

UNION CHRISTIAN COLLEGE ALUVA

SELF STUDY REPORT

Accreditation Cycle IV



Submitted by IQAC



to

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
BENGALURU**



UNION CHRISTIAN COLLEGE

(Affiliated to Mahatma Gandhi University, Kottayam)
Website: ucCollege.edu.in E-mail: ucc@ucCollege.edu.in

Post Box : 5
ALUVA-683 102
Ernakulam Dist, Kerala
Fax: 2607534,
2609194
☎ 2604003, 2609194

No.UCC/NAAC/Re-Accrd/SSR/2017

Date: 27/03/2017

The Director
National Assessment and Accreditation Council
P.O.Box No. 1075
Bangalore- 560072.

Sir,

Sub: Self Study Report for Re-accreditation (Fourth Cycle) 2017-Reg.

We hereby submit the Self Study Report with respect of the fourth Cycle of Re-accreditation for the period of 2011-2016.

We feel glad that the preparation and submission of the report has given an opportunity for the total involvement of everyone in ensuring the growth and quality sustenance of the Institution.

We look forward to the peer team inspection and evaluation.

Yours faithfully


Principal
U.C. College, Aluva





UNION CHRISTIAN COLLEGE

(Affiliated to Mahatma Gandhi University, Kottayam)
Website: ucCollege.edu.in E-mail: ucc@ucCollege.edu.in

Post Box : 9
ALUVA- 688 102
Ernakulam Dist, Kerala
Fax: 2607534,
2609194
☎ 2609009, 2609194

CERTIFICATION OF SELF STUDY REPORT

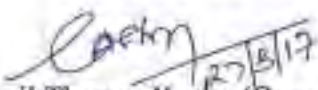
This is to Certify that the Self Study Report submitted to the National Assessment and Accreditation Council for the fourth cycle of accreditation of the College has been prepared with the active participation of the College community and that it accurately reflects the nature and substance of the institution.

Signed:

Dr. P.Thomas Mathew (Principal)


PRINCIPAL
U.C. College, Aluva




Dr. Anil Thomas Koshy (Coordinator, IQAC)

PREFACE

Union Christian College, founded in 1921, was the first Christian Higher Educational Institution in India established under Indian Christian initiative. The founder members, who were old students of Madras Christian College, conceived and established this institution on the distinctive foundations of interdenominational management, participatory form of administration based on Christian fellowship, service to the nation, residential life, cosmopolitan and secular ethos, Christian and humanistic values. It started with a humble beginning, in a small building donated by the then Maharaja of Travancore. Now the College has 15 undergraduate and 15 postgraduate programmes across government-aided and self-financing streams. Besides, nine departments are approved research centers of Mahatma Gandhi University.

U. C. College has been a pioneer in the field of higher education for the last nine decades, and always championed the causes of quality, equity, social inclusion and humanism. It also has an impeccable record of keeping transparency and merit in the appointment of teachers and admissions of students. As it was in the past, the whole college community under the leadership of Principal and IQAC could put in its best efforts to prepare the college for its 4th cycle of assessment and accreditation. It has made an honest attempt to portray the strengths, weakness, opportunities and challenges of the college. This exercise has provided the faculty and administration an opportunity for introspection and to prepare itself to meet the challenges that lie ahead. In fact, the IQAC could bring together all stakeholders and make the process highly participatory and rewarding.

I am happy to submit this Self Study Report of the Union Christian College for the 4th cycle of Assessment and Accreditation of NAAC. We look forward to the visit of esteemed peer tem members of the NAAC to have their expert observations and directions for the future.

Dr. P. Thomas Mathew
Principal

TABLE OF CONTENTS

No.	Title / Sub- Title	Page No
A	EXECUTIVE SUMMARY AND SWOC ANALYSIS	1
B	PROFILE OF THE AFFILIATED / CONSTITUENT COLLEGE	11
C	CRITERIA WISE INPUTS	
	Criterion I: CURRICULAR ASPECTS	
1.1	Curriculum Planning and Implementation	19
1.2	Academic Flexibility	27
1.3	Curriculum Enrichment	33
1.4	Feedback System	39
	Criterion II: TEACHING, LEARNING AND EVALUATION	
2.1	Student Enrolment and Profile	42
2.2	Catering to Student Diversity	49
2.3	Teaching Learning Process	52
2.4	Teacher Quality	58
2.5	Evaluation Process and Reforms	61
2.6	Student Performance and Learning Outcomes	64
	Criterion III: RESEARCH, CONSULTANCY AND EXTENSION	
3.1	Promotion of Research	69
3.2	Resource Mobilization for Research	81
3.3	Research Facilities	88
3.4	Research Publications and Awards	91
3.5	Consultancy	93
3.6	Extension Activities and Institutional Social Responsibility (ISR)	95
3.7	Collaboration	100
	Criterion IV: INFRASTRUCTURE AND LEARNING RESOURCES	
4.1	Physical Facilities	113
4.2	Library as a Learning Resource	119
4.3	IT Infrastructure	124
4.4	Maintenance of Campus Facilities	126

Criterion V: STUDENT SUPPORT AND PROGRESSION

5.1	Student Mentoring and Support	129
5.2	Student Progression	142
5.3	Student Participation and Activities	145

Criterion VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1	Institutional Vision and Leadership	155
6.2	Strategy Development and Deployment	168
6.3	Faculty Empowerment Strategies	175
6.4	Financial Management and Resource Mobilization	178
6.5	Internal Quality Assurance System (IQAS)	180

Criterion VII : INNOVATIONS AND BEST PRACTICES

7.1	Environment Consciousness	187
7.2	Innovations	190
7.3	Best Practices	191

D EVALUATIVE REPORTS OF DEPARTMENTS

1	Department of English	195
2	Department of Malayalam	209
3	Department of Hindi	215
4	Department of Economics	221
5	Department of History	233
6	Department of Mathematics	245
7	Department of Chemistry	261
8	Department of Physics	273
9	Department of Botany	283
10	Department of Zoology	291
11	Department of Psychology	299
12	Department of Computer Science	315
13	Department of Physical Education	323
14	Department of Electronics and Computer Maintenance	333
15	Department of Commerce	341

16	Department of Bioinformatics	349
17	Department of Biotechnology	355
18	Department of M.C.A	361
19	Department of M.B.A.	373
E	POST ACCREDITATION INITIATIVES	381
F	ANNEXURES	385
G	CERTIFICATES	
	Declaration by the Head of the Institution	437
	Certificate of compliance	439
	Affiliation Certificate	441
	2(F) 12 (b) Certificates -UGC	443
	2(F) 12 (b) Certificates –MG University	445
	Approval Certificates – AICTE	447
	Certificate of Accreditation – NAAC	451
	NAAC Pear Team Report, 2011	455
	Grant in-Aid Certificate – UGC	461
	Certificate on AISHE	465

LIST OF TABLES

Table No		Page No.
Criterion I : CURRICULAR ASPECTS		
1.1	Participation of Faculty in Exchange Programmes Abroad	23
1.2	Board of Studies members from our College in the M.G. University	25
1.3	Board of Studies members from our College in Autonomous Colleges	25
1.4	Open courses run by various Departments.	29
1.5.	Self financing courses of the College	31
1.6.	Self financing courses Fee Structure /Qualification	31
1.7	Details of additional skill oriented Programme	32
Criterion II : TEACHING, LEARNING AND EVALUATION		
2.1	Minimum and maximum percentage of marks for admission at entry level for each of the Programmes offered by the College	45
2.2	Students' enrollment in various classes according to reservation	47
2.3	The details regarding the number of the applications received, students admitted, demand ratio for each Programme during the last four years	48
2.4	Guidance services	55
2.5	Table Qualification of Faculty Members	58
2.6	Details of the academic staff development Programme	58
2.7	Percentage of faculty participated in external workshops / seminars / conferences recognized by national international / professional bodies.	60
2.8(a),(b)	Details of pass percentage in U G and P G Programmes	66
Criterion III: RESEARCH, CONSULTANCY AND EXTENSION		
3.1	Details of the research centers in the College	69
3.2	Research committee in the College	70
3.3	Details of eminent scholars as resource persons for the PhD Course work	72
3.4(a),(b)	List of research guides and scholars	75
3.5	Table shows the list of faculty members and their prioritized research areas	79
3.6	Details of the amount spent on research related activities.	82

3.7	List of Latest instrument and equipment.	84
3.8	List of UGC Sponsored Minor Projects	85
3.9	Details of UGC Sponsored Minor/Major and other Projects	88
3.10	Details of publications by the faculty and students:	92
3.11	Research awards received by the faculty members	93
3.12(a)	Consultancy services provided by the Departments	94
3.12(b)	Major consultancy services provided by the institution	95
3.13	Budgetary details of extension and outreach Programme	97
3.14	Expected outcomes of the extension activities	98
3.16	Eminent scientists who contributed to international/National/ conferences	102

Criterion IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1.	Details of current titles, print and e-journals and other reading materials and the amount spent on procuring during the last four years	120
4.2	Details on the computing facility available in the College	124
4.3	Details of budget allocated for maintenance and upkeep for facilities in the College	126

Criterion V: STUDENT SUPPORT AND PROGRESSION

5.1	List of newly instituted Scholarships in the College	130
5.2	No. of students receive financial assistance from state government, central government and other national agencies.	131
5.3	Details of Publication of Departments	134
5.4	List the Company names and total number of students placed	138
5.5	Details of student grievance redressal cell	139
5.6	Details of Anti- sexual harassment cell	139
5.7	Details of Anti- Ragging cell	140
5.8	Details of welfare Schemes and Coordinating Department	141
5.9	Details of the percentage of Students Progression percentage	142
5.10	Details of the pass percentage in Post Graduate programme	142
5.11	Details of the pass percentage in Under Graduate programme	143
5.12	Details of ranks in M.G. University	143
5.13 a	Details of action plan, result and the method of implementation by the institution to facilitate student progression to higher level of education	144

5.13 b	Details of achievements in Sports activities (M.G. University)	145
5.14	Sports events organized by the College	146
5.15	Students' achievements in Sports	146
5.16	Student achievements in M.G. University Arts/Cultural events	149
5.17	Major students' achievements in N.C.C.	150
5.18	Students' Participation in Cultural events in All India level	151
5.19	Details of College student union Magazine	152
5.20	Details of College student Council	152
5.21	Student representatives in academic and administrative bodies.	153

EXECUTIVE SUMMARY

Introduction

Union Christian College, Aluva has entered the threshold of its centenary. The institution will traverse this historical landmark during the present Accreditation Cycle. The College was established in 1921 as the realization of a shared dream and passion of a group of young visionaries, who with their alacrity and meticulous ways spearheaded the vision of the college as their life-mission.

In 1958, the College opened its portals to women, thereby initiating women's access to higher education in Kerala and history stands to testify how this contributed to the social and educational upliftment of women in our society.

The College has an illustrious line of alumni, whom we remember and treasure with great awe and pride.

The College was first accredited by NAAC in 1999 at the Five Star level. The second accreditation was done in 2007 (B++). The Third accreditation was in 2011 (A). Currently the college awaits the fourth cycle of accreditation.

Criterion I: Curricular Aspects

Curriculum Planning and Implementation – The College is affiliated to the Mahatma Gandhi University, Kottayam which designs and modifies the curriculum for all programmes. It is a strength that, the College has a fair representation and dynamic contribution in curriculum planning and implementation at the University level. Thirteen members of the faculty are on the University Academic Council. Twenty five members are on the various Boards of Studies of the University and Autonomous Colleges. During the implementation of the Choice Based Credit Semester System (CBCSS) by the University, teachers of the College put in remarkable contribution in designing courses, organizing orientation workshops and setting up patterns of evaluation and documentation.

At points where college level intervention is possible in implementation of the curriculum, progressive strategies are planned and implemented. Five new courses and one Ph. D programme (Psychology) were started after the previous accreditation cycle: Two streams of B.Com -B.Com (Taxation) and B.Com (Computer application), MBA, and MCA (Lateral entry) in self-financing stream and M. Sc Zoology in the aided stream.

Academic Flexibility – The College offers 15 undergraduate and 15 post graduate programmes. For each of the undergraduate programmes, an Open Course is offered in Semester V. The Departments decide on the electives and optional subjects that need to be included in undergraduate and postgraduate programmes. All programmes function in the modular form. Four add-on programmes and one enrichment programme (CES) at the undergraduate level offers enough academic flexibility.

Curriculum Enrichment – The College offers four value added programmes including three UGC sponsored career oriented programmes, one enrichment programme, and one skill acquisition programme. Invited talks and lectures are organized on frontier areas of knowledge regularly.

Feedback System –The College has a formal mechanism for obtaining feedback from students at the end of each semester. The system has been developed and modified by the IQAC.

Criterion II: Teaching – Learning and Evaluation

Student Enrolment and Profile – Maintaining total transparency in the enrolment of students is a strength of the College. The College follows the Centralized Allotment Process (CAP) managed by the University for admission to both undergraduate and postgraduate programmes. Over the past few years, the delay in completion of the CAP has posed a challenge for the teachers and students in terms of syllabus completion, as the admission process continues even after the commencement of the regular semester.

Catering to Diverse Needs of Students – The admission procedures rigorously comply with all the government and university norms, and protect all the reservation rights and weightages extended to categories such as scheduled castes, scheduled tribes, minority communities, physically challenged applicants, achievers in sports and arts, etc.

The College has been making efficient use of the specialized mentoring programmes mooted by the Department of Collegiate Education. Walk With a Scholar (WWS) scheme aims to provide the right orientation and motivation to advanced learners and to prepare them for employment. The scheme has been designed for the benefit of the undergraduate students.

The College is a registered centre for Advanced Skill Acquisition Programme (ASAP) launched by the Government of Kerala in 2014. The College has now been accredited at the highest level of five stars as an ASAP collaborate institution.

The College has also been making efficient use of the Scholar Support Programme (SSP), an initiative of the higher education department, Government of Kerala, launched in 2014 to support slow learners.

Remedial coaching is arranged every semester for weak students, identified based on their performance in internal assessments. Advanced learners are provided with coaching for UGC National Eligibility Test, Civil Service and other competitive examinations.

Teaching –Learning Process – The Academic Calendar prepared every academic year by the College in alignment with the University calendar plans internal tests, special events such as seminars, conferences and workshops and co-curricular activities. Individual teachers develop the delivery plans according to the academic calendar.

As the College provides appropriate infrastructure and encourages faculty members to use ICT enabled teaching, innovative teaching methods along with conventional methods are practiced by several teachers. The College caters to student centered learning through student projects, seminars and assignments and ensures excellence in academic performance by feedback mechanism, remedial coaching, peer group teaching and various other innovations. Online admission, academic support to students through online platforms, and the use of ICT in larger measure have been some of the new initiatives of the college. Laboratories are well maintained and effectively used. The Language Lab, in addition to its specialised use by students of

English language and literature, caters to all students at the undergraduate level. Field visits and institutional visits are organized on a regular basis to accentuate what is taught within the classroom. Departments make good use of their computer labs. Students have free access to the internet and every Department has computer connectivity.

Teacher Quality: There are 153 faculty members in all. Of these, 82 teachers hold permanent positions; 48 posts are temporary; and 23 teachers are engaged part time. A significant segment of teachers hold research degrees (Ph. D. 38, M. Phil. 13). Nine teachers were awarded their Ph. Ds after the previous accreditation.

Evaluation Process and Reforms – The University has laid down a two-fold mode for the evaluation of the academic performance of students. The continuous internal evaluation has a formative purpose. This is followed by end-semester evaluation by the university, which is summative in purpose. Scores at the formative level account for 20% in the case of undergraduate programmes and 25% in the case of postgraduate programmes. The evaluation by the University accounts for 80% and 75% for UG and PG programmes respectively. The components of formative evaluation are class participation, seminars, assignments and written examinations. The summative evaluation is based on written examinations conducted by the university. Practical exams, student projects and viva-voce too figure at this level. The results obtained by the students of the college for all the programmes have been far above the University average.

Feedback: Various aspects of teaching a course are evaluated from a learner's point of view through the student feedback form. The Principal reviews the summarised report of each teacher and shares it with the teacher concerned for further improvement.

Student Performance and Learning Outcomes – The institutional perspective is that various factors go into the learning outcome, namely academic excellence, leadership, team work, social concern, environmental consciousness, critical thinking and ethical values. The teaching-learning-evaluation strategies are designed to maximize the learning outcome. Student performance and learning outcome are further assessed through feedback from students, parents and alumni.

Criterion III: Research, Consultancy and Extension

Promotion of Research – The College has made tremendous improvement in the area of research. There are 115 scholars pursuing research leading to Ph.D. under 28 research guides at nine research centres. Twenty-one Ph. Ds were awarded during this period of assessment. The College has taken a proactive role in the promotion of research by conducting and coordinating the Ph.D. course work for the Mahatma Gandhi University in an exemplary manner. The Department of Physics, Botany and Chemistry are DST-FIST centres.

Resource Mobilisation for Research-During the last five years the College has spent Rs.1,34,35,000/-for creating, developing and maintaining various research facilities. During the last five years 35 minor and 7 major projects have been undertaken by the faculty with a total grant of Rs.2,83,02,120/-.

Research Facilities – Access to 7 research laboratories and the Internet, NLIST access, and a well-stocked reference library are among the chief facilities open to researchers, along with tie-ups with various agencies to promote collaborative research.

Research Publications and Awards - During the period under review faculty members published 417 research articles and 12 books. More than ten teachers have publications with impact factor of >1, and more than eight faculty members have *h* index >3. Students are encouraged to attend and present papers during seminars and conferences. There are more than hundred paper presentations by students during the period under review.

Consultancy - The faculty members provide consultancy, generally free of cost. Currently seven faculty members are engaged in providing consultancy services in different areas. The major areas of consultancy are – providing coaching for the Kerala Public Service Commission; extending equipment (UV-Visible-NIR Spectrophotometer, FTIR, Fluoromax-4C spectrofluorometric etc.) for analysis to external researchers; rendering facilities for research projects; conducting psychological assessment; undertaking the taxonomy of spiders and offering consultancy in vermicomposting, fish rearing and breeding and organic farming. The College encourages faculty members to take up consultancy work and provides the necessary infrastructure facilities. An amount of Rs.3, 46,585/- has been generated through consultancy.

Extension Activities and Institutional Social Responsibility – NSS and NCC units functioning in the College undertake socially useful activities, promoting holistic development of students. The College has adopted a village in the Karumalloor Grama Panchayat and conducted an economic and social survey to identify prospects and problems. A Geriatric Care project has been undertaken under the initiative of the Department of Psychology. Planting of tree saplings on World Environment Day and ensuring their protection; noon meal scheme for the underprivileged taken up by different Associations in the college and blood donation have been some of the activities pegged to social responsibility undertaken by the College. Blood donation has been institutionalized and implemented as one of the best practices of the College. On an average, 50 students donate blood every year.

Collaboration - The faculty members have collaborated with national level institutions for research work / laboratory use and joint paper preparation.

MoU's have been signed with 15 institutions including three foreign institutions namely Hope College, Michigan, USA, Fu Jen Catholic University, Taiwan, and International Christian University, Japan for student-faculty exchange programmes and Service Learning programmes. The Medical Mission Medical College, Kolencherry, and Synthite Industries, Kolencherry, the Centre for Heritage Studies, Tripunithura and Centre for Heritage, Environment and Development, Cochin have been extending their facilities for research work and practical training.

Criterion IV: Infrastructure and Learning Resources

Physical facilities – The College has land area of 42.4 acres, with 5,13,3546 sq. ft of built up area. The main structures contain 67 class rooms, 20 department staff rooms, 28 laboratories, 08 fully furnished seminar rooms, 02 botanical gardens, 1 instrumentation room each for Chemistry, Botany and Physics Departments, 05

computer labs, one language lab, 01 Conservation Lab, 02 Archaeological Museum, 03 major playfields, 03 courts, 01 indoor stadium, a well-equipped gymnasium, 01 counselling centre, and 03 auditoriums.

Other than the Central Library, there are 14 department libraries. The college has 05 women's hostels, 02 boys' hostels. These include 02 sports hostels. The Principal's Residence is located in the heart of the campus. Seven staff quarters and one staff apartment block consisting of 07 apartments are located inside the campus. Two staff quarters are located adjacent to the women's hostel outside the campus.

The Students' Cooperative Society Book Stall, a counseling centre (BLISS), a crèche (Play school), a co-operative bank, canteen and post office too are situated within the campus.

Library as a Learning Centre - The built up area of the library is 9300 sq. Ft with a seating capacity of 222. The library resources at present comprise of 81141 books, 34 print journals, 21 magazines/periodicals, approximately 6200 e-resources, and 3 million e-books (N-LIST). Books are bar coded and issue and return of books are computerised. The average walk-in number is around 270 per day.

IT Infrastructure: Free Wi-Fi facility is available on the campus. An assemblage of 384 Desktop computers and 40 laptops are available on the campus and these are connected on LAN via underground Optical Fibre Cable. A full-time system administrator looks after the IT facilities. The College has a public address system.

Maintenance of Campus Facilities - Computers and Network issues are covered under warranty or Annual Maintenance Contract. A transformer has been installed for trouble free power supply. The power supply to computers is backed up by UPS, and the major equipment and laboratories have generator back-up (03 generators).

Water supply on the campus is complemented by rainwater harvesting and independent wells. The maintenance of the campus is done by the works department under the supervision of a faculty member and a committee.

Criterion V. Student Support and Progression

Student mentoring and support – To recognize and reward the academic performance of the students 142 Departmental and 73 Institutional scholarships have been instituted. These include the scholarships instituted by old students of the college, retired teachers, and well-wishers. There are various other scholarships established by individuals and organizations such as UCC Alumni in America, K. C. Chacko, Kano Yamamoto, Scranton and Abraham Kulangara, through which an amount of Rs.51, 39,673 was given to 593 students. Scholarships set up by the Government are available to the students of SC/ST categories, and economically challenged students.

Student Progression - 20% of the UG students and 4% of the PG students go for higher studies. 159 students got placements during 2014-16. The students pass percentage is above 70 % across all the programmes on an average. The dropout rate is negligible.

During the last five years 45 candidates qualified UGC-NET, 07 candidates qualified as JRF, 08 candidates' qualified GATE, 01 candidate qualified MAT and 02 candidates qualified ICMR.

Student participation and activities – There are adequate facilities for sports and games. These include a football field, cricket ground, hockey field, volleyball court, tennis court and basketball court. An indoor court is also available for the students. A well-equipped gymnasium functions on the campus. Inter departmental competitions are arranged for students. An annual athletic meet is conducted every year. The College team has been university level winners in hockey, softball, baseball, judo, fencing and netball for the past several years consecutively. The college bagged the 4th position in 2012-13, 5th position in 2013-14, 6th position in 2014-15 and 4th position in 2015-16 (among 193 Arts and Science Colleges) in terms of its performance in the M. G. University sports championships. The college conducts two inter collegiate championships every year in basketball and hockey.

Cultural activities: Inter -departmental competitions are arranged for students by the College Union. Students have participated in the university youth festival bringing laurels to the college by achieving 4th position in 2012-13, 4th position in 2013-14, 7th position in 2014-15, and the 6th position in 2015-16, among 193 Colleges.

The NSS unit of U.C. College focuses on the wholesome nurturing of its members by initiating them into varied facets of community service.

The National Cadet Corps: The NCC has a dynamic presence on the campus. There are cadet units for boys and girls. The performance of the cadets has been commendable during the last five years, in terms of representation at the Republic Day Parade, Youth Exchange Programmes (YEP), etc.

Other activities include Service Learning, Departmental Associations, Campus Film Club, Nature Club, and Women's Club. The Student Council is constituted every year (College Union by Presidential mode).

Criterion VI – Governance, Leadership and Management

Institutional Vision and Leadership – The College was established with the objective of providing value based liberal education which aims at social development. To fulfill this objective the college admits students from diverse backgrounds irrespective of their religion, region, caste, economic strata and academic performance. In addition to the improvisation of several existing procedures and practices to sustain its performance, the College has come up with new and pro-active initiatives to improve the overall quality in all its spheres. Since the Reaccreditation in 2011, the focus of the college had been to face the challenges of higher education in the era of globalization and to press towards higher goals and objectives. The college responded to this call in the post accreditation period, by addressing issues related to all aspects of college life in a multifaceted way, which prepares the student to face an ever-changing world. The college vision and mission statement was redrafted accordingly. A culture of participative management has been developed in the institution. Various committees are formed to address specific demands and needs, and are constituted with representation from various segments.

Strategy Development and Deployment - Use of ICT is well established in the teaching, learning and evaluation process. Encouragement is given to research. Avenues of community engagement are being discovered, and constructive tapping of human resource is being promoted.

Faculty Empowerment Strategies – The College conducts several programmes for faculty empowerment. An induction programme is organised for newly appointed members of faculty, Methodology workshops and ICT skill development programmes are organised for all teachers. Further, faculty members are encouraged to attend Refresher courses and Orientation programmes. The college motivates the faculty members to attend seminars, conferences and workshops. During the period under review 44 faculty members attended Orientation/Refresher courses and 07 teachers carried out research under the Faculty Development Programme.

International Linkages

The College signed MoU's with International Christian University Japan and Fu Jen Catholic University Taiwan in the accreditation period. The partnership with United Board, USA and Hope College, Holland MI, USA were strengthened during the term. Four faculty members from Hope College visited UCC as exchange faculty. The students of Centre for Environmental Studies received a gift of \$1000 from Hope College for their environmental initiatives in service learning.

Fourteen faculty members have undergone 26 faculty development training programmes in reputed international Universities and institutions in USA, Japan and other Asian countries such as Hong Kong, Thailand, Indonesia and Taiwan. Three students spent a semester each in International Christian University Japan and two students participated in Women's Leadership Seminar at Scranton Centre S Korea.

Financial Management and Resource Mobilization – Major sources of financial assistance to the college are the grants from State Government for salary of the staff, development assistance from the UGC and special assistance from the Department of Science and Technology. Other sources of income are from self-financing programmes, revenue sharing programmes and contributions by the PTA. Appropriate authorities audit all the accounts of the college.

Internal Quality Assurance Cell (IQAC) – The IQAC of the college undertakes several quality improving activities. It organises academic workshops and academic reviews. It designs, implements, monitors and evaluates quality-improving initiatives.

Criterion VII – Innovations and Best Practices

Environment Consciousness

The college maintains an eco-friendly campus. It has the wealth of a variety of trees belonging to over 35 species. Rare and endangered plants are protected. Conscious effort is taken to sustain the campus as a natural ecosystem. The initiative includes planting of saplings and their protection, rainwater harvesting and recharging of wells. Installation of a biogas plant and incinerator are other eco-friendly initiatives taken up by the college after the last accreditation.

The *Bhoomi Malayalam* series (a journal), an initiative which stands in the league of knowledge generation, consolidation and archiving; quality life through Physical Fitness -assessment and empowerment of U. C. College Community through service learning; Centre for the Study of Religion and Society (CSRS) etc. are some of the best practices of the College.

SWOC ANALYSIS

Strengths

- Institutional image, pride and cultural heritage
- Accessibility to the College
- Affordability and quality of education
- Merit based faculty recruitment and student admission
- Teacher-student relationship
- Eco-friendly campus
- High demand ratio for all the programmes
- Quality research with publications and projects by faculty members and students
- International linkages and MoU's
- Alumni associations in and outside the country
- Activities of clubs and associations complementing class room education
- Active NCC/ NSS units and service learning centre.
- Scholarships for meritorious and financially challenged students
- High density of young faculty members with updated knowledge and research background

Weaknesses

- Marketing/promotion programmes
- Lack of sufficient interdisciplinary programmes
- Limited freedom for academic innovation

Opportunities

- Alumni support
- Faculty exchange programme with international institutions
- Consultancy and Extension
- Support from various funding agencies that increases success for lower skilled students
- Student exchange programmes with international institutions
- Young faculty members with specialised knowledge and research skill

Challenges

- Fast changing technology
- Financial constraints for developmental activities
- Competition from other higher education institutions
- Falling number of experienced senior teachers for mentoring
- Significant number of first generation learners

PROFILE OF THE COLLEGE

1. Name and Address of the College:

Name:	Union Christian College
Address:	P.O Box 5, Union Christian College, UCC P.O, Aluva
City: Ernakulam	Pin: 683102 State: KERALA
Website:	www.uccollege.edu.in

2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. P. Thomas Mathew	O:0484-2609194 R:0484-2609124	9446479124	0484 2607534	pthomasmathew@uccollege.edu.in
Steering Committee Co-ordinator	Dr. Anil Thomas Koshy	O:0484-2609194 R: 0484 2605542	9847477804	0484 2607534	anilkoshy1965@gmail.com

3. Status of the Institution : Affiliated College
4. Type of Institution :
- a. By Gender : Co-Education
- b. By Shift : Regular
5. It is a recognized minority institution? : Yes
6. Sources of funding : Grant-in aid and Self-financing
7. a. Date of establishment of the College : 1921
- b. University to which the College is affiliated/ or which governs the College : Mahatma Gandhi University, Kottayam
- c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)
i.2(f)	1948	Copy Attached
ii.12(B)	1956	Copy Attached

d. Details of recognition/ approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section/ Clause	Recognition/Approval details Institution/ Department Programme	Day, Month and Year	Validity	Remarks
1	M.C.A	27-06-2001	One year	Copy Attached
2	M.C.A.(Lateral)	04-06-2014	One year	Copy Attached
3	M.B.A.	04-06-2014	One year	Copy Attached

8. Does the affiliating university Act provide for conferment of autonomy

(as recognized by the UGC), on its affiliated Colleges ? Yes

If yes, has the College applied for availing the autonomous status? Yes

9. Is the College Recognized?

a. by UGC as a College with Potential for Excellence (CPE)? No

b. for its performance by any other governmental agency?

Yes, DST-FIST: Date of recognition (Annexure)

10. Location of the campus and area in sq.mts:

Location	Semi-urban
Campus area in Acres	42.4 Acres
Built-up area in sq.mts.	26744

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement).

✓ Auditorium/ seminar complex with infrastructural facilities. 3 nos.

✓ Sports facilities Playground-----6 nos , Gymnasium--1

Hostel Boys' Hostel

i. Number of hostels- 2

ii. Number of inmates- 48

iii. Facilities--Single room, Reading room, Recreation and T.V. Room

Hostel Girls' Hostel

i. Number of hostels –5

ii. Number of inmates-246

iii. Facilities-Recreation, Reading room, Security and T.V. Room

Residential facilities for teaching and non-teaching staff

Teaching staff quarters- 10

Teaching staff Apartment Block 1 (8 apartments)

Non-teaching staff quarter 1

Cafeteria	Health Centre	First-aid Centre	Ambulance
1	1	3	On call

Health Centre staff–

Qualified doctor	Fulltime	Rural Medical Mission
Qualified Nurse	Fulltime	

Facilities like

✓ post office,

✓ book shops

Transport facilities to cater to the needs of students and staff No

Animal house- No

Biological waste disposal- Yes

Generator or other facility for management/

Regulation of electricity and voltage Yes --3Nos.

✓ Solid waste management facility

✓ Waste water management

✓ Water harvesting

12. Details of Programme offered by the College (Give data for current academic year)

Program Level	Programme	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned / approved Student strength	No. of students admitted
Under Graduate	B A	English	3 yrs/ 6 sem	+2/ VHSE	English	50	50
		Malayalam				50	50
		Economics				60	60
		History				38	38
	BSc	Mathematics				40	40
		Physics				48	48
		Chemistry				48	48
		Botany				32	32
		Zoology				32	32
		Psychology				30	30
		BTSP				38	34
		E&CM				38	38
	B.Com	Taxation				50	50
		Computer Application				50	50
Post Graduate	M A	English	2 yrs/ 4 sem	Degree	English	15	15
		Malayalam				15	15
		Economics				15	15
		History				15	15

	MSc	Mathematics				15	15
		Physics				12	12
		Chemistry				14	14
		Botany				10	10
		Zoology				12	12
		Biotechnology				20	20
		Bio- inform Zoology				20	20
	M.B A					60	15
	MCA					60	60
	M.C.A (Lateral)					60	60

13. Does the College offer self-financed Programmes? Yes

If yes, how many? 9

14. New Programmes introduced in the College during the last five years if any?

3 Nos.

M.B.A., B.Com. (Computer), B.Com. (Tax)

15. List the Departments: (respond if applicable only and do not list facilities like Library, Physical Education as Departments, unless they are also offering academic degree awarding Programme. Similarly, do not list the Departments offering common compulsory subjects for all the Programme like English, regional languages etc.)

Faculty	Departments (eg. Physics, Botany, History etc.)	UG	PG	Research
Science	Physics, Chemistry, Maths, Zoology, Botany, Psychology, Biotechnology, Bioinformatics Electronics and Computer Maintenance,	9	8	5
Arts	English, Malayalam, Economics, History	4	4	4
Commerce	B.Com	2		
Any Other (Specify)	M.C.A, M.B.A		2	

16. Number of Programme offered under (Programme means a degree course like BA, BSc, MA, M.Com)

a. annual system Nil

b. semester system 30

c. trimester system Nil

17. Number of Programme with

a. Choice Based Credit System -- U.G 15 Nos.

b. Inter/ Multidisciplinary Approach

c. Credit and semester system - P.G 15 Nos.

18. Does the College offer UG and/ or PG Programme in Teacher Education? No

19. Does the College offer UG or PG Programme in Physical Education? No

20. Number of teaching and non-teaching positions in the Institution

Positions	Teachingfaculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC/University/ State Government Recruited	-----	-----	9	7	17	49	29	6	Nil	Nil
Yet to recruit			12				5		1	
Sanctioned by the Management/ society or other authorized bodies Recruited			1	1	10	36	2	14		
Yet to recruit										

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.			8	4	18	17	47
M.Phil.			1	2	3	8	14
PG				2	2	17	21
Temporary teachers							
Ph.D.			1	1	1	1	3
M.Phil.					1	4	5
PG					9	31	40
Part time teachers							
Ph.D.						1	1
M.Phil.							
PG					1	21	22

22. Number of Visiting Faculty/Guest Faculty engaged with the College. Nil

23. Furnish the number of the students admitted to the College during the last four academic years.

Categories	Year1		Year2		Year3		Year4	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	60	207	61	201	57	225	49	250
ST	7	20	7	20	11	23	9	31
General	385	1406	470	1376	420	1622	462	1760

24. Details on student enrollment in the College during the current academic year:

Type of students	UG	PG	M.Phil.	Ph.D.	Total
Students from the same State where the College is located	1795	766		90	2651
Students from other states of India					
NRI students	Nil	Nil	Nil	Nil	Nil
Foreign students	Nil	Nil	Nil	Nil	Nil
Total					

25. Drop out rate in UG and PG (average of the last two years)

UG 3.2%

PG 2%

26. Unit Cost of Education

Including the salary component

Rs. 45,043/-

Excluding the salary component

Rs. 3,623/-

27. Does the College offer any Programme/s in distance education mode (DEP)? No

28. Provide Teacher-student ratio for each of the Programme/course offered

Sl No	Course	Programme	No. of Teachers	No. of Students	Teacher-student Ratio
1	UG	B.A English	7	142	1:20
2		B.A Malayalam	5	133	1:27
3		B.A Economics	4	166	1:41
4		B.A History	3	92	1:31
5		B.Sc Mathematics	5	128	1:26
6		B.Sc Physics	5	161	1:32
7		B.Sc Chemistry	5	160	1:32
8		B.Sc Botany	4	94	1:24
9		B.Sc Zoology	4	89	1:23
10		B.Sc Comp.Science	5	92	1:18
11		B.Sc Psychology	3	106	1:35

12		B.Sc	E &CM	7	96	1:14
13		B.Sc	BTSP	3	84	1:28
14		B.Com	Tax	4	85	1:21
15		B.Com	Computer Application	8	133	1:17
16	PG	M.A	English	5	34	1:7
17		M.A	Malayalam	5	29	1:6
18		M.A	Economics	5	34	1:7
19		M.A	History	5	36	1:7
20		M.Sc.	Mathematics	5	37	1:7
21		M.Sc.	Physics	5	28	1:5
22		M.Sc.	Chemistry	5	23	1:5
23		M.Sc.	Bio tech	5	37	1:7
24		M.Sc.	Bio Info	4	31	1:8
25		M.Sc.	Botany	4	25	1:6
26		M.Sc.	Zoology	4	26	1:6
27		M.Sc.	Psychology	4	30	1:8
28		M.C.A		8	60	1:8
29		M.B.A		6	20	1:3
30		M.CA (Lateral)		7	57	1:8

29. Is the College applying for Accreditation: Cycle: 4

30. Date of accreditation*

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation
1	1 st Cycle	A	5 Star Level 2	1999
2	2 nd Cycle	B++	81.8%	2005
3	3 rd Cycle	A	3.35	2011

31. Number of working days during the last academic year. - 180

32. Number of teaching days during the last academic year - 143

33. Date of establishment of Internal Quality Assurance Cell - 20/06/1994

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC

AQAR (i) Submitted on 23/07/2012

AQAR (ii) Submitted on 30/09/2013

AQAR Submitted on 23/03/2017

AQAR Submitted on 23/03/2017

AQAR Submitted on 23/03/2017

35. Any other relevant data (not covered above) the College would like to include.
(Do not include explanatory/descriptive information) : Nil

CRITERION I:

CURRICULAR ASPECTS

1.1. State the Vision, Mission and objectives of the Institution and describe how it is communicated to the students, teachers, staff and other stake holders.

Vision:

To serve the nation by facilitating and modeling wholesome and socially relevant education and to actualize the values of humanism in accordance with the revelation in Jesus Christ.

Mission

The Union Christian College, extending God's love to all, is committed to providing such education that facilitates the growth of the whole person and brings out the best in him or her that they would serve our nation and humanity at large and the ecosystem as intellectually competent, morally upright, spiritually inspired persons.

The College strives to live out its commitments by the following strategic initiatives in line with its unique history and cherished values.

1. Programmes and activities aimed at improving academic standards and achieving academic excellence
 - Faculty Improvement Programme: special training events for teachers in curriculum development, academic audit, alternative teaching and assessment techniques.
 - Student evaluation of teachers and peer evaluation to enhance the performance of teachers.
 - Remedial education and tutorial programmes; mentoring and peer teaching.
 - Providing better library facilities and training to students in the use of internet aided learning.
 - Evolving inter Departmental and interdisciplinary educational programmes.
 - Strengthening Research programmes and Research Centers: Facilitating research orientation both among teachers and students.
 - Facilitating national and international seminars and collaborative research.
2. Innovation in academic activities by offering courses designed to enable students to be competent in community life and to render them fit for the challenges of their personal and professional lives.
3. Providing add-on courses that have a practical and vocational orientation.
4. Providing extra-curricular opportunities that facilitate maximum student-teacher interaction in the form of sports and games, clubs and societies, cultural and literary activities.
5. Revamping the residential system, to provide the best conditions and to enhance the opportunities for out-of –class interaction.

6. Internationalization of higher education; promoting international seminars and conferences; facilitating faculty and student exchanges; joint publications of journals and books and encouraging collaborative research.
7. Providing adequate Infrastructure for the qualitative and quantitative enhancement of Higher Education.
8. Enhancing student services in the form of improving general amenities and library facilities and providing access to internet and placement services.
9. Providing structures and Programmes that would ensure women empowerment and gender equity
10. Facilitating ethical discourses through the Center for the Study of Religion and Society; offering Programmes to ensure value orientation to learning and to provide alternative models in sacrificial service.
11. Providing service-learning and community extension opportunities to the neighboring communities, especially the most marginal communities under the initiative of each Department.
12. Resource mobilization for the development of the College through a Development Office manned by a Development Officer.
13. Establishing greater international linkages to further the internationalization of education to meet global standards and to facilitate solutions to global concerns.

The Vision and Mission of the College are well aligned with the objectives of the higher education policy of the nation. Established in 1921 out of indigenous initiative, Union Christian College has always been in the forefront in adapting to the changing needs of the society while continuing to pursue its goals and objectives. The special features of this institution are interdenominational basis of administration, participation of the faculty in the governance of the College, cosmopolitan and liberal campus life, and ample opportunity for interaction between students and teachers in outside-the-class-room activities. All the academic, administrative and co-curricular initiatives of the College are aimed at achieving the mission of the College, by focusing on the holistic development of students, empowering them intellectually, morally, emotionally and spiritually to take their part in nation building. The College strives to ensure transparency, participation, and quality at all levels of administrative and academic functions. Besides, it enables students and teachers to extend their knowledge, skills and expertise to surrounding communities, especially to those who are most marginalized and vulnerable. The College provides special care to the needs of the surrounding community through various extension activities and service-learning initiatives. The College strives for academic excellence on a par with international standards through various programmes that augment and supplement the regular academic activities and to foster international linkages.

The goals and objectives of the College are four-fold; academic goals, social goals, character building and value orientation. The College commits itself to the promotion of justice and peace, preservation and enhancement of the integrity of creation, fostering of a wholesome simple life style combating the ill-effects of corruption, powerlessness of the marginalized, violence and criminalization. Empowering the powerless, particularly the tribals, dalits, women and other vulnerable sections of the

society form a significant part of this commitment. It seeks to nurture probity in public life and to promote national integration.

The College has students coming in from different backgrounds of religion, economic status and society. Almost 40% of the students belong to minority groups and are also from rural areas. In allegiance to the Vision and Mission, the College constantly strives towards the upliftment of students from these sections of the society. The vision, mission and objectives of the college are communicated to the stakeholders in the following ways:

College Handbook:

The vision and mission of the College, along with all the rules and regulations are communicated to the students and staff, through the College handbook/calendar published and distributed on an annual basis.

Orientation Programmes:

Fresh undergraduate and postgraduate students and their parents are given separate orientation sessions on the commencement day. The aim of such sessions is to educate them about the general values and principles on which the College functions. It also familiarizes them with the different activities undertaken by the College for achieving its mission.

Value Education/ Ethical Response Sessions:

An hour a week is set apart for discussion on **issues and ethical responses** which is a student teacher interactive programme based on a syllabus prepared by the faculty members, in tandem with the principles of the College. The value education sessions create a good arena for the students to have an open positive interaction with their teachers through which institutional values are imbibed by them.

College Website:

The College website helps the College community as well all the other stakeholders to educate themselves on the objectives, principles, vision and mission of the College.

Annual Newsletter and Magazine:

The newsletter and the College magazine, both published annually, function as a platform for sharing the fundamental principles of the College. The Newsletter is primarily meant to reach out to the alumni who play an active role in supporting the institution.

Alumni Re -Union day:

Every November, the second Saturday is celebrated as alumni day. The keynote address and memory retrospectives reflect the values the alumni imbibed from the institution, and which need to be passed on to the next generation.

Parent Teacher Association:

The Parent Teacher Association of the College is very strong. Regular meetings are held to ensure awareness and participation of the parent community in all aspects of College life.

Staff Council and Staff Association:

Periodic meetings of the Staff Council as well as the Staff Association help to communicate the goals and objectives of the institution to the faculty of the College.

1.1.2. How does the Institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s)

Affiliated to the Mahatma Gandhi University, Kottayam, Kerala, the College follows the curriculum prescribed by the University. The process through which plans for effective curriculum implementation are developed, takes place as follows:

- A general time-table is prepared by a committee constituted by the Staff Council for the whole institution at the beginning of the academic year to ensure smooth functioning of teaching-learning activities.
- Every Department is responsible for developing its own action plans, based on the academic calendar of the University and the College. The plans would take into account the number of hours required for the course delivery, allotment of portions and deadlines to be met. Within this framework, the Heads of the Departments are in charge of Department wise planning and implementation of the curriculum.
- The College staff council (which consists of representatives from all Departments), based on the requirements of all Departments, arrives at a consensus about important deadlines, such as dates for centralized internal assessments.
- Feedback collected from students in the previous year is reviewed and suitable changes are incorporated into the action plan, if necessary, at the Department level.
- This feedback is conveyed to the respective Departments, which would then make effective changes, if necessary, to the existing plans.
- The College administration, right from the Academic Dean to the Heads of Departments make regular interventions to ensure the proper implementation of the curriculum both at the UG and PG level.

1.1.3. What type of support (procedural and practical) do the teachers receive (from the University or the Institution) for effectively translating the curriculum and improving teaching practices

- Workshops are held by the University to facilitate syllabus revision and make the faculty aware of essential changes and necessary improvements to the existing syllabus.
- The University ensures that Model Question papers are available to teachers and learners. The syllabus also provides reading lists for each course prescribed.
- The university academic calendar, published annually, provides the College with sufficient information on the exam schedules for the year.

- A general time-table is made at the beginning of the academic year to ensure the smooth functioning of classes.
- The workload for each Department and each course is divided among the respective faculty by the Head of the Department. The Departmental time-table is prepared by the Head of the Department for effective teaching.
- The College provides essential infrastructural support. All the Departments have sufficient classrooms and most Departments are equipped with reading rooms, language labs and practical labs which complement academic activities. For instance, the Department of History has an Archaeological museum and conservation laboratory to give students hands on training in historical material handling.
- Periodical Staff Council meetings and Staff Association meetings render procedural assistance to the faculty. Problems identified are dealt with in such meetings with immediate effect.
- The College ensures that books connected to the curriculum are available in the library for both teachers and students alike.
- Internal exams are scheduled for each semester and are held on a time bound basis.
- The IQAC keeps the teaching community updated with academic sessions meant to expose them to new methods of teaching and use of IT to enrich the teaching learning process.
- Faculty members from different Departments have had an opportunity to participate in Exchange Programmes or training Programmes abroad. They have introduced innovative teaching strategies and shared their experience with other faculty.

Table 1.1: Participation of Faculty in Exchange Programmes Abroad

Sl. No	Name of the Faculty	Programme
1	Dr. M. I. Punnoose	UBCHEA
2	Dr. Rachel Reena Philip	UBCHEA
3	Dr. Mini Alice	UBCHEA
4	Dr. Justin R. Nayagam	UBCHEA
5	Dr. Resmi R.	FLAIR

1.1.4. Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on curriculum provided by the affiliating university or other statutory agency

- A decentralized method based on various subjects is followed in the College for transaction of curriculum.
- The syllabus requirements are verified at the Departmental level.
- The curricular objectives are developed.
- To meet the identified objectives a delivery plan is made for each Department.

- Based on the course duration, credits and learning objectives, the work distribution for the Department is made.
- To ensure that the transaction is effective, periodical introspection is made through class tests, class response and scheduled internal examinations.
- Identified lacunae among the learners are rectified through remedial teaching.
- Problems still identified as persisting are addressed through tutorial and mentoring Programmes. If the learner still displays learning problems, counselling by the mentor or counselling with parental assistance is suggested or undertaken.
- Periodic assessments are a very effective tool for feedback to analyse the knowledge level of the students.
- Recurring problems identified in the Departments are rectified in the next academic year.

1.1.5. How does the institution network and interact with the beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?

- The institution has a number of faculty members who have industry experience. Their professional networking and exposure have been handy in bringing in experts from different fields to deliver talks and workshops.
- The Department of Biotechnology has signed MoU's to provide On-the-Job Training for its students in BT & SP (Biological Techniques & Specimen Preparation) programme with two institutions, the Synthite Group and Kolenchery Medical College respectively. Every year students of the Department participate in Industrial visits.
- The Department of History has tie up with Centre for Heritage Studies, Tripunithura and Centre for Heritage, Environment and Development, Corporation of Cochin For practical training in Archaeology and Museology
- The Department of Zoology has a tie-up with 'Care Keralam', an institution where students get On-the-Job training in a range of activities such as Animal care and Ayurvedic practices.
- The Department of Physics offers consultancy on the utilizing of research equipment. Students from neighboring colleges and Cochin University of Science and Technology utilize the lab facility of the Department of Physics.
- The College has received grants for various minor and major projects from Research funding bodies such as the UGC, ICHR, KCHR, ISRO, DST, SERB, DBT, UBCHEA, KSCSTE, and BRNS (List attached Annexure:)
- Industry visits and field visits are organized by various Departments.
- The career guidance centre functioning in the College assists employers including banks to select candidates from the campus itself. More than 200 students have been recruited by scheduled banks, MNCs, etc. during the assessment period.

1.1.6. What are the contributions of the institution and/or its staff members to the development of the curriculum by the university?

- Thirteen faculty members from various Departments are part of the Board of Studies of the University and have been actively involved in preparation of Syllabus.

Table1.2: Board of Studies members from our College in the M. G. University

Sl. No.	Name of the teacher	Department
1.	Dr. P.M. Kuriachen	Botany
2.	Dr. E.S. Jeevanand	Mathematics
3.	Dr. Ancy Eapen	English
4.	Dr. Sheela Kumari Isac	Chemistry
5.	Dr. Shirley Thomas	Zoology
6.	Mr. Saju Mathew	Malayalam
7.	Dr. Malini R	Psychology
8.	Dr. Neelima Ranjith	Psychology
9.	Dr. Seena M Mathai	Psychology
10.	Ms. Syna Soosan Abraham	Psychology
11.	Dr. Vidhya Ravindranadhan	Psychology
12.	Mr. Cijin K Paul	Computer Sciences
13.	Dr. Sareen Sarah John	Bio-Technology

Table1.3: Board of Studies members from our College in the various Autonomous Colleges

Sl. No	Name of the teacher	Department	Colleges
1.	Dr. Muse Mary George	Malayalam	SH College, Ernakulam
2.	Dr. M. I. Punnoose	Malayalam	St. Josephs College, Irinjalakkuda
3.	Dr. K. S. Narayanan	Malayalam	St. Josephs College, Irinjalakkuda
4.	Dr. Vidhu Narayan	Malayalam	C.M S College, Kottayam
5.	Dr. E. S. Jeevanand	Mathematics	SH College Ernakulam
6.	Dr. Seena M. Mathai	Psychology	St. Joseph College, Irinjalakuda
7.	Dr. Malini R.	Psychology	St. Teresas College, Ernakulam
8.	Dr. Neelima Renjith	Psychology	St. Teresas College, Ernakulam
9.	Dr. Anila E. I.	Physics	St. Joseph College, Irinjalakuda
10.	Dr. Sebastian Joseph	History	C.M.S.College, Kottayam
11.	Dr. Jenee Peter	History	Maharajas College, Ernakulam
12.	Dr. Thara K. Simon	Botany	Mar Ivanios College, Trivandrum

- Forty eight faculty members from various Departments are on the panels of question paper setters in different universities and Autonomous Colleges
- Twenty five faculty members from various Departments are part of curriculum revision Programmes in different Universities and Autonomous Colleges

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it. If 'yes' give details on the process (needs assessment, design, development & planning) and the courses for which the curriculum has been developed.

- Yes

The College offers **four value added career oriented Programmes** (UGC sponsored) at various levels. **The Departments of Botany, Chemistry, History, and Computer Science** have designed and developed curricula for add-on and diploma courses run by them. Besides, an inter-disciplinary certificate course in Environmental Studies is offered by the Center for Environmental Studies (CES) of the College. Significantly, the course design and plan of these courses are internally generated. (Two such courses {E&CM, & BT & SP} developed and designed by the College during the first assessment period have grown into regular degree programmes of the University and still continue under the self-finance stream in the College)

a) UGC Sponsored Courses

- The Department of Botany offers a diploma course in **Industrial Floriculture and Gardening**.
- The Department of History conducts an advanced diploma course in **Archaeology and Museology**
- The Department of Chemistry offers an advanced diploma course in **Material Sciences**.
- The Department of Computer Science offers a Career Oriented Course titled **Structured Information Processing and Network Application**. This course is of a 3 year-duration in which a student can acquire three separate certificates/diplomas. (After the first year, the student completes a certificate course. In the second year the student earns a diploma, and in the third year an advanced diploma.)

b) Certificate course in Environmental Sciences offered by the College

The Departments of Botany, Chemistry, and Zoology have jointly developed and conducted an inter-disciplinary certificate programme for selected final year UG students of these departments. The curriculum is developed by the participating departments, and certificate issued by the College.

Needs Assessment

The courses are developed on the basis of their relevance, job opportunities available, and opinion of present and former students and employers.

Design

The curricula were designed by faculty members of the concerned Departments in consultation with experts and resource persons in the relevant field.

Development

In the case of UGC sponsored Diploma Programmes, the curricula so prepared were sent to the University for approval.

Planning

The time schedule, the duration, methodology, fees, faculty, examination, infrastructure etc. of the courses are planned by the College. The action plan is finalized by a committee consisting of the Principal, External Expert and the coordinator of the respective course.

1.1.8. How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation

- Through periodic assessments, introspection and an active feedback mechanism.
- Assessments are done in the form of internal examinations and assignments. Besides departments conduct surprise quizzes, class room response etc.
- ICT enabled seminars and project presentations are conducted to effectively achieve the objectives.
- The percentage of pass, number of university ranks and grades, placements, etc. are other indicators of achievement.
- Feedback from stakeholders especially from parents and students are also taken into account.
- Projects, field visits, study tours, industrial and laboratories visits are also undertaken by the UG and PG students in line with the stated objectives.

1.2. Academic Flexibility

1.2.1 Specifying the goals and objectives give details of the certificate/ diploma/skill development course etc., offered by the institution,

Apart from the regular Undergraduate and Postgraduate courses, the College offers the following Programmes:

Add-on Courses

1. The Department of Computer Science offers a Career Oriented Add-On Course titled **Structured Information Processing and Network Application**. It is a 3 year course which issues three certificates. The first year is a certificate course. The second year of the course ensures a diploma and the third year leads to post diploma.

Objectives:

1. To enable students to work as desktop publishers and data entry operators
2. To enable students to select their career as programmers and software developers
3. To make a students proficient in network administration, server configuration, image editing and video editing

2. The Department of Chemistry offers an advanced diploma course in **Material Sciences (UGC Sponsored)**

Objectives:

1. To equip its students for successful careers in the field of Materials Science.
2. To prepare students to apply modern day approaches to materials problems.
3. To make the students aware of the social, safety and environmental consequences of their work.
4. To be able to design and conduct experiments and to analyze data.
5. To understand the professional and ethical responsibilities of a materials scientist

3. The Department of Botany offers a diploma course in **Industrial Floriculture and Gardening (UGC Sponsored)**

Objectives

1. To foster improved standards of living.
 2. To create greater employability.
 3. Growing consciousness among the students to live in environment friendly manner.
 4. To provide greater scope for self-employment.
- 4. The Department of History conducts an advanced diploma course in **Archeology and Museology (UGC Sponsored).****

Objectives

1. To provide vocational opportunities for History graduates.
2. To broaden their higher education options.

5. Inter-disciplinary Certificate Course in Environmental Science

Objectives

1. Spread and Provide Environmental awareness among youth
2. Conduct studies on national, Regional and Global Environmental Issues.

6. Advanced Skill Acquisition Programme (ASAP)

The Department of English in association with Department of Computer Science has been conducting the ASAP training Programme under the initiative of the Government of Kerala. To sharpen the four pillar skills: Speaking, listening, reading and to buff up vocabulary and grammar. Batches are arranged in smaller groups so that effectual interaction takes place between teachers and students and amongst students themselves

1.2.2 Does the institution offer Programme that facilitates twinning/dual degree? If 'yes' give details. No

1.2.3 Give details of the various institutional provisions with reference to academic flexibility and how it has been helpful students in terms of skill development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond.

1.2.3.1 Range of core/elective options offered by the university and those opted by the College.

- The curriculum offers a number of elective options in the Choice Based Credit System. (CBCS).
- A number of new Programmes and options are available to meet the needs of the students and society.
- The B.Sc. Physics (main) students can opt for a second option (either Chemistry or Statistics) along with Mathematics. Similarly, Economics students can choose a second subsidiary subject from either History or Mathematics.

1.2.3.2 Choice Based Credit System and range of Subject options

With the introduction of the Choice Based Course, Credit and Semester (CBCSS) system which was introduced in 2009-2010 by the University, (offering a variety of open and choice based courses to the students) greater academic flexibility has been realized.

- A number of new Programmes and options are available to meet the needs of the students and the society. Open courses/ Electives are provided for the 5th and 6th semester UG students and Electives are provided for 3rd and 4th semester PG students. The students can opt for an open course out of the 12 courses offered by different Departments during the 5th semester at UG level. Transcripts are issued to students for continuation of their studies outside Kerala state and also for international academic Programmes.

Table 1.4.Open courses run by various Departments.

Sl. No.	Department	Name of the course
1	Malayalam	Journalism
2	English	English for Careers
3	History	Environmental History
4	Economics	Foundations of Environmental Economics
5	Physics	Astrophysics
6	Chemistry	Food Science
7	Mathematics	Applicable Mathematics
8	Computer Science	Web Designing
9	Botany	Horticulture and Nursery Management
10	Zoology	Ornamental Fish Breeding, Rabbit farming, Bee keeping
11	Psychology	Life skills Development
12	Physical education	Physical, Health and Life skills Education

- A range of elective options is offered by the university, and the College opts the best combination because of its competent faculty.

1.2.3.3 Courses offered in modular form

All the UG and PG Programmes are offered in modular form. The Internal Assessments and the University Examinations are also on modular basis.

1.2.3.4 Lateral and vertical mobility within and across programmes and courses

- Postgraduate programmes and PhD programmes available in most of the departments enable vertical mobility of the undergraduate students within and across their discipline.
- B.Sc. Computer Science and B.C.A students of the College can move laterally to the M.C.A programme of the College.

1.2.3.5 Enrichment Courses

- The College offers enrichment courses such as Advanced Diplomas and Certificates (Refer 1.2.1)
- Skill enhancement programmes such as ASAP, Walk With a Scholar, personality development Programmes, NET coaching and coaching for Civil Service Examination aspirants are also offered by the College.
- Various enrichment classes are provided by the College to enhance value orientation such as value education, endowment lectures and Women's Cell discussions. Activities of the Center for the Study of Religion and Society (CSRS) and programmes of Youth Inspire Club also contribute to the value orientation. Awareness in social citizenship roles are provided by the College through BLISS- the counseling centre, Women's Cell, NSS, NCC, Association activities, Students Christian Fellowship (SCF), legal literacy classes, Women Empowerment Programme, study tours, etc.

1.2.4. Does the institution offer self-financed Programme? If yes list them and indicate how they differ from other Programme with reference to admission, curriculum, fee structure, teacher qualification, salary etc.

Yes.

The various self-financing courses, fee structure and teacher qualification are given in tables 1.5 and 1.6.

Table.1.5. Self-financing courses of the College

Sl. No.	Programme	Duration of the course	Year of commencement
1	B.Sc. Computer Maintenance & Electronics	6 semesters	2001
2	B.Sc. Biological Techniques and Specimen Preparation (BT & SP)	6 semesters	1995
3	M.Sc. Biotechnology	4 semesters	2001
4	M.Sc. Bioinformatics	4 semesters	2004
5	B Com. Taxation	6 semesters	2014
6	B Com. Computer Application	6 semesters	2013
7	MCA	6 semester course	2001
8	MBA Electives 1. Marketing Management, 2. Financial Management 3. H R M 4. Information Systems 5. Production and Operations Management 6. International Business	4 semesters.	2005

Table.1.6. Self-financing courses Fee Structure /Qualification

Course (Self-financed)	Admission	Curriculum	Fee structure (Semester)	Teacher qualifications
B.Com (Computer)	50%Merit 50%Management	University Syllabus	Rs.22500	Post Graduates
B.Com (Tax)	50%Merit 50%Management	University Syllabus	Rs.19000	Post Graduates
B.Sc E&CM	50%Merit 50%Management	University Syllabus	Rs.30,000	Post Graduates
BT & SP	50%Merit 50%Management	University Syllabus	Rs. 11,250	Post Graduates
M.Sc Bio-Tech Bio Info	50%Merit 50%Management	University Syllabus	Rs. 35000 Rs. 35,000	Post Graduates
M. C. A.	50%Merit	University Syllabus	Rs. 26,000	AICTE Norms
M. B. A.	50%Management	Syllabus	Rs. 50,000	

Admission to the self-financed courses is as per the existing norms and guidelines issued by the Mahatma Gandhi University. 50% of total seats are filled through CAP on merit basis by the university and 50% is reserved for management quota. The 50% general merit is again divided into 40% general, 3% OBC and 4% SC/ST. Teacher qualification is the same as that for regular courses and fee structure is as per the University/Kerala Government norms.

To be self –reliant, the University suggests a higher fee than regular courses, but the College collects a lesser fee than the maximum fee fixed by the University.

Curriculum. The self-financed courses offered by the institution follow the curriculum framed by the Mahatma Gandhi University.

1.2.5. Does the College provide additional skill oriented Programmes, relevant to regional and global employment markets? If yes provide details of such Programme and beneficiaries

Yes.

The College offers various additional skill acquisition programmes in cooperation with various agencies such as Department of Higher Education, UGC, Indian Association of Physics Teachers (IAPT) etc.

Table.1.7. Details of additional skill oriented Programme

Sl. No.	Programme	Description
1	Additional Skill Acquisition Programme	Introduced by the higher education dept.- Department of Higher Education (DHE), Government of Kerala (GoK) and the Wadhvani Foundation announced a strategic partnership which aims at improved employability of students in Kerala through vocational and other educational training Programme
2	Walk With A Scholar (WWS) Programme	Specialized mentoring Programme for students in Under Graduate Programmes in Arts, Science and Commerce and to provide guidance for their future. The scheme introduces the idea of mentoring and builds on the concept of mentor as a 'Guide' and 'Friend'. The mentoring scheme for students will be purely voluntary in nature.
3	Civil Service Coaching	Civil Service Coaching classes: Functions as a center of excellence in molding young minds in reaching top-notch positions in Central Civil Services. The Programme intends to help the aspirants work towards delivering relevant and comprehensive guidance factoring in all the parameters of UPSC.
4	NET coaching	Net coaching has been provided to PG students in their respective Departments by experts in the same field to encourage students to enter the teaching and research area.

1.2.6. Does the university provide the flexibility of combining the conventional face to face and distance mode of education for students to choose the courses/ combination of their choices? If yes, how does the institution take advantage of such provision for the benefit of students?

In the present system of Mahatma Gandhi University there is no provision to combine the conventional and distance modes of education together. But students in conventional UG and PG programmes can study courses of their choice under distance mode.

1.3. Curriculum Enrichment

1.3.1. Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic Programme and Institution's goals and objectives are integrated?

As the mission statement declares, the College aims to give a holistic education to its students, equipping them with the intellectual, social, technical and interpersonal skills that they would require to meet the challenges in the vocations of their choice. At the same time, the need to create morally and socially aware citizens who can contribute their skills for the betterment of society is also an objective. The institution ensures that the said goals are integrated to the curriculum in the following ways:

- The College provides five add-on courses to supplement the regular University curriculum (Refer section 1.1.7.)
- In line with the goals and objectives of the College, several value enrichment programmes are offered by CSRS, Ford Pathways to Higher Education, Counselling centre, and classes on issues and ethical response.
- Faculty members of the College encourage UG, PG and Ph. D students to take up research projects instituted by various state and national agencies such as KSCSTE, DST. During the last three years, two Ph. D students, 6 PG students and 4 UG students were benefited with major and student projects.
- Club Activities – The College has six clubs to support co-curricular activities- the Fine Arts Club, Tourism Club, Quiz Club, Debate Club, Media Club and Nature Action Club. Each club is under the supervision of a faculty advisor. The clubs conduct Programmes and competitions under the initiatives of the volunteers. These clubs help to integrate the College's goals with the curriculum.
- Department Association Meetings – Each Department of the College has its own Association with elected office bearers. One hour a week, or in some cases, two hours a month are allocated in the timetable on a regular basis. All the three Undergraduate batches and the Postgraduate students of a Department meet to conduct programmes relevant to their respective disciplines. These include presentations, discussions and debates and invited lectures. The students also learn how to conduct meetings, prepare and read the minutes, and organize their own activities in the given time.
- Scholarships and Endowments - 123 scholarships and endowments based on academic proficiency of worth Rs.1,32,570/- are given to 148 deserving students annually by all Departments. Besides, 73 Institutional scholarships including the Scranton Scholarship for Women instituted by American Methodist Korean Women's Mission Foundation, Korea, awarded to meritorious girl students.

- **National Service Scheme**-The N. S. S. unit of the institution actively orients students to the social needs of the community including awareness rallies, camps, and organic farming initiatives.
- **National Cadet Corps**-The N. C. C. plays an active role in instilling confidence and self-discipline among the volunteers. The Youth Exchange Programme (YEP) instituted at the national level for NCC cadets by the Government of India is significant as it allows cadets to broaden their horizons by experiencing different cultures. During the assessment period four NCC cadets from the College represented India in Bhutan, Singapore, Sri Lanka, and Russia under this exchange programme.
- **Value Education or Ethical Response Sessions** are other means of supplementing the academic programme. On every Friday during the second semester, first period is allocated for Value education lectures. Seminars are also held for teachers, in order to equip them to handle these classes effectively
- **Sports Facilities**- the College has several facilities for Physical Education of Men and Women students. Students have been using these facilities. There is also a well-equipped multi gymnasium for students.

1.3.2. What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?

Over the years, as a centre for higher learning, the College has attempted to equip students with hands on experience and skills that would make them a valuable asset to any industry.

- Field trips or field visits organized by the science departments and History Department are an integral part of gaining first-hand experience outside the classroom.
- On-the-Job training programmes offered by the Departments of Computer Maintenance and Biotechnology and Centre for Heritage Studies offered by History Department.
- Seminars, workshops and training programmes are organized by the College, and by individual Departments to enrich and supplement the curriculum.
- Faculty members of the College encourage UG, PG and Ph. D students to take up projects in association with state and national funding agencies such as KSCSTE and DST. Six PG students (Rs.30, 000/-), four UG students (Rs.20, 000/-) and three PhD students (Rs.40, 00,000/-) were awarded student and research projects during the last three years. These projects expose advanced students to research avenues.

- ASAP (Additional Skills Acquisition Programme) is a venture that trains selected students and equips them with soft skills and computer skills, over a period of three weeks. The College has been accorded five stars by the Government of Kerala for the successful conduct of the programme.
- The Career Guidance and Placement Cell has been effectively bridging the gap between the institution and the industry by organizing training sessions in soft skills and job fairs/ interviews for students.
- All Departments have been conducting career guidance programmes for outgoing Undergraduate and Postgraduate batches.
- Eminent persons are invited to share their experiences and expertise in various fields with students.
- Student Exchange Programme: Ten students from the International Christian University, Tokyo, Japan were on this campus during the assessment period as part of the Student Exchange Programme. In exchange, three students from the College attended service learning courses in Japan.
- Coaching for the UGC NET examination has been offered in phases.
- Students are encouraged and facilitated to attend/ present papers at seminars.
- College promotes Service learning activities to learn from first-hand experience.
- Career oriented materials provided by the library
- Students are also provided personal counseling, mentoring, tutorial, career guidance and personality development programmes.
- To fulfill this objective, research projects are taken up by faculty members; College supports faculty members to take leadership roles in various academic and professional bodies in connection with curriculum revision; and faculty members offer consultancy services.

1.3.3. Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum.

The existing curriculum of Mahatma Gandhi University does address many of these issues. Gender, Environmental Education and Human Rights form a large component of the syllabus of the common courses, especially English. In addition the institution takes efforts to expose and sensitize students to these issues in several ways:

- The College has different cells and centers to promote these aspects among the students and faculty. Ford Pathways to Higher Education was one such project instituted by the Ford Foundation in the College. The project was in

function during 2011-12 and 2012-13 with the objectives of enhancing students' awareness about social justice, human rights, gender inequalities and human diversity; increase opportunities for interaction among students from all socio-economic backgrounds; and empower students to overcome social, cultural and economic stigmas. Twenty programme volunteers were selected every year from the socially and economically marginalized students, during 2011-12, and 2012-13. Programmes conducted by the Cell include production of a Documentary and two short films with themes like social issues, and survey among the individuals of the nearby Dalit Colony. As a result of the programmes, participants became alert about social diversity, human rights, and gender disparities.

- Whenever an opportunity presents itself in the form of choices of electives or open courses, Departments choose an area that would add to the student's general awareness of the world around them. For example, Environmental History is an interdisciplinary Open Course offered by the History Department.
- Assignments and seminars given to students are connected to social realities and not confined to the curriculum.
- Talks by and interactions with prominent social leaders expose students to such issues.
- The Women's Cell of the College actively engages in educating the student community on gender issues through formal and informal meetings.
- The Nature Action Club and the N.S.S. both focus on specific environmental projects in and around the campus. Campaigns, street theatre, screening of documentaries and making power point presentations are methods used by the students to raise awareness about issues like Save Periyar Movement, Transgender issues, etc.
- The N.C.C has organized seminars on road safety and Cyber-crime.
- The College provides residential facility for both men and women students as well as faculty. To promote gender equality and avoid gender discrimination, the college has constituted a Women's Cell, which has been functioning effectively for the last several years.
- Every research Department encourages students to undertake research in areas relating to gender, climate change, environmental education, human rights, etc. during their project work.
- Important days such as Ozone Day, Science Day, World Environmental Day, and Women's Day are observed. Seminars related to human rights issues, gender issues are also conducted by Clubs and Associations.

1.3.4. What are the various value-added courses/enrichment Programmes offered to ensure holistic development of students?

1.3.4.1 Moral and Ethical Values: Value Education or Ethical Response **classes** are conducted on every Friday during the second semester. During this semester, the first period is allocated for Value Education sessions. Seminars are also held to prepare the syllabus and to equip teachers to handle these classes effectively.

1.3.4.2. Employable and Life Skills:

- The College offers other add-on, Enrichment programmes, and Life Skills development courses such as Diploma programme in Archaeology and Museology (History), Open courses in Life Skill Development (Psychology Department) and Physical, Health, and Life Skills Education (Physical Education), and Environmental History (History).
- The Physical Education department in association with Women's Cell of the College offer programmes in Yoga and Karate for women students.
- The U. C. College is a nodal center for ASAP (Additional Skills Acquisition Programme) of Kerala Government. It is a venture that trains selected students and equips them with soft skills and computer skills, over a period of three weeks. The students completing this training programme could become Skill Development Executives or Communicative English Trainers (CET). More than 80% of the participants have already selected as CETs.

1.3.4.3. Better Career Options:

- The College also provides NET Coaching, Guidance for entrance exams such as JAM & JEST, Mentoring Programmes like Walk With a Scholar and Civil Service Coaching.

1.3.4.4. Community Orientation:

- The NSS unit of the College organized various community orientation programmes as given below:
 - *Aksharachilla*: Collected books from teachers, old students and present students and instituted libraries in three rural villages (Chennamangalam, Kunnukara, and Kottappady).
 - *Laharimukthasena*: conducted awareness rallies and seminars in association with Kerala Excise Department to save youth from drug abuse and alcohol.
 - *KANAVU*: Home for Homeless – Four homes were constructed and one home renovated during these years.

- Pain and Palliative Care unit of the College conducted programmes to support Cancer Patients and Hemi Paraplegia patients. The unit conducted a survey in the locality to identify people in need of palliative care as well.
- Women's Cell organized a programme for the *Kudumbasree* members (Self-Help women's group) to equip them in soft skills and making them capable of self-employment.
- BLOOD Donation: Different student organizations coordinated blood donation activities, and approximately 300 students donated blood during this period.

1.3.5. Citing a few examples enumerate on the content of use of the feedback from stakeholders in enriching the curriculum.

- Syllabus revision/updating plan drafted based on student feedback.
- Complementary tutorials initiated.
- Pedagogic methods/tools adapted according to the draft.
- Use of new discourses/texts like movie/stage/musical/online adaptations.
- Generating new materials/discourses based on the curriculum.

The College has 13 faculty members represented in the UG and PG Boards of Studies of the University. The observations and constructive suggestions from the feedback obtained from stakeholders including parents, alumni, local community and campus recruiters are conveyed to the Boards of Studies and are utilized in designing and enriching the curriculum.

Every year the institution and all the Departments hold alumni meetings. The suggestions of the alumni contribute to the productive functioning of the College. Feedback from the alumni gives ample information regarding the strengths and weaknesses in the light of which improved facilities are made available to students. Feedback from students is used for rectifying the shortcomings of the curriculum.

- As an example, based on the feedback from alumni of the Psychology Department, Internship was introduced in 2011 in the B. Sc. Psychology programme in the final year.
- For the M. Sc. Psychology, as suggested by the peer teachers, provided weightage for activity based assignments done by each student in every semester and evaluated as part of the corresponding practical examinations.
- Similarly, Department of Electronics and Computer Maintenance (E&CM) introduced mandatory on-the-job training in the 4th semester of the B.Sc. Degree Programme in accordance with the suggestions of employers.

1.3.6 How does the institution monitor and evaluate the quality of its enrichment Programme.

- For enrichment programmes such as Value Education and Ethical Response, quality is ensured by a committee comprising of faculty members from different departments. The committee conducts workshops to frame the syllabus, and to make necessary modifications every year. This programme runs as per a scheduled time table. Feedback from students is collected by the committee and submits a report to the Staff Council.
- Concerned committees review the Walk With a Scholar (WWS), ASAP and SSP programmes periodically and collect feedback from students. The reports are submitted to the Principal through IQAC and forwarded to the Department of Higher Education, Kerala.

1.4 Feedback System

1.4.1. What are the contributions of the institution in the design and development of the curriculum prepared by the University?

- Thirteen faculty members from eight Departments are members of the respective Board of Studies at the UG and PG levels in Mahatma Gandhi University. They contribute effectively at all stages of curriculum planning, revision and implementation.
- Several faculty members have attended syllabus revision workshops conducted by the University and contributed significantly to enrich the syllabi of various UG and PG programmes.

1.4.2. Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If yes, how is it communicated to the University be and made use internally for curriculum enrichment and introducing new changes/ new Programme?

Yes

1.4.2.1 Students:

- Every teacher formally collects feedback from students at the end of each semester using a structured questionnaire framed by IQAC. Teachers analyse these questionnaires and make necessary improvements in their delivery of content, teaching methodology etc.
- Annual farewell meetings are arranged for outgoing students in which students express their suggestions, feedback and opinions regarding the curriculum and overall experience in the College. In subsequent faculty meetings these suggestions will be discussed to make appropriate corrections.

1.4.2.2 Alumni:

- Reunion of alumni and friends of the College is organized every year on the second Saturday of November in which alumni feedback is obtained. In addition, regular Alumni Executive Committee meetings are held to collect suggestions on matters related to the academic programmes.
- When alumni members revisit the college during annual meetings or department get-togethers express their suggestions/ opinions regarding curricular and co-curricular activities of the college in the background of their experiences in other institutions.

1.4.2.3. Parents:

- Open house Programmes regularly conducted by the College after the publication of internal examination results are an opportunity to get feedbacks from parents.
- PTA General Body meets once a year and executive committee meetings are held at least once in every term. Feedback on curriculum and academics are obtained through such meetings.

1.4.2.4. Employers/ Industries:

- The College is in the process of developing a mechanism to obtain feedback from employers/ industries. The College has strong ties with industries where our alumni occupy key positions. Feedback is collected informally and analysed. Employers visit the college during campus placement drives give their feedback as well. For example, one such feedback resulted in the incorporation of on-the-job training as a part of the curriculum of B. Sc. E & CM programme.

1.4.2.5. Academic peers:

- Faculty members attending curriculum-restructuring workshops, valuation camps, and visiting other colleges as external examiners collect feedback and valuable inputs regarding curriculum implementation. Faculty members from the Department of Psychology revised their PG curriculum by including Activity Based Assignment in every semester.

1.4.2.6. Community:

- No formal mechanism is adopted for obtaining feedback from the community. However, the College has strong relationship with the community around and the College always takes into consideration the informal suggestions from these community members.

The feedback obtained from students, alumni, parents and other stakeholders are usually discussed in the Staff Council, which consists of the Principal, Heads of all Departments, librarian and two elected faculty

members. Then these matters are discussed in the Staff Association meetings as well.

Suggestions obtained from various stakeholders are either communicated to the Boards of Studies of the University for appropriate Action. As there is a good representation of the College in academic bodies in the University, most of the suggestions will be reflected in all decisions.

1.4.3. How many new programmes or courses were introduced by the institution during the last four years? What was the rationale for introducing new courses or programmes?

The College has started two UG programmes, three PG programmes and one Ph. D programme as follows:

- B. Com (Computer Application) : 2013-14
- B. Com (Taxation) : 2014-15
- M. Sc (Zoology) : 2013-14
- M. B. A : 2014-15
- M. C. A (Lateral Entry) : 2014-15
- Ph. D Psychology : 2013-14

The rationales for introducing new courses are

- Recommendations of NAAC peer team visited last time
- Suggestions made by Kerala State Higher Education Council.
- Demand from Stakeholders.
- Opportunities available in the job market
- Demand from parents

CRITERION II

TEACHING, LEARNING, AND EVALUATION

The College strives for the wholesome education of each individual and to get the best out of him/her. Established in 1921 on interdenominational co-operation, the College adheres to the mission of producing intellectually competent, morally upright and spiritually inspired men and women who serve the country with dedication and fervour, which is reflected in every aspect of teaching and learning. It fosters Christian and humanistic values and the management, faculty, administration and students strive to live up to these cardinal values envisaged by our founding fathers.

2.1.1. How does the College ensure publicity and transparency in the admission process?

An institution located in a semi-urban area, with its legacy and reputation built over several years, Union Christian College attracts young aspirants from all over the state and from varied social, economic and demographic strata of the society. The College, as per the Kerala government stipulations, exercises reservation for students belonging to minority Christian and Muslim communities, and those from Union Territories (Lakshadweep) as well. As the admission to UG and PG Programme is done through Centralized Allotment Process (CAP) of the affiliating university, the University notifies the procedure for admissions in newspapers. The College website gives links to the relevant pages of the University website. The prospectus and other details related to admission are made available in the College before the time of admission. As the scholarships and financial support offered by the institution are major attractions, the College gives publicity to them through the website and handbook.

The enrolment of students to various programmes is strictly based on the rules of the State government and the guidelines of Mahatma Gandhi University. For SC/ST students, the admission procedure is as per the guidelines provided by the Government. For Self Financing Programmes, notifications are advertised through newspapers. The lists of selected students are exhibited on the College notice board. To ensure transparency, the applications to management quota seats are serially numbered. Cut-off marks for Management quota seats and Community quota seats are decided by a committee comprising the Principal, the Manager and selected faculty members. Records of the entire admission procedure are further submitted for auditing so as to ensure transparency in the process.

2.1.2. Explain in detail the criteria adopted and the process of admission

The institution follows the Centralized Allotment Process (CAP) of the Mahatma Gandhi University for admissions to the undergraduate and postgraduate Programmes. Admissions to the general and reservation seats (SC/ST) are also carried out through this process. The entire system being computerized, the prospective candidates enroll

themselves in the University website, stating their choice of the Programme as well as the institution under the University. Allotment of students to various Programmes and Colleges is done by the University based on their academic merit. The dates of admission to various Programmes are announced and provided in newspapers and the University website for easy verification. Enquiries regarding the admission procedure are addressed by the College. An interactive help-desk is opened and made available at the College reception and all information related to admission are provided on boards displayed near the College entrance. The application forms for the management and community quota are provided by the College and admissions to those seats are carried out by the institution based on the academic merit of students. Minimum marks are fixed for student enrollment to management quota, which ensures transparency of the process.

Admission process

An admission committee is constituted under the headship of the Principal, along with the Heads of Departments and administrative officer. Apart from the general admission committee, separate committees are constituted at the Department level, with Heads of Departments and three faculty members as per the decisions made by the Staff Council, a statutory body of the institution. Students are admitted to various Programmes after verification of the eligibility documents by the Department level committee. Final verification of documents is done by the administrative staff under the supervision of the Principal, and selected students get confirmation to their admission to the Programme of their choice. Information regarding the students admitted is uploaded in the University website by the College on the day of admission as per the directions of the university, and the University prepares subsequent admission lists based on the number of vacant seats. Admission to self-financing Programmes is also carried out based on the norms of the Government and the University.

Admissions to PhD Programme are carried out as per the UGC and University guidelines. Students with UGC-NET/JRF or those who qualify the entrance examination (conducted by the University) find entry to the PhD programmes in the College.

2.1.3. Give the minimum and maximum percentage of marks for admission at entry level for each of the Programmes offered by the College and provide a comparison with other Colleges of the affiliating university within the city/ district

Table 2.1 Minimum and maximum percentage of marks for admission at entry level for each of the Programme offered by the College 2015-16

AIDED Stream: Undergraduate Programme					
Programmes		Maximum Marks %		Minimum Marks %	
		U. C. C	*St. Xavier's	U. C. C	*St. Xavier's
B.A.	English	98.58	97	80.17	67
	Economics	97.83	92	83.75	82
	History	96.25	NA	80.80	NA
	Malayalam	91.43	92	69.42	82
B.Sc.	Mathematics	98.75	96	77.58	75
	Physics	98.83	95	88.92	73
	Chemistry	98.25	96	82.58	83
	Botany	94.17	98	83	73
	Zoology	95.83	93	68.92	76
	Computer Science	92.67	NA	87.58	NA
	Psychology	93.60		90.17	
AIDED Stream: Postgraduate Programmes (index marks)					
M.A.	English	89.50	90	75.25	65
	Economics	98.80	NA	57.70	NA
	History	81	NA	62.25	NA
	Malayalam	76.90	90	47.50	65
M.Sc.	Mathematics	93.20	NA	79.80	NA
	Physics	91.20	92	86.10	62
	Chemistry	91.30	NA	89.80	NA
	Botany	88.09	NA	85.20	NA
	Psychology	97	NA	66.75	NA
	Zoology	89	NA	88.09	NA
Self-Financing Stream: Undergraduate Programme					
B.Sc.	Biological Techniques & Specimen preparation(BT&SP)	88.25	NA	66.90	NA
	Electronics & computer Maintenance (E&CM)	82.4	NA	70.88	NA
B.Com	Computer Application	90.40	100	79.58	69
	Finance & Taxation	89.75	NA	88.60	NA
Self-Financing Stream: Postgraduate Programmes					
M. Sc.	Biotechnology	81.80	NA	51.50	NA
	Bioinformatics	91.20	NA	70	NA

*Data of St. Xavier's College, Aluva (Urban area)

2.1.4. Is there a mechanism in the institution to review the admission processes and student profile annually? If yes, what is the outcome of such an effort and how has it contributed to the improvement of the processes?

The verification of mark lists and certificates of candidates selected for admission is done centrally in all the academic Programmes. The database of students' marks and other academic details prepared on the day of admission itself ensures easy access to students' profile throughout the course of their study and beyond. The admission

committee reviews the admission process, the number of students admitted to each Programme, as well as their academic credentials. In fact, the need for a **help-desk** to support applicants at the College was felt during such a review process, and steps were taken thereafter to introduce the same. Similarly, Programmes with higher demand are identified and then marginal increase in the number of seats is requested to the University (Every year the College gets additional seats in such Programmes). The need for a Programme in the Commerce stream at UG level was felt and thereafter effort was taken to begin the Programme. The College also took steps to introduce a Masters in Business Administration taking into account the growing demand for the Programme and on the basis of feedback received from the students and their parents. The academic quality of students admitted to the College is also monitored by the committee and this has led to the identification of certain discrepancy in admission criteria to Programmes such as B. Sc. Psychology. Students from any academic stream at their higher secondary level are permitted to apply for the Programme, while those who have studied Psychology as an optional course get an additional advantage of greater index marks, which creates a disparity. The College has raised the issue and has brought it to the notice of the Vice-Chancellor of the University. His office has assured to make modifications in the admission criteria for the Programme.

The student profile ensures regular monitoring of their attendance through a centralized system of attendance maintenance. It also helps to identify academically bright students in need of financial assistance to pursue their studies.

2.1.5. Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its students' profiles demonstrate/reflect the national commitment to diversity and inclusion?

SC/ST: The College strictly adheres to the reservation policies set by the Government in the admission of students to SC/ST quota. 20 % of the seats are reserved for SC/ST students in each of the Programmes. Provision for fee relaxation, remedial coaching in areas of academic weakness etc. are also provided for their betterment. (See also table 2.2).

Women: Access to higher education for women has been one of the major highlights of the institution as envisioned by our founding fathers. A review of the ratio of women to men indicates that women outnumber men in various academic programmes (ratio of women to men - 7:3). The College provides ample opportunities for women and ensures their participation in almost all extracurricular activities. Accommodation facilities in terms of five ladies' hostels, women rest rooms etc. are also provided. The College has a Women's Cell which co-ordinates activities which help in creating awareness about issues related to women and women empowerment. A unit of NCC women's wing and large participation of female students in NSS ensures active involvement of women students in the student activities of Union Christian College, Aluva.

Differently-abled: Students with physical and visual impairments are admitted to the College as per the University norms, and 3% of the total seats for undergraduate Programme are reserved for differently abled students.

Economically weaker sections: Socially and economically weaker sections of the society are identified during the time of admission and relaxation in fee is provided as per Government norms. Apart from this, the College has instituted scholarships and endowments offered to students on the basis of academic merit and financial need.

Minority community- Students belonging to minority Christian communities have 10% reservation to seats for various academic Programme under community merit quota. The institution ensures that in the self-financing Programmes, in addition to the reservation policies of the government, minority community gets due weightage during the admission process. The details of seats reserved under each category are given below.

Table 2.2 Students' enrollment in various classes according to the reservation

Programme offered		Total	Gen	OBC	Muslim (Incl. in General)	LC*	OBX*	OBH*	SC	ST	MGT	COM
AIDED COURSES (2015 admission)												
B.A	English	51	26	5	3				8	2	10	5
	Economics	60	30	18	7				9	3	12	6
	History	37	19	12	9				5	2	7	4
	Malayalam	50	25	14	5				9	1	10	5
B. Sc	Mathematics	40	20	12	8				8	0	8	4
	Physics	49	26	15	5				8	1	9	5
	Chemistry	58	28	13	7				10	2	12	6
	Botany	32	16	6	9				4	2	6	4
	Zoology	32	16	10	4				5	1	6	4
	Computer science	30	15	8	4				6	0	6	3
	Psychology	36	18	5	5				6	1	7	4
M. A.	English	16	8	3	2				2	1	4	1
	Economics	16	8	1	5				4	0	3	1
	History	18	8	8	0				3	1	4	2
	Malayalam	17	8	5	2				3	1	4	1
M. Sc.	Mathematics	18	8	2	1				3	1	4	2
	Physics	15	8	4	1				2	0	3	2
	Chemistry	11	6	2	1				2	0	2	1
	Botany	13	6	3	1				2	1	3	1
	Zoology	13	7	5	1				2	1	3	0
	Psychology	16	10	2	4				1	0	4	1
Self-Financing courses(2015 admission)												
B. Sc	(BT&SP)	35	11	10	6			5	1	0	18	0
	(E&CM)	36	12	9	3			4	2	0	18	0
B.Com	Computer application	49	15	19	6			7	2	0	25	0
	Finance and Taxation	49	16	20	9			5	3	0	25	0
M. Sc.	Bioinformatics	18	8	6	1				2	0	8	0
	Biotechnology	17	7	5	1			2	1	0	7	0
M C A	Regular	37	12						4	1	25	0
	Lateral Entry	57							1		57	
M B A		50	25								25	

*Data for LC, OBX and OBH is not available separately. Total number includes these categories of students.

2.1.6. Provide the following details for various Programme offered by the institution during the last four years and comment on the trends, i.e. reason for increase/decrease and actions initiated for improvement.

The College offers undergraduate and postgraduate Programmes both in the aided and self-financing streams. As the College follows CAP of Mahatma Gandhi University, data related to merit and reservation seats is not available. The following table presents data of management quota seats (20% of the total seats) only.

Table 2.3 The details regarding the number of the applications received, students admitted, demand ratio for each Programme during the last four years

Programme offered		Number of Applications				Number of students admitted*				Demand ratio			
Year		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
AIDED COURSE: Under graduate courses													
B.A	English	81	91	72	56	10	11	10	10	8.1	8.27	7.2	5.6
	Economics	73	84	56	67	12	12	12	12	6.08	7	4.67	5.58
	History	30	34	29	35	8	6	6	7	3.75	5.67	4.83	5
	Malayalam	24	27	24	25	12	10	10	10	2	2.7	2.4	2.5
B.Sc.	Mathematics	29	30	44	47	8	10	10	8	3.6	3	4.4	5.87
	Physics	46	48	53	62	12	11	12	12	3.83	4.36	4.41	5.17
	Chemistry	66	75	89	88	12	11	12	12	5.5	6.81	7.41	7.33
	Botany	23	22	26	34	8	7	7	7	2.87	3.14	3.71	4.85
	Zoology	25	21	33	26	6	7	7	7	4.16	3	4.71	3.71
	Computer science	57	72	52	36	5	6	6	6	11.4	12	8.66	6
	Psychology	58	54	80	96	8	7	7	7	7.25	7.7	11.4	13.7
SELF FINANCED COURSES: Undergraduate courses													
B.Sc.	Biological Techniques & Specimen preparation BT&SP	74	83	77	102	5	15	6	18	14.8	5.5	12.8	5.7
	Electronics & computer Maintenance (E&CM)	78	84	94	123	7	18	18	18	11.1	4.7	5.2	6.8
B.Com	Computer application	154	174	204	235	25	25	25	25	6.2	7	8.2	9.4
	Finance			224	225			25	25			8.96	9.0
SELF FINANCED COURSES: Postgraduate courses													
M.Sc.	Biotechnology	43	28	37	47	12	12	10	12	3.6	2.3	3.7	3.9
	Bioinformatics	21	25	28	25	10	10	12	13	2.1	2.5	2.3	1.9

2.2. Catering to Student Diversity

2.2.1. How does the institution cater to the needs of differently abled students and ensure adherence to government policies in this regard?

The College provides additional facilities such as audio records based on the syllabi for visually challenged students to enhance their learning. Infrastructural facilities such as ramps, and hostel facilities are provided. Differently abled students are given extra time for completing their examinations and scribes are made available to assist them in writing examinations. Eligible students make use of these facilities, and Mr. Vishnuprasad C.B., visually challenged student in the Department of Malayalam secured the UGC-JRF in 2013-14. At present, 17 students in this category are admitted to various Programmes.

2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the Programme? If yes, give details on the process.

The institution organizes various Programmes to assess the potential of students before the commencement of the Programme.

- Every year, the institution organizes one day Orientation Programme (OP) for the first year students (UG/PG students) and their parents on the first day of their class. The classes by renowned academicians and experts in various fields offer the students an opportunity to know about the academic programme in detail along with the nature of curricular and extracurricular activities in the College. Parents are also given an opportunity to attend the Orientation Programme along with their wards. During the OP, teachers-in-charge of sports, arts, NCC, and NSS introduce the activities and benefits of the corresponding programmes. The Principal and Deans highlight the vision and mission of the College, College motto, history of the College, nature of management, general code of conduct of students, details of academic programme, fee payments. Feedback regarding the Orientation Programme is collected from parents, which helps the College in furthering improvements of the activities in the subsequent years.
- Assessment of student potential is done during the time of entry of students. Undergraduate students in science stream, viz., Botany, Chemistry, Physics, etc., are assessed with a multiple choice exam based on higher secondary level syllabi to determine their level of knowledge. This helps in identifying the advanced learners and those with academic backwardness. Advanced learners are selected for WWS programme, average/slow learners are given special attention through SSP and remedial classes.
- Students with deficits in language skills (mostly English language) are also identified and are given special training classes by teachers from the English Department.
- Advanced learners from PG Programme are identified at the entry level and they are sent to attend seminars, workshops, summer programmes etc. Students with good research aptitude are motivated to present their work in National and International conferences.

2.2.3. What are the strategies adopted by the institution to bridge the knowledge gap of enrolled students (bridge, remedial, add-on, enrichment courses etc.) to enable them to cope with the Programme of their choice?

- The institution assesses the learning capacity of students through class test papers, seminars and assignments and provides remedial coaching to enable weaker students to cope with the Programme. Based on the scores obtained in the first internal examination for each course, remedial coaching is provided to those who find it difficult to cope with the learning. Peer teaching and learning is also practiced as a remedial measure.
- Apart from these, tutorial sessions are arranged by teachers to all students of undergraduate classes outside class hours with a conscious effort to support those students in need of help. In addition, open house meetings with parents are arranged in the odd semesters, which help in maintaining a healthy rapport between parents and teachers. The academic progress of students is monitored and efforts are taken to enhance their academic performance.
- Career Oriented Add-On Course titled „Structured Information Processing and Network Application“(Computer Science Department), advanced diploma course in Material Sciences (Chemistry Department), a diploma course in Industrial Floriculture and Gardening (Botany Department),advanced diploma course in Archeology and Museology (History Department) and an Inter-disciplinary Certificate Course in Environmental Science are the Add-On courses provided by the College for the students.
- ASAP, Walk With a Scholar, Personality Development Programmes, NET coaching and coaching for Civil Service Examination aspirants are also offered by the College for skill enhancement of the students.
- Various enrichment classes are provided by the College to enhance value orientation such as value education, endowment lectures and Women’s Cell discussions. Activities of the Center for the Study of Religion and Society (CSRS) and Programmes of Youth Inspire Club also contribute to the value orientation.

2.2.4. How does the College sensitize its staff and students on issues such as gender, inclusions, environment, etc.?

- The institution does not segregate students based on gender of students. Seminars and Programmes were conducted addressing various issues in the assessment period.
- Student Christian Movement of the College conducted a state level conference on „Women Spirituality“, a two-day workshop on „Women and Nature“ and a one-act play named „Malsyagandhy“.
- Sheethal Shyam, a transgender activist took a class on transgender issues in Kerala organized by College Women’s Cell.
- A student organization of the College performed a street play related to transgender issue.

- „Harithavarsham“ is an initiative of the institution towards raising eco-consciousness among the members of College community and is celebrated every year without fail since the initiation of Programme. Similarly, the College plants saplings every year on the day of commemoration of our founders, and on the occasions of visit of VIPs.
- The College has a nature action club which conduct field visits and awareness Programmes to sensitize the students about the importance of environmental issues.

2.2.5. How does the institution identify and respond to special educational/ learning needs of advanced learners?

- The institution has been associating with the „Walk With a Scholar“ programme, which is an initiative of the Higher Education Council, Government of Kerala to cater to the advanced learners. A team comprises of six students and a mentor teacher. The students are exposed to life skill education programme, academic mentoring, and mentoring by external resource persons.
- In addition, advanced learners have an opportunity to join the Additional Skill Acquisition Programme (ASAP), an initiative of the General Education Department & Higher Education Departments in Kerala, to be trained to become language and life skill trainers in various schools and other academic and non-academic institutions. Advanced learners are also encouraged to become peer tutors, who help the slow learners (academically backward students) in their academic activity.
- Besides, every year a student with exceptional qualities is selected for foreign exchange programme. Such students could spend three months in Japan in International Christian University (ICU) attending courses on Service learning. So far, six students have benefitted from the programme.
- Advanced learners of Science departments are promoted to attend and present papers in National and International conferences, attend summer workshops and to take up student projects from KSCSTE.

2.2.6. How does the institute collect, analyze and use data and information on academic performance (through the Programme duration) of the student at risk of drop out (students from disadvantaged section of the society, physically challenged, slow learners, economically weaker section, etc. who may discontinue their studies if some sort of support is not provided?)

- The class teachers and the teachers mentoring tutorial groups during their counseling sessions assess such students and direct needy students to remedial coaching and peer tutoring. Differently abled students receive extra time to complete their University examinations (30 Minutes for students with vision problem who are able to write exams on their own, 15 minutes extra per hour for students with physical disability, scribes for visually handicapped and interpreters for mentally challenged students). Besides, the College has a group of volunteers associating with the „Pain and Palliative Care“ Unit who help such students by acting as scribes

during examinations. Interaction with the parents/students and personal counselling help to reduce the risk of dropout.

- Students from the weaker sections of the society and with financial difficulties are provided assistance to secure scholarships instituted by the Government and foreign agencies like Kano Yamo Moto, United Board of Christian Higher Education in Asia (UBCHEA) (Scranton scholarship), and other endowments and memorial scholarships instituted by the College.

2.3. Teaching – Learning Process

2.3.1. How does the College plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

The College plans and organizes teaching, learning and evaluation as per the academic calendar provided by the affiliating University. In line with this calendar, the College prepares a calendar and handbook with the cooperation of a team of staff members headed by the Principal. The handbook is also uploaded on the College website. The major academic events are indicated in the College calendar for smooth planning and monitoring of the teaching- learning activity.

Considering factors such as academic calendar, availability of classrooms, etc. a committee constituted by the Staff Council develops semester-wise time-table. To fill up the time gap between retirement of teachers and appointment of new faculty, guest lecturers are appointed in accordance with the rules of the Government of Kerala and University. In case special classes are required at the end of the semester, special time-tables are prepared. Regular staff meetings in the departments analyse the progress in covering the course of each teacher.

In consultation with the staff council, the dates of internal examinations, and the date of declaration of the results etc. are announced in advance. After evaluation of answer scripts, the results are declared and grievances if any are addressed. For UG programme, internal examination is conducted centrally, whereas for PG programme the departments conduct internal evaluation separately.

2.3.2. How does IQAC contribute to improve teaching – learning processes?

IQAC organizes workshops and seminars for faculty members and students on a regular basis for improving and enhancing the teaching learning process.

List of Programmes conducted by the IQAC

- Mr. Johny K. Joseph, Management Consultant, “Institutional Goal Setting and Strategic Planning” three lectures from December to February, 2015.
- Dr. Joe Jesudurai, Dean of Sciences, Loyolla College, Chennai – “Autonomy and Teachers” held on 18/02/2015
- Sri. T. P. Sreenivasan, IFS, Chairman, Kerala State Higher Education Council. “Higher Education in Kerala”

- Dr. Jeyakar Chellaraj, Former Principal, Bishop Heber College, Tiruchirappalli – “Value Education– Innovative Teaching Methods” held on 10/09/2015
- Dr. R. Mahalakshmi, Associate Professor, Centre for Historical Studies, JNU, New Delhi – “Relativity in Research” conducted on 30/09/2015
- Mr. Johny. K. Joseph, HRD consultant – “Strategic Planning of the Departments” held during 16/11/2015 - 20/11/2015
- Dr. Latha Pillai, Director, Rajiv Gandhi National Institute of Youth Development “Teaching, Learning and Research: Exploring Creative Engagement” held on 08/01/2016
- Prof. M. K. Sanu, Retired Professor, Maharajas College and Dr. K. N. Ganesh, Former Head, Department of History, Calicut University – Orientation for teachers provided on 09/06/16
- Rev. Dr. Varghese Puthussery, Director, Santhwana Counselling Centre, Kochi – “Achieving Excellence in Teaching with Special Focus on Student Mentoring”

2.3.3. How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students.

The curriculum and scheme of evaluation proposed by the University itself is highly student-centric in nature and requires presentation of seminars and assignments by individual students.

- ICT enabled classes and group discussions make learning interactive. Learner-centric interactive methods are offered by teachers depending on the corresponding subject matter like Industrial/field visits, demonstration classes etc. Some teachers give assignments and study materials through the personal pages of the College website.
- Some of the teachers are coordinating a Journal Club for PG students to prepare students for scholarly writing, Similarly, Departmental Association meetings, projects, quiz programmes, exhibitions and group seminar presentations provide plenty of opportunities for collaborative learning.
- Resources and teaching materials are made available by the Service Learning Centre, and the library. The College has extended internet and Wi-Fi facilities inside the campus for independent learning.

To facilitate the above, teachers attend support schemes such as orientation programmes, refresher courses, faculty development programmes, seminars, workshops and conferences. IQAC too conducts training programmes for teachers to adopt innovative teaching approaches/methods.

2.3.4. How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into lifelong learners and innovators?

The college has adopted lecture-cum-discussion method. Students are made to prepare and present a given topic from the syllabus. This directs them towards creativity and innovativeness. Some Departments organize inter-collegiate events, exhibitions, seminars and workshops. Language Departments organize screening of films followed by discussion. The college publishes Proceeding of Seminars and Newsletters; students' union publishes College magazine and Departmental associations produce manuscript magazines with contribution of articles from the students. Under the Ford-Pathways programme, a group of students produced a short film based on „Culture of Lakshadweep“ in Kavarathy Island. Discussions on latest developments in the field of their respective area of learning takes place between teachers and students. Critical thinking is further sharpened in the final year of graduation where every student is engaged in a research project. All the above activities promote a scientific temper among students.

2.3.5. What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

Teachers use resource materials on Government initiatives like NPTEL and tutorials for effective teaching in certain subjects (for example Physics). Course materials from popular providers such as Coursera, edX, SWAYAM, e-pg pathsala are also used by students and faculty to update themselves. The College has been using 10Mbps broadband internet connection provided by NME-ICT since 2011. Electronic submission of projects and assignments by students is also allowed by a number of teachers.

2.3.6. How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops)?

Lectures by experts in various fields are organized by the institute for faculty and students. Departments host workshops, symposiums, conferences, regional seminars etc. to get acquainted with the latest development in respective fields. Students of some departments undertake internship during the summer vacation and undertake projects with the help of external agencies.

2.3.7. Details (process and number of students benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling /mentoring / academic advise) provided to students.

2.3.7.1 Academic

• Walk With a Scholar Programme (WWS)

Advanced learners are provided with specialized mentoring programmes under WWS scheme of Department of Collegiate Education, Kerala. WWS scheme proposes to arrange specialized mentoring programs for students in Undergraduate Programs in Arts, Science and Commerce and to provide guidance for their future. The programme

aims to provide mentoring, visits to institutions of national importance, soft skill training, career guidance etc.

- **Scholar Support Programme (SSP)**

This scheme sponsored by the Department of Collegiate Education is developed to give sufficient support to help the slow learners in their weak areas of learning. Study materials and question banks are provided to them.

- **Additional Skill Acquisition Programme (ASAP)**

This project aims to equip young generation with skills required for attractive sectors in order to alleviate the unemployment problem among the youth in the state. Various courses are allocated to students based on their aptitude and interest.

2.3.7.2 Psycho-Social Support

- The institute has a counseling centre „BLISS“ (Basic Life Skills Service Centre) which caters to the psychological needs of the students. Counselling services and life skills training for students and staff are provided free of cost. Coordinators from each Department identify the students in need and refer them for counseling. Students can also directly approach the counsellors. Present and former teachers of the Department of Psychology function as counselors.
- Life skills training sessions are conducted for different batches of undergraduate and postgraduate students periodically. Students are also given study skills training and career counselling. Surveys are conducted to assess the incidence and prevalence of various health needs and problems.
- Regular tutorial meetings are conducted by teachers of every Department. Mentoring and academic advice is provided by faculty through tutorial Programmes. In addition, class teacher system for every class ensures close monitoring of academic activities of students by the teacher and in the maintenance of general well-being of students.

2.3.7.3 Guidance Services

- **Career Guidance and Placement Cell**

Career Guidance and Placement Cell with a full time placement officer organizes career guidance sessions regarding employability, opportunities related to their courses and other career options available in the areas of interest and expertise. It also organizes placement drives in the campus. Students are also informed about the placement drives organized by other institutions.

Table 2.4 Guidance Services

Mentoring	Guidance to all non-academic activities	All UG and PG students
Tutorial	Guidance to all academic activities	All UG and PG students
Counselling	Guidance	150
Walk With a Scholar	Advanced learners	90

Scholar Support Programme	Slow learners	450
ASAP	Students of aided UG courses	
Career guidance	Career awareness to students	159(2014-2016)

2.3.8. Provide details of innovative teaching approaches/ methods adopted by faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

The teachers of the college adopt different teaching methods according to the discipline and size of the class, as mentioned below:

- Conventional Teaching Methods

- Chalk and Board
- Practical Sessions

- Alternate Teaching Methods

- Discussions
- Jigsaw class
- Case studies
- Collaborative learning
- Internet searches
- Mobile learning
- Simulations
- Concept maps
- Power point presentations
- ICT enabled learning

Each of the teaching method is appropriately selected for instruction on the basis of the topic and the size of the class to ensure maximum learner involvement and to meet the expected learning outcome.

The College provides platform to share different innovative teaching methods among all the members of the faculty and encourage Departments to follow these methods.

2.3.9. How are the library resources used to augment the teaching-learning process?

The library subscribes to an online package of electronic resources through the N-LIST (National Library and Information Services Infrastructure for Scholarly Content) Programme of the UGC-INFLIBNET. These resources could be accessed from anywhere, and this helps the students and staff. The faculty and students have open access to all the print resources and electronic resources. During 2016 January – March period, U. C. College was one among the top ten users of the N-LIST at the national level.

2.3.10. Does the institution face any challenges in completing the curriculum within the planned timeframe and calendar? If yes, elaborate on the challenges encountered and the institutional approaches to overcome these.

Yes, unexpected *hartals*, statewide student strike calls, centralized paper valuation camps and balancing academic and extracurricular activities within a semester are some of the challenges in completing the curriculum within the timeframe suggested by the University. However, the syllabi are covered within the time frame by taking special classes in the evenings (3.30-4.30PM) and Saturdays.

2.3.11. How does the institute monitor and evaluate the quality of teaching-learning?

- Semester wise evaluation is done through written feedback collected from students regarding
 - Teaching method.
 - Teaching quality.
 - Interactive classes.
 - Teacher knowledge in the respective area.
 - Strength and weakness of teachers.
 - Syllabi covered within the timeframe.
- In the Department meetings students' attendance records and internal marks are analysed
- A detailed analysis of the results in the University examination is presented in the staff Council and corrective action is suggested.
- The institution also holds regular open house meetings with parents to provide information to them regarding the academic performance of their wards and obtain their feedback on teaching and learning process.

2.4. Teacher Quality

2.4.1. Provide the following details and elaborate on the strategies adopted by the College in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum

Table 2.5. Qualification of Faculty Members

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							
D. Sc. / D. Litt.	-	-	-	-	-	-	
PDF	-	-	-	-	5	2	7
Ph. D	-	-	8	4	13	15	40
M. Phil	-	-	1	2	3	8	14
PG	-	-	-	2	2	17	21
Temporary Teachers							
Ph. D			-	-	2	1	3
M. Phil	-	-	-	-	1	4	5
PG	-	-	-	-	9	31	40

2.4.2. How does the institution cope with the growing demand/scarcity of qualified senior faculty to teach new Programme/modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.). Provide details on the efforts made by the institution in this direction and the outcomes during the last three years.

The institution has introduced Programmes such as M.Sc. Biotechnology, M.Sc. Bioinformatics and Information Technology which have been conducted successfully for more than ten years. The faculty members working in those fields are research oriented and keep themselves updated. The College encourage them to take up projects from different organizations. Service of researchers in respective fields is sought from other institutions to compensate for the scarcity of senior faculty.

2.4.3. Provide details on staff development Programme during the last four years. Elaborate on the strategies adopted by the institution in enhancing the teacher quality.

Table 2.6 Details of the academic staff development Programme

Academic Staff development Programme	Number of faculty nominated
Refresher course	26
HRD Programme	1
FIP Programme	7
Orientation Programme	18
Staff training conducted by Universities	2
Staff training conducted by other institutions	2
Summer / Winter school, workshops, etc.	26

a) Faculty Training Programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching – learning.

• **Teaching Learning Methods/Approaches**

- Dr. Jeyakar Chellaraj, Former Principal, Bishop Heber College, Tiruchirappalli – “Value Education– Innovative Teaching Methods”.
- Dr. R. Mahalakshmi, Associate Professor, Centre for Historical Studies, JNU, New Delhi – “Relativity in Research”.
- Dr. Latha Pillai, Director, Rajiv Gandhi National Institute of Youth Development “Teaching, Learning and Research: Exploring Creative Engagement”.
- Prof. M. K. Sanu, Retired Professor, Maharajas College and Dr. K. N. Ganesh, Former Head, Department of History, Calicut University – Orientation for teachers.
- Rev. Dr. Varghese Puthussery, Director, Santhwana Counselling Centre, Kochi – “Achieving Excellence in Teaching with Special Focus on Student Mentoring”.

• **Handling New Curriculum**

- Orientation Programmes and workshops are arranged for revising the curriculum (Choice Based Credit Semester System CBCSS) at the College level.
- Orientation Programme for teachers and students at the Department level.
- Training Programmes at the university level for new practical curriculum.

• **Selection, development and use of enrichment materials**

- Talks led by eminent professors in different subjects to increase the interest and involvement of teachers (Refer section 3.7.4).
- Two day work shop for college teachers on „Tensor Analysis“ led by Dr. S V M Satyanarayana, from Pondichery Central University, organized by Academy of Physics Teachers and Department of Physics
- Two day work shop for college teachers on „Special Theory of Relativity“ led by Dr. H .S. Mani organized by Academy of Physics Teachers and Department of Physics
- Training programmes organized by the website committee of the College for training the faculty members to develop and manage their pages in the college website.

- **Audio Visual Aids/multimedia**

Workshops are conducted to familiarise participants with methods of Information and Communication Technology and modern teaching practices using smart board.

- **Teaching learning material development, selection, and use**

Training programme by Dr. Jeyakar Chellaraj, Former Principal, Bishop Heber College, Tiruchirappalli – “Value Education– Innovative Teaching Methods” was helpful in modifying the syllabus for value education in the College.

c) Percentage of faculty

Table 2.7 Percentage of faculty participated in external workshops / seminars / conferences recognized by national international / professional bodies.

	Workshop	Seminars	Conferences
Resource person	37 (10.2%)	27 (7.5%)	12 (3.33%)
Participation	49 (13.6%)	48 (13.6%)	41(11.38%)
Paper Presenter	65 (18.05%)	59 (16.38%)	63 (18%)

2.4.4. What policies / systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)

- The College encourages faculty members to take up major and minor research projects as part of Research Promotion Programme. Five major and twenty-two minor research projects are currently being undertaken by the teaching faculty. The institution has nine approved research centers catering to the needs of faculty engaged in research.
- Study leave, as permissible by the rules of M G University is granted to those faculty members who seek to pursue higher degrees, especially a doctoral degree. Extraordinary leave, as per the guidelines of MG University, is also granted whenever applicable for academic activities of the faculty.
- United Board of Christian Higher Education (UBCHEA) with its headquarters in Hong Kong has been associated with the growth of the college a number of years. The College take initiative in sending selected teachers for leadership training (8months duration) in countries outside India, in taking up community development based projects by faculty members and in sending teachers to attend small workshops outside the country with the sponsorship of UBCHEA.
- The College has MoU's with Fu Jen Catholic University, Taiwan and Hope College, Michigan, USA to exchange faculty, students and researchers for the purpose of teaching and research

2.4.5. Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance / achievement of the faculty

- Dr. Aju K.N. UGC Research award-2012
- Dr. Muse Mary George- Best Research guide - M. P. Paul award.
- Dr. Sibu M. Eapen - UGC Research award.
- Dr. Ruby Elsa Jacob - (Sahitya Puraskar) -Best Research work-2015
- Dr. Jenee Peter –Best research award-UBCHEA, 2015
- Dr. Justin R Nayagam- Outstanding paper award by International Forum for Agriculture, Biology and Life sciences (IFABL), Japan- 2016
- Dr. Anila. E. I – Best paper award – NCAMS -2012

2.4.6. Has the institution introduced evaluation of teachers by the students and external peers? If yes, how is evaluation used for improving the quality of teaching learning process?

Yes.

- Various aspects of teaching a course are evaluated from a learner's point of view through the student feedback form prepared by IQAC. The Principal reviews the report of each teacher and shares it with the teacher concerned for further improvement.

The performance of the faculty and the Department are evaluated by College staff council.

2.5. Evaluation Process and Reforms

2.5.1. How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation process?

- Orientation Programme are conducted every year for students and parents on day 1 of the course for first year BA/ B. Sc /B.Com and M.A/ M.Sc. programmes.
- In addition all Departments conduct separate orientation Programme for the first year students. Such programmes help them to understand the evaluation process and other details of the curriculum.

2.5.2. What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

- Since the College is affiliated to Mahatma Gandhi University, it adheres to the guidelines of the University. The major evaluation reform by the University is the internal and external evaluation under the Choice Based Credit Semester System. Each student has to obtain separately 30% of minimum marks in

external and internal examination in all the subjects and also an aggregate of 40% to pass in that particular subject. Out of 100 marks, 80 marks is by external evaluation and 20 by internal evaluation (10 marks for test paper, 5 for attendance and 5 for seminar/assignment/viva).

- The College adopts a centralised internal examination system for UG programme.

2.5.3. How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

- The internal examination is conducted centrally by the College and is conducted in the same manner as University examinations are conducted. The Internal examination coordinator and the Head of the Departments ensure the effective implementation and transparency of the evaluation process. The dates of examination are published in the first month of every semester, the question papers are printed centrally. The examinations for all undergraduate Programmes are conducted on three days splitting the entire group of students into forenoon and afternoon sessions.
- After the evaluation of the answer scripts, the mark list is also provided to the Principal's office.
- For those who are unable to attend these internals due to genuine reasons, department level tests are provided.
- After the valuation, an Open House is conducted so that parents are aware of the performance of the students.
- The teachers from the College actively participate in the Centralized Valuation Camp to facilitate timely declaration of the examination results by the University.

2.5.4. Provide details on the formative and summative assessment approaches adapted to measure student achievement. Cite a few examples which have positively impacted the system.

The institution follows the assessment pattern as per the guidelines of the affiliated university.

Formative Evaluation

- Assignments are submitted and evaluated in the stipulated time as per the guidelines of the University.
- Class tests are conducted periodically to provide information about the students' progress and give teachers the opportunity to direct the students for improvement.
- Assessment by teachers is also done by asking questions during class hours to ascertain the understanding of the students and to clarify their doubts.
- Two internal exams (both theory and practical) are conducted in each

semester. Result analysis of these exams is conducted and steps for improvement like remedial classes are taken up. At the end of every internal exam, the College records the marks of the students in a progress card, and intimates it to the parents in the open house.

Summative evaluation

- This is strictly according to the University stipulation. The time schedule is fixed by the University and the valuation is also done at the University level. Introduction of the new system of evaluation has made palpable changes in the academic environment in the College. Notable features are the following:
 - Interest of students in academic activities has increased.
 - Students' initiatives in co-curricular and extracurricular activities has shown a marked increase.
 - Skill of students in extracting web resources and ICT supported presentations has been enhanced

2.5.5. Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioural aspects, independent learning, and communication skills).

- Internal exams are conducted in accordance with the directions of the University
- The schedule of examination is fixed in consultation with the Staff Council, and the examinations are conducted under the supervision of a senior teacher.
- Answer scripts are distributed to students after the examination, and collected back to be centrally stored.
- Marks score card displayed on notice board.
- Three-tier grievance redressal mechanism at the Department level, College level, and University level ensures transparency.
- Consolidated evaluation statements are prepared and forwarded to the University.
- While evaluating the seminar presentations and assignments, due weightages are given to students for their scholarly inputs, academic integrity, effectiveness of communication, and control over the topic.
- The percentage of attendance scored by each student is also taken into consideration during the evaluation, as per the University guidelines.

2.5.6. What are the graduates attributes specified by the College / affiliating university? How does the College ensure the attainment of these by the students?

The College envisages following attributes for every student graduating from the College.

- Specific knowledge in the discipline
- Intellectual competence
- Critical thinking
- Communication skill
- Career readiness
- Moral and ethical quality

These are ensured by Value education class, Participation in Club activities, association activities, and activities of the students' union along with regular academics. The college aims at equipping students to get admission for higher education Programmes both within and outside State.

2.5.7. What are the mechanisms of redressal of grievances with reference to evaluation both at the College and university level?

- Regarding the internal marks awarded at College level, the student can approach the department level Grievance Redressal Cell immediately after the publication of score sheet on the noticeboard.
- The College level Grievance Redressal Cell functions as an appellate body to decide on appeals from students.
- The University also has formed a Student Grievance Cell which considers matters regarding both internal grades as well as the grades of end semester examinations conducted by the University. The University offers an opportunity to the students to get their answer scripts re-evaluated within stipulated time.

2.6. Student Performance and Learning Outcomes

2.6.1. Does the College have clearly stated learning outcomes? If yes, give details on how the students and staff are made aware of these?

Yes, the learning outcomes are clearly stated in the objectives of the institution. The primary objective of the College is to provide an environment in which students can enrich themselves socially and academically. The College and all Departments work towards a clearly stated vision and mission.

Apart from the values envisaged in the College motto and the goals and objectives of the College, the institution has the following general learning outcomes

➤ Communication outcome

Command in written and oral communication

Language fluency and clarity

➤ Intellectual outcome

Proficiency in reasoning skill

Critical thinking and evaluation

➤ Ethical outcome

Good social sensitivity and commitment

Value system

➤ Educational Career outcome

The institution focuses on enabling the graduate students to achieve admission for postgraduate studies in „A“ grade Colleges and Universities both within and outside the State.

➤ Employability.

2.6.2. Enumerate on how the institution monitors and communicates the process and performance of students through the duration of the course/Programme)/ Provide an analysis of the students' results/ achievements (Programme/course wise for last four years) and explain if the differences if any and patterns of achievement across the programmes/course offered.

- The internal examinations and the University examinations provide an objective measure of the academic performance of the students.
- The results of internal examinations are published and students' progress and pitfalls are carefully monitored.
- During the open houses conducted in odd semesters, teachers discuss the marks/ grades, and attendance with students and their parents.
- Weaker students are directed to remedial coaching and peer tutoring during these sessions.
- Attendance received by each student is also examined, evaluated and communicated to the students in every semester.
- Internal mark score sheet is displayed on the notice board.

Table 2.8(a). Details of the pass percentage in Under Graduate programme

Departments	2012-13	2013-14	2014-15	2015-16
History	78.00	63.00	84.6	25.00
Economics	84.00	81.00	81.4	27.08
English	89.47	90.69	84.44	50.00
Malayalam	68.00	57.50	57.8	7.89
Mathematics	92.00	86.00	77.5	59.09
Physics	80.00	91.00	64.5	48.21
Chemistry	81.00	76.00	83.7	50.00
Botany	96.00	79.00	93.50	48.19
Zoology	85.00	96.00	82.00	67.86
Psychology	70.00	86.00	97.00	54.29
Computer Science	92.00	95.00	75.8	50.00
E & Computer Maintenance	96.00	59.00	40.6	29.03
BT & SP	82.00	100	84.6	60.87
B. Com (Tax)	-----	----	----	-----
B. Com (Computer)	-----	-----	-----	43.59

Table 2.8(b).Details of the pass percentage in Post Graduate programme

Departments	2012-13	2013-14	2014-15
	UCC	UCC	UCC
History	100.00	60.00	75.00
Economics	93.00	61.50	70.00
English	85.00	24.00	61.50
Malayalam	88.00	90.00	81.25
Mathematics	44.00	57.00	84.62
Physics	67.00	92.30	66.67
Chemistry	64.00	55.50	50.00
Botany	69.00	66.60	53.23
Zoology	-----		58.00
Psychology	56.00	90.00	77.78
Bio Technology	68.00	33.30	72.20
Bio informatics	79.00	44.40	100
M.C.A	80.00	50.87	
M.C.A(Lateral)			
M. B. A	-----	-----	61.05

2.6.3. How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

- Planning and monitoring done by the staff council and committees.
- The teacher takes serious effort to complete the portions in the prescribed syllabus on time in each semester. Special attention provided to slow learners through remedial coaching. These measures ensure that the students are well equipped to perform well in the examinations.

- Assessments, seminars, group discussion, paper presentations, journal clubs etc. held by the Departments provide a means to assess the students' mastery over the subject. This is assessed meticulously through the internal assessment.
- The external evaluation is done through University examinations in each semester.

2.6.4. What are the measures /initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?

- The college has an effective Career Guidance and Placement Cell with a full-time placement officer. The cell offers career guidance and personality development classes from time to time.
- Open courses such as Journalism, English for Careers, Food Science, Web Designing, Horticulture and Nursery Management, Ornamental Fish Breeding, Rabbit Farming, Bee keeping etc. offered for the UG students equip students to set up their careers.
- The Entrepreneurship Development Club (EDC) in the College works to nurture entrepreneurs among students.
- Campus interviews are held regularly.
- ASAP Programme has been implemented to enhance employability
- Higher education seminars and interactive sessions are also conducted.
- Inculcation of research attitude is done through the projects prescribed by the University for all UG/PG Programme, as well as through assignments and seminars.
- Students are encouraged to present research papers in regional/national/international conferences.
- In cooperation with the Start-Up mission of the Government of Kerala, the College has started a programme to provide training to students in this area
- The institution has tie ups with other organizations such as Synthite Industries, Kolenchery which provide internship facility for students.

2.6.5. How does the institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?

- Student performance in academics is assessed through internal and University examinations.
- The results and feedback regarding their performance is communicated to the students by respective teachers. This helps in identifying the strengths and weaknesses of students in communicating appropriately in examinations and assignments.

- Results are communicated to parents through regular open house Programme. This enables the parents to understand their ward's performance and take further steps to improve their academic performance.
- Regular tutorial meetings held by teachers help in identifying the difficulties faced by students which hinder better performance.

2.6.6. How does the institution monitor and ensure the achievement of the learning outcomes?

- At the time of admission, both academic and personal details of each student are collected.
- The achievement of learning outcomes is monitored through the student's performance in class tests, seminars, assignments etc.
- Attendance records help teachers to monitor the performance of students.
- Student performance is analyzed in the Department staff meetings and is communicated to the parents.
- Details of student progression also show achievement of learning outcome
- The percentage of students getting enrolled for higher education such as post graduation, M.Phil., PhD and getting employed through campus and other recruitments, self employment etc. are carefully monitored

2.6.7. Does the institution and individual teachers use assessment / evaluation outcomes as indicators for evaluating student performance, achievement of learning objectives and planning? If yes provide details on the process and cite a few examples.

Yes, The institution evaluates the progress and academic achievement of the students in terms of their performance through internal and external examinations, assignments, seminars. Continuous and summative evaluations are ensured through these mechanisms in each semester. Students are provided required help by the teachers through remedial coaching and improvement examinations conducted regularly.

CRITERION III:

RESEARCH, CONSULTANCY AND EXTENSION

3.1. Promotion of Research

3.1.1. Does the institution have recognized research center/s of the affiliating University or any other agency/organization?

Yes. The institution takes pride in having nine active and leading Research Centres in Malayalam, English, History, Economics, Physics, Chemistry, Botany, Mathematics and Psychology affiliated to the Mahatma Gandhi University, Kottayam, Kerala. The centres have 110 research scholars working. The centre wise details of the research centres are presented in Table 3.1 below.

Table 3.1 Details of the research centres in the College

Sl. No	Research Department	Year in which registration is granted	University Order No.
1	Malayalam	1989	Ac/AII/1/260/89 dtd 21/7/1989
2	English	1990	Ac/AII/3/2233/89 dtd 3/8/1990
3	History	2004	Ac/AII/1/2103/2003 dtd 13/7/2004
4	Economics	1993	Ac/AII/3/1441/1993
5	Mathematics	1998	Ac AVI/73/RC/98 dtd 30/12/1998
6	Physics	1985	Ac /AII/ 1/1985
7	Chemistry	1988	Ac/AII/2/505/1988
8	Botany	1985	Ac/AII/1/504/85dtd 29/10/1985
9	Psychology	2013	5937/AVI/1/RC/3381/2012 dtd 16/11/2013

3.1.2. Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Yes. A research committee is constituted in the College in accordance with the University regulations in this regard. It comprises of the Principal as the Chairman, Supervising Teachers, HOD"s as members and Dr. Sebastian Joseph, Department of History as the Convener. The committee monitors / coordinates research activities in the College and acts as a clearing centre for resolving any issues related to higher research. Details are given in the Table 3.2

Table 3.2 Research Committee in the College

Sl. No	Name of the Faculty	Designation	Department
1	Dr. P. Thomas Mathew Chairman	Principal	Botany
2	Dr. Sebastian Joseph Convenor	Asst. Professor	History
3	Dr. Muse Mary George	Asso. Professor	Malayalam
4	Dr. C. Jacob George	Asso. Professor	English
5	Dr. Thara .K. Simon	Asso. Professor	Botany
6	Dr. P.V Sreenivasan	Asso. Professor	Chemistry
7	Dr. E.S Jeevanand	Asso. Professor	Mathematics
8	Dr. E.I Anila	Asso. Professor	Physics
9	Dr. Rachel Reena Philp	Asst. Professor	Physics
10	Dr. Anilkumar .M	Asst. Professor	Botany
11.	Dr. Sunil Abraham Thomas	Asst. Professor	Economics
12	Dr. Neelima Ranjith	Asst. Professor	Psychology
13	Dr. Vidya Ravindranadhan	Asst. Professor	Psychology
14	Dr. Seena M. Mathai	Asst. Professor	Psychology

In addition to this, there is a course work committee to coordinate PhD course work in the College with Dr. Sebastian Joseph of the Department of History as its Convener. Other members of the committee are Dr. Anilkumar. M (Coordinator, Science), Dr. Jacob George (Coordinator, Language and Literature) and Dr. Neelima Ranjith (Coordinator, Social Sciences).

Recommendations of the Research Committee

The Research Committee aims at fostering research culture by effectively monitoring PhD course work in the College and coordinating various research activities in the College. It acts as a regulatory organization, as per the existing norms of the Mahatma Gandhi University. It has made the following recommendations pertaining to the promotion of higher quality research in various Departments of the College.

1. To inspire faculty members to undertake research Programme with funding from UGC, DST, ICSSR, KSCSTE, BRNS, ICHR, Kerala State Higher Education Council and United Board (UBCHEA).
2. To assist faculty members in developing project proposals through organising research methodology workshops.
3. To invite erudite scholars for engaging classes for the Ph.D fellows and teachers of the College.
4. To motivate students to take up research problems related to the needs and problems of society, for their dissertations.

5. To conduct course work for research scholars in accordance with the regulations of the Mahatma Gandhi University.
6. To encourage faculty members and Postgraduate students to present papers at national and regional seminars/conferences.
7. To encourage faculty members to publish their works in journals with high impact factor.

The impact of recommendations on research and related activities.

- During the post accreditation period, the College conducted Course Work for the research scholars who are working in various Departments of the College and also for those scholars from other Colleges affiliated to Mahatma Gandhi University. As part of the course work, apart from serving as resource persons from the College, eminent scholars from prestigious institutions like Jawaharlal Nehru University(JNU), New Delhi, IISC, Bangalore, Cochin University of Science and Technology(CUSAT), IITS, various University Departments in Kerala and foreign Universities were invited for delivering expert lectures in the sciences, social sciences and literature. Table 3.3. is the list of eminent resource persons who had engaged classes for the course work in Ph.D. Programme.
- During the period under review 35 Minor and 07 Major research projects were undertaken by faculty members affiliated with various Departments
- 7 teachers were awarded doctoral degrees
- Faculty members have published their books with leading publishers like PRIMUS, New Delhi, VDM Scholar Press, SPCSS, etc.
- Faculty members have published 417 Papers in journals and seminar proceedings
- 06 faculty members have undergone UGC FDP.
- Thrust given on development of inter-disciplinary research culture as part of the Ph. D course work programme.
- 8 Faculty members were awarded UBCHEA research projects
- Ms. Muhsina Noohu, M.A (History) student won the prestigious M.P Paul Award for the best dissertation in History from among the dissertations submitted in History and Malayalam in various Colleges and University centres of Kerala. The award carried Rs.15, 000 and a citation.

Table 3.3 Details of eminent scholars as resource persons for the PhD Course work

Sl. No.	Name
1	Dr. Kiran Rao, Director, NIMHANS, Bangalore
2	Prof. Dr. Aditya Mukerje, Prof of History, JNU, New Delhi
3	Prof. Dr. Rajan Gurukkal, IISC, Bangalore
4	Dr. K R M Nair, Controller of Examinations, Kerala Fisheries University, Ernakulam
5	Dr. V C Harris, School of Letters, Mahatma Gandhi university, Kottayam
6	Dr. Eva Ehninger, Art Historian, University of Bern, Switzerland
7	Dr. Pavithran, Dept of Malayalam, Malayalam University, Tirur
8	Dr. Vishnu Namboodiri, Department of Mathematics, Govt College, Harippad
9	Dr. Prakash Kumar, School of Bio Sciences, Mahatma Gandhi University
10	Dr. E. I Abdul Sathar, Dept of Statistics , University of Kerala
11	Dr S Harikumar, Dept of Economics,CUSAT, Ernakulam
12	Dr. Mathachan Pathayil, Dept of Statistics, Nirmala College, Muvattupuzha
13	Prof. Sacaria Zacaria, Visiting Professor of Malayalam , Sree Sankaracharya University, Kalady, Kerala
14	Dr. Sheeba K. M., Dept of History, Sree Sankaracharya University, Kalady, Kerala
15	Dr. Jayasree C.H, Research Coordinator, Kerala State Higher education Council
16	Dr. K. V. Kunnikrishanan, Visiting Faculty, School of Social Sciences, Mahatma Gandhi University, Kottayam
17	Dr. Burton Cleetus, CHS, JNU, New Delhi
18	Dr. Vinod Kumar, Prof , Dept of Basic Sciences, Rajagiri College pf Engineering
19	Dr. Anil, Calicut University, Department of Malayalam
20	Dr. Ani Tresa, Dept of History, Sree Sankaracharya University, Kalady, Kerala
21	Dr. C.R. Praasd, Dept of Malayalam University of Kerala, Trivandrum
22	Dr. K.S Madhavan, Dept of History, University of Calicut
23	Dr. P.G. Sankaran, Dept of Statistics, CUSAT

3.1.3. What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?

The research committee and the IQAC ensure smooth progress and implementation of the projects undertaken by faculty members through its monitoring and effective mediation at critical times. It ensures autonomy for the Principal Investigators and ensures the release of funds on time and helps the project fellows in discharging the financial obligations like auditing connected with the use of funds.

The institution supports and ensures a positive ambiance for research activities through the following:

- The institution never interferes with the autonomy of the Principal investigator in matters relating to the research work, appointments of research fellows and purchase of equipment's etc.
- Funds received from UGC and other funding agencies are released on time without causing any hardships for the PI
- The College has well equipped laboratories, library and conference halls for activities connected with research. All Departments are provided with internet facilities.
- The College provides eligible leave for all research assignments according to Government and University regulations. Faculty members who are selected for FDP are relieved and substitutes appointed on time.
- The faculty members are adequately trained in the use of information technologies of different kinds. Special training in SPSS is given by experts for the faculty engaged in research.
- In auditing and submitting the utilization certificate, the office staff assist the faculty.
- The College in a timely manner notifies all regulations and latest updates on project completion issued by funding bodies like the UGC, DST and others.

3.1.4. What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

Together with regular academics, the College promotes research aptitude among the students through the following strategies.

- Students are encouraged to attend and present papers during seminars and conferences. The Psychology Department during the period under review has 42 paper presentations by students to their credit.
- To develop interdisciplinary thinking, students are inspired to attend seminars organized by other Departments in the College. It is a culture of the College that students, irrespective of their academic affiliations participate in research Programmes of other Departments.
- Students are encouraged to become members of various clubs in the College which would promote their debating and critical skills.
- Students are encouraged to participate in scientific exhibitions and competitions.
- Post Graduate students are encouraged to attend Ph.D. Course Work classes by erudite scholars.
- Collaborative research with PG students are encouraged by faculty

Some of the best practices followed by different Departments in promoting research among students

1. Zoology

1. PG students participate in national seminars and workshops. Needhu Das C. D., a student of II year PG presented a paper based on her dissertation in the national seminar on Molecular Taxonomy held at St Thomas College, Thrissur in September 2015
2. Original research is promoted among UG and PG students. They work on diverse topics such as Biodiversity, Environmental Science, Animal rearing and Pollination studies. Field work is greatly encouraged, so as to inculcate scientific temperament and authentic research.
3. Students are regularly taken on field trips to acquaint them with various ecosystems and methods of biodiversity estimation.
4. Institute visits are an integral part of the curriculum. Students visit research institutes of national repute inside and outside Kerala, and understand research activities there. This exposes them to various research fields, equipment and instruments, and research opportunities in Biosciences.
5. Students are encouraged to publish research articles based on their project. Two papers have been submitted
 - Post Graduate students are encouraged to do quality dissertations with focus on environmental and cultural history
 - Ms. Muhsina Noohu, M. A (History) student won the prestigious M.P Paul Award for the best dissertation in History from among the dissertations submitted in History and Malayalam in various Colleges and University centres of Kerala. The award carried Rs.15, 000 and a citation.
 - Some of the post Graduate students have registered for PhD with their research problem drawn from the PG Dissertation
6. The Psychology Department promotes paper presentations by students at various seminars and conferences, and 41 papers were presented by the students during the period of 2011 to 2016.(Annexure 1)

3.1.5. Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/ collaborative research activity, etc.

All faculty members of the College are involved in student projects at UG and PG level. In many cases these student projects, especially PG research, are published in journals as well as presented in regional, state level or national seminars and congresses.

- **Guiding Student Research**

Twenty-seven teachers are actively involved in research in 9 Departments guiding 115 Ph.D. students. In the accreditation period, 21 students were awarded Ph.D.

Table 3.4.a. List of scholars completed Ph.D:

Sl.No.	Name of the Scholar	Supervising Guide
English		
1	Milan Franz	Dr. Varghese John
2	Bindu Jamal	Dr. Varghese John
3	Mini V. S.	Dr. Varghese John
Malayalam		
4	Divya M.	Dr. C.M. Jose
Economics		
5	Sunil Abraham Thomas	Dr. C.A. Antony
6	U.Aboobekar	Dr. P.M.Rejimon
Physics		
7	Rejani Jacob	Dr.Rachel Reena Philip
Mathematics		
8	Bibin K. Jose	Dr. S. Arumugham
9	Varughese Mathew	Dr. S. Arumugham
10	Cyriac Antony	Dr. E. S. Jeevanand
11	Tutu M. John	Dr. A. Sunny Kuriakose
12	Thavamoni J.P.	Dr. A. Sunny Kuriakose
13	Annie Varghese	Dr. A. Sunny Kuriakose
14	Shiney Jose	Dr. A. Sunny Kuriakose
15	Philomena C.F.	Dr. A. Sunny Kuriakose
16	Bijamma Thomas	Dr. Rajan Varughese
17	Rogi Jacob	Dr. A. Sunny Kuriakose
18	Dhanya M.	Dr. E. S. Jeevanand
Botany		
19	Egy T. Paul	Dr. P. Thomas Mathew
20	C.M. Sreejith	Dr. P. Thomas Mathew
History		
21	Twincy Varghese	Dr. P.D. Johny

Table 3.4.b. List of Research Guides and Scholars

Sl.No	Department	Name of Research Guide	Name of Student	Status of research
1	English	Dr. Jacob George	Akhila Narayanan	Ongoing
2			Rekha Nair	Ongoing
3			Saumya AP	Ongoing
4			Sheenu Varghese	Ongoing
5			Asha Baby Mathews	Ongoing
6			Anu S.	Ongoing
7		Dr. Varghese John	Niji C. I	Ongoing
8			Thara Gangadharan	Ongoing
9			Lissy Antony	Ongoing

10	Malayalam	Dr. C.M.Jose	Anoop V	Submitted
11			Shimi Paul Baby	Submitted
12		Dr. Aju KN	AshaMathayi	Ongoing
13			Sheena G	Ongoing
14			Lathika K	Ongoing
15			Arunkumar O	Ongoing
16			Rincy P	Ongoing
17			JettishSivadas	Ongoing
18		Dr. Sibu M. Eapen	Sheeba AC	Ongoing
19			AncyIssac	Ongoing
20			Sidhya Edwin	Ongoing
21			Lakshmi Das	Ongoing
22			Anjali PP	Ongoing
23			Saparna TS	Ongoing
24			RaghiSekharan	Ongoing
25			Bindu Varghese	Ongoing
26		Dr. Muse Mary George	Sinu Varghese	Ongoing
27			Shanty C.Y.	Ongoing
28			Divya S.	Ongoing
29			Beena B.S.	Ongoing
30			Lasitha V.B.	Ongoing
31			Vineetha George	Ongoing
32			Lubus Jacob Abraham	Ongoing
33			Rajesh P.S.	Ongoing
34	Physics	Dr. E.I. Anila	Bindu K.R	Ongoing
35			Athma. P.V	Ongoing
36			Sreeja V.G	Ongoing
37			Rekha.S	Ongoing
38			Joffy P.J,	Ongoing
39			Ebitha Eqbal ,	Ongoing
40			Safeera T.A,	Ongoing
41			Parvathy Radhakrishnan	Ongoing
42		Dr. Rachel Reena Philip	Anitha Abraham,	Ongoing
43			Bindhu G.Nair,	Ongoing
44			Sinitha Nair,	Ongoing
45			Aijo K John,	Ongoing
46			Keerthy A,	Ongoing
47			Sheeba Naser,	Ongoing
48			Julie Ann Joseph	Ongoing
49	Chemistry	Dr. A. Benny Cherian	Neethumol Varghese	Ongoing
50			ManjushaHariharan	Ongoing
51			Smitha Roy	Ongoing
52			SindhuThampi	Ongoing
53			Jeemol P.A	Ongoing
54			Asmi Antony	Ongoing
55	Mathematics	Dr. Sunny Kuriakose	Manjusha	Ongoing

56			Mili Mary Sleeba	Ongoing
57			Sheeja T K	Ongoing
58			Murali T. K.	Ongoing
59	Statistics	Dr. E.S Jeevanand	Gilfin Francis	Ongoing
60			Neethu Jacob	Ongoing
61	Mathematics	Dr. K. K. Thampi	Joseph Justin Rebello	Ongoing
62			Benno Mathew	Ongoing
63		Dr. Aparna Lakshmanan	Jismy Varghese	Ongoing
64			Seena Varghese	Ongoing
65			Ninu S Lal	Ongoing
66			Anu V.	Ongoing
67			Jeepamol J. Palathingal	Ongoing
68		Dr. S. Arumugham	Manju Raju	Ongoing
69		Dr. Mary George	Ambily M.P.	Ongoing
70	Botany	Dr. Thara K. Simon	S. L.Sreekala	Ongoing
71			Ligi.T.J	Ongoing
72		Dr. M. Anilkumar	Anusree K. Dharman	Ongoing
73			Sithara K. Urumbil	Ongoing
74			Jaya Kuruvilla	Ongoing
75			Linsa J	Ongoing
76			Anumol Jose	Ongoing
77	History	Dr. Rajan Gurukkal	Uma Pandey	Ongoing
78		Dr. P. D. Johnny	Akhila Jacob	Ongoing
79		Dr. Sebastian Joseph	Lekha Pillai	Ongoing
80			Jiya Tharian	Ongoing
81			Jijo Jayaraj	Ongoing
82			Meenu Jacob	Ongoing
83			Nisha Ann Jacob	Ongoing
84			Mary Varghese	Ongoing
85		Dr. C.H. Jayasree	Bindhu Mathew	Ongoing
86	Economics	Dr. Rajan Varughese	Liji Lawrence	Ongoing
87			Shaniba M.H	Ongoing
88			Sony Thilakan	Ongoing
89		Dr. Rejimon P.M	Ameena Poovanchery	Ongoing
90			Krishnan Kutty V	Ongoing
91			Smitha R	Ongoing
92			Asha Neendur	Ongoing
93			Anumol PS	Ongoing
94			Hyderali	Ongoing
95		Dr. C.A Antony	Lakshmi C.S	Ongoing
96			Piya Mathew	Ongoing
97	Psychology	Dr. Seena M Mathai	Asna M. Naorin	Ongoing
98			Nadia Moideen	Ongoing
99			Agimol Suresh	Ongoing
100			Anjaly Surendran	Ongoing

101			Muhsina Lubaiba	Ongoing
102			Swathimol P.S	Ongoing
103		Dr. Neelima Renjith	Anu Varghese	Ongoing
104			Lisha P. Balan	Ongoing
105			Neelima C.C	Ongoing
106			Shema Elizabeth Kovoov	Ongoing
107			ReenaDamodar K	Ongoing
108			Mereena Sebastian	Ongoing
109			Anthony Joseph	Ongoing
110		Dr. Vidhya Raveendranadan	Saji Anna Philip	Ongoing
111			ShonyMthew P.J	Ongoing
112			Sr. Ciily	Ongoing
113			Jacob George	Ongoing
114			JesnaShivasankaran	Ongoing
115			Anu Singh	Ongoing

• Leading Research Projects

Thirty four faculty members of the College are leading 35 minor projects and 9 major projects as Principal Investigators (Refer Section 3.2.7). Some of the teachers from science Departments are Co-Investigators of major projects.

3.1.6. Give details of work

3.1.6. Workshops/Training Programme/ sensitization Programme conducted/ organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

PG and UG Departments regularly conduct workshops and training programmes with focus on research so as to enable the students, researchers and faculty members to actively participate in research Programmes in the institution. The IQAC and other organizations in the College have conducted 9 research oriented programmes on current issues. Apart from the faculty members, the UG and PG students of all Departments are encouraged to take up research oriented topics for their project work under the supervision of their guides in the final semester. The students are also encouraged to present and publish articles in their subjects

3.1.7. Provide details of prioritized research areas and the expertise available with the institution.

There are nine recognized research centres under Mahatma Gandhi University in UC College. Each centre has been undertaking Ph. D Programmes under the able guidance of the supervisors, and the College facilitates other research guides from nearby institutions to register their students for doctoral work at the centres in U. C. College. In each discipline, there are many prioritized areas and faculty members are

specially trained under many sub disciplines. Table 3.5 shows the list of faculty members and their prioritized research areas.

Table 3.5 List of faculty members and their prioritized research areas

Sl. No.	Faculty	Discipline	Specilization
1.	Dr. Jacob George	English	English language & Literature
2	Dr. Sonia Chacko	English	English language & Literature
3.	Dr. V. P. Markose	Malayalam	Linguistics and Grammar
4.	Dr. Muse Mary George	Malayalam	Novel, Short Story, Women studies
5.	Dr. M. I. Punnoose	Malayalam	Folklore and Cultural studies
6.	Dr. Mini Alice	Malayalam	Women studies
7.	Dr. Vidhu Narayanan	Malayalam	Linguistics, Grammar, Translation, Ancient Literature & folkloristics
8.	Dr. Aju K.N	Malayalam	Folkloristics, cultural studies & Film studies
9	Dr. Sibu M. Eapen	Malayalam	Poetry, Film studies, Linguistics
10	Dr. E.S. Jeevanand	Statistics	Choasin Economics, Geometric distributions
11	Dr. E.I. Anila	Physics	Material Science
12	Dr. Rachel Reena Philip	Physics	Thin Films
13	Ms. Rakhy Rapaheal	Physics	Peroxidase solar cell
14	Dr. Alex Mathew	Physics	Optical Absorption
15	Dr. Manu Punnen John	Physics	Chaos
16	Dr. Resmi R	Physics	Solar cells
17	Dr. Pramod Domonic	Physics	String theory
18	Dr. Madhu K	Physics	String Theory
19	Dr. Shinoj V K	Physics	Optical imaging
20	Dr. Sreenivasan PV	Chemistry	Polymer chemistry
21	Dr. Jenish Paul	Chemistry	Polymer chemistry
22	Dr. Simi Pushpan	Chemistry	Organic Chemistry
23	Dr. Thara K. Simon	Botany	Taxonomy
24	Dr. P. Thomas Mathew	Botany	Taxonomy
25	Dr. David Saj Mathew	Botany	Mycology
26	Dr. Manju M. George	Botany	Plant Biotechnology
27	Dr. M. Anilkumar	Botany	Biotechnology

28	Dr. Justin R.Nayagam	Botany	Plant propagation
29	Dr. Shirley Thomas	Zoology	Marine biology
30	Dr. Sebastian Joseph	History	Environmental history
31	Dr. Jenee Peter	History	Archaeology
32	Dr. Twincy Varghese	History	Political history
33	Dr. Malini R	Psychology	Educational Psychology
34	Dr. Seena M Mathai	Psychology	Sports Psychology
35	Dr. Neelima Ranjith	Psychology	Health Psychology
36	Dr. Vidhya Ravindranadan	Psychology	Educational Psychology
37	Dr. Marikutty P J	Psychology	Clinical Psychology
38	Dr. Sunil Abraham Thomas	Economics	Development Economics
39	Dr. Ann George	Economics	Development Economics
40	Dr. Anil Thomas Koshy	Phy. Education	Sports Psychology
41	Dr. Bindu M	Phy. Education	Sports Psychology

3.1.8. Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

Several eminent scholars in different disciplines visited the College for expert lectures during seminars, conferences and workshops organized by various Departments. The list of scholars who have visited the College as part of the Ph. D course work is presented above (Table 3.3).

A higher level of academic mentoring as part of the Walk With a Scholar (WWS) Programme of the Government of Kerala is being organized in the College since September 2014, for which eminent scholars with proven academic achievements and persons of standing in different walks of life like law, media, health, administration are invited to interact with the students. The Programme aims at developing a passion in the students in their chosen subjects.

As part of the orientation Programme for the students eminent persons are invited for lectures.

3.1.9. What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

As per the Govt. rules, there is no provision for availing Sabbatical Leave for research activities. Despite this the institution still encourages faculty members to get actively involved in all research-based activities. It promotes research by assisting teachers to apply for the Faculty Development Programme under the UGC scheme.

3.1.10. Provide details of the initiatives taken up by the institution in creating awareness/ advocating/ transfer of relative findings of research of the institution and elsewhere to students and community (lab to land)

- The Department of Chemistry organized illustration of analytical methods for plus 2 students, and conducted an exhibition for schools and Colleges. The Department's Instrumentation centre has been offering spectral analysis for researchers and PG students on payment basis. It also organizes intercollegiate and interschool quiz competitions annually.
- The Department of Economics has conducted a Socio-Economic survey to identify the prospects and problems of Karumaloor Grama Panchayat, Aluva.
- The Department of Psychology has conducted surveys in the locality to identify people in need of palliative care. Five such cases were linked with assistance. The Department has been conducting outreach Programmes organized by different agencies.
- The Department of MCA conducted a class for the senior citizens on how to perform various Online Payment Transactions through Net Banking.
- The Department of Zoology tries to inculcate scientific temperament and authentic research in undergraduate and postgraduate students by making them work on diverse topics as Biodiversity, Environmental Science, Animal rearing and Pollination studies. Fieldwork is greatly encouraged. Students are encouraged to publish research articles based on their project.
- Department of Physics in association with ISRO, TVM conducted *Bhauthika-2014*, a three day exhibition in science and technology which highlighted a multitude of events linked up with diverse categories of technical and cultural ecosystem.
- The E & CM association organised a tech-fest-*Techneo* in 2012. The event include projects exhibition, Workshop on PC Maintenance and troubleshooting, Seminar on Open Source.
- A workshop on *Drupal* in association with the National Centre on FOSS and CDAC Chennai was organized in 2012.
- One day Workshop on Innovative experiments and projects in Physics conducted by IAPT- Kerala region and Department of Physics in 2012.

3.2. Resource Mobilization for Research

3.2.1. What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

During the last five years, the College has spent an amount of Rs.1, 34, 35,000/- for research related activities under the prescribed head.

Table 3.6 Details of the amount spent on research related activities.

Sl.No	Head of Expenditure	Source of income	Utilized amount (Rs)
1	Research lab innovation and purchasing research equipments	FIST,UGC and Management	1,13,00,000
2	Common instrumentation lab	UGC and Management	7,00,000
3	Purchasing reference book and journals	UGC and PD account	5,00,000
4	10 mbps Connection	Management	1,35,000
5	Wi-Fi facility	Management	8,00,000
Total			1,34,35,000

3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

At present there is no provision to provide seed money for faculty research. However, the Management provides financial assistance, on request, for organizing seminars, as well as the necessary infrastructure and other facilities. Sufficient financial assistance is obtained through recognized funding agencies for promoting research in the institution.

The PTA also provides necessary financial help for conducting seminars and workshops to individual Departments each year.

3.2.3. What are the financial provisions made available to support student research projects by students?

- The students are permitted to use common College facilities like instrumentation lab in the science Departments, College library, and internet facilities for their research projects.
- Students are offered travel allowance to present papers at seminars/conferences.
- Students from the Department of Mathematics and Physics have received scholarships under ASPIRE for conducting research projects.
- The students from various Science Departments have benefitted from research development funds received from UBCHEA, and KSCSTE.

3.2.4. How does the various Departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

Three Departments have undertaken inter-disciplinary research work through minor research projects, workshops, and sharing of knowledge. The college has a life science research forum consisting of Botany, Biotechnology and Bio informatics Departments that undertake interdisciplinary research. Some examples are cited below.

- Interdisciplinary research between **Physics and Botany** departments leading to publication of journal and conference papers
 1. Enhanced biocompatibility of ZnS:Mn quantum dots encapsulated with Aloe vera extract for therapeutic applications; **M Anilkumar**, K R Bindu, A Sneha Saj and **E I Anila**, Chin.Phys.B, Vol.25, No.8(2016) 088103(IF 1.6)
 2. Investigation on the evolution of structural, electrical and transmitting properties of aluminium doped ZnO thin films as a function of substrate temperature; Sebin Devasia, P V Athma, **Anumol Jose** and **E I Anila**; IOP Conference series, Material Science and Engineering149(2016)
- Interdisciplinary research between **Physics and Chemistry** Departments leading to publication of journal and conference papers
 1. Low temperature electrical conductivity and seebeck coefficient of nanostructured CuSe thin films with Ga addition, Anitha Abraham, Tarachand, Gunadhor S. Okram, Rajani Jacob, P.V. Sreenivasan, **Rachel Reena Philip**, DOI: .1016/j.Vacuum.2016.04.011(IF:1.55)
 2. Zinc gallate and its starting materials in solid state reaction route-A comparative study,T A Safeera, N Johns, K Mini Krishna,**P V Sreenivasan**, R Reshmi and **E I Anila**; Materials Chemistry and Physics(2016)1-5).(IF 2.101)
 3. Effect of Sn doping on properties of transparent ZnO thinfilms prepared by thermal evaporation technique”, N.H.Sheeba,Sunil C.V,J.Naduvath, **P.V.Sreenivasan**,S.Mathew, **Rachel Reena Philip**, Chemical Physics Letters, 635, 290-294 (2015) (IF 1.963)
 4. Highly conductive n- and p-type CuInO thin films by reactive evaporation, Surya A. Mary, Bindu G. Nair, Johns Naduvath, G.S. Okram, Stephen K. Remillard, **P.V. Sreenivasan**, **Rachel R. Philip**” Journal of alloys and compounds.600 (2014) 159-161. (IF:2.99)
 5. “Structural, optical and electrical properties of Sb doped and undoped $\text{AgIn}_{1-x}\text{Ga}_x\text{Se}_2$ and $\text{Ag}(\text{InGa})_5\text{Se}_8$ thin films” Rajani Jacob, Stephen K Remillard, Paul A. DeYoung, Uday P. Deshpande, T. Shripathi, V. 6. Ganesan, Johns Naduvath, **P. V. Sreenivasan**, and **Rachel Reena Philip***, Phys. Status Solidi A, 1–9 (2013) / DOI 0.1002/pssa.201330370(IF:1.605)
 6. Optoelectronic and thermoelectric properties in Ga doped β -PbS₂ nanostructured thin films, Geethu R, Rajani Jacob, T.Shripathi, G.S.Okram, V.Ganesan, Shilpa Tripathi, Anees Fatima, **Sreenivasan P.V**, Urmila K.S, B.Pradeep, **Rachel Reena Philip**, Applied Surface Science, 258 (2012) 6257-6260. (IF: 2.112).

Challenges

- Lack of sufficient facilities is a major challenge for inter disciplinary research.
- No allocated time slot due to the absence of such provisions in curriculum

- No relaxation of workloads for research guides.

3.2.5. How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

- All Departments have sufficient number of computers with Net facility provided to the staff and the students to carry out research-related activities.
- All PG classes are digitalized and enabled with LCD projectors.
- Botany and Chemistry Departments have DST FIST funded Computer labs
- The College has 03 digitalized A/c Conference halls for hosting International/National seminars and conferences.
- Department Libraries and the Central library are equipped with quality collection of books, journals and e-resources.
- The Department of English has a state- of- the art digital Language Lab to improve the communicative skills of the students.
- Students can use inter Departmental facilities for their projects
- Permission is given to teachers for undertaking interdisciplinary projects and consultation services.
- Laboratories of Science Departments are modernized and equipped with updated instruments and equipment.

Table 3.7: List of Latest instruments and equipment.

Department	Added facilities	Funding agency
Botany	UV Spectrophotometer-Shimadzu	DST-FIST
	PCR-Eppendorf	DST-FIST
	Gel-Doc Bio-Rad	DST-FIST
	Electrophoresis Units-Vertical & Horizontal	DST-FIST
	-80 and -20 Freezers	DST-FIST
	UV Trans illuminator	DST-FIST
	Ultracentrifuge- Thermo	DST-FIST
	Spectrophotometer	UGC
Chemistry	UV Spectrophotometer-Shimadzu	DST-FIST
	FTIR- Shimadzu	DST-FIST
	Rotary Vacuum Evaporator	DST-FIST
	UTM-Universal	UGC
	Vacuum Oven	ISRO
	Muffle Furnace	UGC
	Microwave Synthesizer	UGC
	Flame Photometer	DST-FIST
	Paleographic Analyser	DST-FIST
	Polarimeter	DST-FIST
Physics	Spray pyrolysis equipment	(DAE-BRNS)
	Dip Coating Unit	(DAE-BRNS)
	Spin coating Unit(Women scientist)	DST-FIST
	Fluoromax 4C Spectrofluorometer	DST
	Keithley 2401 Source Measure Unit	DAE-BRNS

	Keithley 2450 source measuring unit	KSCSTE
	Spectral response unit-grating	KSCSTE
	Multi source vacuum coating unit	KSCSTE

3.2.6. Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

Yes, during the period 2012 – 16, the College received a grant of Rs.48.5 lakhs from the Department of Science and Technology, Govt. of India under the FIST Scheme for the development of Science Departments.

3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.

Table 3.8: List of UGC Sponsored Minor Projects

Sl. No	Name of Faculty member and Department	Title of the project	Amount sanctioned	Completed/ Ongoing and Year
1.	Dr. Ancy Eapen,	“Creative Works as Quasi-Historical Documents: A Study of the Films and Novels set in the background of the Konkan-Koramandel Coast in the 14 th and Fifteenth Century.”	1,20,000	Completed,
2.	Suma Mary Scaria,	“The Role of the Media in Defining the Changing Faces of Womanhood in Kerala.” 2012-15	1,50,000	Completed,
3.	Dr. Sonia Chacko	The Making of the New Woman: A Psycho-Social Analysis of the Impact of Women’s Magazines in Kerala.”	1,20,000	Completed,
4.	Dr. Alwin Alexander	“Reconstituting the Self: A Dialogic Study of the Selected Works by Sarah Joseph and their Praxis of a Critical Theology of Liberation.”	1,00,000	Completed,
5.	Dr. V.P. Markose,	Male representations in Malayalam feminist plays.	90,000	Completed
6.	Dr. Siby M. Eapen,	Cultural Changes in Kerala through Malayalam cinema	1,00,000	Completed
7.	Dr. Ruby Elsa Jacob,	The Agony of Women During Indian Sub – continent Partition : A Comparative Study In The Scenario Of Hindi & English Partition Literature	1,65,000	Ongoing
8.	Mr, Cijin K Paul	Creation of an ambient picture	4,60,000	Ongoing
9..	Dr. E.S. Jeevanand,	“Estimation of time to test transform for classical Pareto distribution in some real data situation”	1,20,000	Completed

10.	Dr. E.S. Jeevanand	Software Reliability Data Analysis with Stress-Strength Model Using The Power law distribution	2,00,000	Completed
11.	Mr. Eldo Varghese	Some Problems in Graph Theory with special reference to Fuzzy Intersection Graphs	1,70,000	Completed
12.	Mr. Pratheesh Abraham	An Analysis of Effectiveness of Student Support Systems in individual Performances using Fuzzy Relations	1,70,000	Completed
13.	Dr. E.I.Anila	Synthesis and characterisation of nano Structured PbS thin films for photovoltaic applications	1,05,000	Completed
14.	Dr, Rachel Reena Philip	Studies on effect of flux on the structural and optical properties of SrS:Cu phosphor – UGC	1,52,000	Completed
15.	Dr. Resmi R	Investigations on sensing parameters of CNT-TiO ₂ nanostructured films.	3,4,0000/-	Completed
16.	Dr. TharaK.Simon,	Phytochemical analysis and DNA sequencing of two species of podostemaceae of Kerala Rivers	1,20,000	Completed
17.	Dr, David Saj Mathew	“Selection of root rot resistant <i>Coleus forskohlii</i> plants”	1,30,000	Completed
18.	Dr. P.M.Kuriachen	“Histopathological Studies on some common fruity vegetables”	1,20,000	Completed
19.	Dr. Manju M. George	“Tissue culture studies in <i>Coleus forskohlii</i> -an important medicinal Plant	1,45,000	Completed
20.	Dr. Manju M. George	“ <i>In vitro</i> propagation in <i>Barlerialupulina</i> Lindl.” –	1,40,000	Completed
21.	Dr. Anilkumar M	Phytochemical and antibacterial screening of <i>Simaroubaglauca</i> DC	1,25,000	Completed
22.	Dr. A. Benny Cherian,	Synthesis of toughened unsaturated polyester Resin	1,30,000	Completed
23.	Dr. K.P. Unnikrishnan,	Development of particulate filled epoxy resin	1,40,000	Completed
24.	Dr. P.V. Sreenivasan,	Preparation of super tough thermoplastic from polystyrene and powdered nitrile rubber	1,45,000	Completed
25.	Dr. Jenish Paul,	Glass fibre reinforced epoxidized siloxane modified epoxy system for high strength applications	1,45,000	Ongoing
26.	Ms. Smitha Roy,	Isolation of chitin and its interaction studies with organic dyes (Computational and Experimental)	1,90,000	Ongoing
27.	Dr.Simi Pushpan K,	Synthesis and characterization of selected Privileged structure bearing Dipyrromethanes.	5,00,000	Ongoing

28.	Miss Juby John	Envisioning Female Agency-Tracing the History of the local women workers of the CMS Mission-19 th and 20 th Century	170000	Ongoing
29.	Dr. Sunil Abraham Thomas	Are Prices Sticky: Evidences from real world	44,000	Ongoing
30.	Mr. Shyam Mohan,	In-Silico Drug target identification against Cyclooxygenase -2(Cox 2)-A key enzyme Mediating inflammation	3,50000	Ongoing
31	Liji Lawrence,	„Emergence of rural non-farm economy: Implications to movement of labour and land conversions in Central and Southern Kerala“,	1,15000/-	Completed
32	Nino Baby,	„towards sustainable development through CFL usage under Clean Development Mechanism projects: A case study of domestic energy consumption in rural Ernakulam“,	1,00,000/-	Completed
33	Rajalakshmi R,	Migration and Inclusive growth in Kerala; A case study of migrant construction workers in Kochi,	1,30,000/-	Ongoing
34	Tresa Divya T.J,	“Marginalization of Urban Poor Population in Kochi”, UGC Minor Research Project –	1,50,000/-	Ongoing`
35	Dr. Bindu M.	Body image perception, self esteem, and dietary practices: Comparison between women athletes and Non-athletes of college level	1,35,000/-	Completed

Total Rs. 57,86,000/-

Major Research Projects

1. Dr. M. Anilkumar

- Department of Botany - Kerala Biotechnology Commission sponsored Project titled In vitro anti-inflammatory activity of the leaf extracts *Litseaquinqueflora* Dennst Suresh.

Amount obtained: 16, 11,500/ -Duration-3 years

Period of study-(2012- 2015) Status of project-Completed

2. Dr. Anila E.I

- Department of Physics -DST Sponsored project on Prepration and Characterization Nano phosphorus for display and biomedical applications.

Amount obtained: 32, 54,102

Period of study- 2012-2015, Status of project-Completed

- BRNS-Fabrication and characterization of transparent conducting oxide thin films for optoelectronics application. Rs.22,66,500, Duration of the study2015-18 (Ongoing)

- Scientist mentor of the project titled „Electrical and nonlinear optical characterization of optoelectronic materials“. Rs.19,85,000/ Duration of the study 2015-18 (Ongoing)

3. Dr. Rachel Reena Philip–

DST sponsored project-Fabrication and Characterization of Hybrid Solar Cells of a Novel Configuration with I-III-VI OVC and II-VI or IV – VI nanostructured thin films

- UGC and DAE, KSCSTE, Minor Research Project (UGC) Amount obtained: 14,86,618/- Period of study-2013-2016, Status of project-Completed
- TiO₂ Nano tubes as electrodes in super capacitors and junctions in photovoltaics UGC DAE Rs.6, 89,400/-(2014-17) Status of project-Ongoing
- Fabrication and characterization of hetero Junction solar cells FTO/n-silver indium gallium selenide/p-silver indium selenide/metal(Scientist Mentor) KSCSTE Rs.16,00,000 Period of study-2014-17 Status of project-Completed

Table 3.9: Details of UGC Sponsored Minor/Major and other Projects

	Number	Total grant
Minor projects	35	Rs.57,86,000/-
Major projects including 2 Students' Research projects	7	Rs.1,28,93,120/-
Interdisciplinary projects	-	-
Industry Sponsored	-	-
Students' Research projects(KSCSTE)	3	Rs.30,000/-
DST-FIST -Department of Chemistry Department of Botany, Mathematics and Physics	1	Rs.48,50,000
Any other UBCHEA	16	Rs.47,43,000/-

Total Rs.2, 83, 02,120/

3.3. Research Facilities

3.3.1. What are the research facilities available to the students and research scholars within the campus?

The College has 09 research centres, where 115 researchers and students can carry out quality research in a purely academic environment. Some of the facilities made available to research scholars and students are:

- Research rooms for all research Departments. Malayalam, English, History, Economics, Physics, Chemistry, Botany, Mathematics and Psychology
- Seven research laboratories.

- The library subscribes to the N-LIST package of the INFLIBNET, through which appr.6200 e-journals, and more than 3 million e-books are accessible. Students are free to access all these resources from the library, Departments, placement cell, labs, and from their homes. The College also subscribes to IEEE database.

3.3.2. What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

- Union Christian College is a higher learning institute, which encourages students and faculty members to undertake research by applying recent trends.
- The Research committee of the College provides information regarding Minor and Major Research projects, about the funding agencies and on the timely submission of the projects.
- The College has shown a significant increase in the number of faculty members and students undertaking research projects in new and emerging fields.
- The College makes all efforts in encouraging the results of the research projects undertaken through publications in peer reviewed National and International journals.
- The Physics, Botany and Chemistry Departments have acquired sophisticated and essential instruments needed for research through the funds generated through research projects and funding from Govt. agencies like DBT, DST and FIST.
- The College provides support in updating the infrastructure facilities enabling students to explore the emerging areas of research. The College has well equipped Science Research Laboratories.
- The College take the initiative in coordinating the various Departments to apply for service learning research projects from UBCHEA. During the accreditation period an amount of Rs.65 lakhs has been sanctioned through service learning projects to the faculty members. UBCHEA also provided travel grant for selected faculty members to present research papers outside the country.

3.3.3. Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments/ facilities created during the last four years.

Yes.

- The institution has received Rs.48.5 lakhs from FIST for developing research facilities and procuring instruments.
- From the fund received from the UGC, the College has been successful in constructing Laboratories and smart classrooms.

- Some of the facilities acquired by each Department through grants received from UGC Minor Research project, Major project and DST - FIST are listed in Table 3.7.
- The Department of botany received 1,000 USD from Hope College, USA for an equipment and another fund of 15,000 USD from an alumnus through Hope College and UBCHEA. One spectrophotometer and a microscope were purchased with this amount.

3.3.4. What are the research facilities made available to the students and research Scholars outside the campus/other research laboratories?

External Library facilities utilized:

- British Council Library, Chennai, American Centre Library, Chennai, IFLU Library, Hyderabad.(English)
- Kerala Sahitya Academy Library, Thrissur (Malayalam Dept.),University Library, Trivandrum and Kottayam, American College Library, Madurai (Malayalam)
- CUSAT Library, Cochin.

Analytical facilities Utilized:

- Sophisticated Test and Instrumentation Centre-CUSAT
- School of Pure and Applied Physics -M. G. University
- IIT- Chennai, Mumbai
- NIT Calicut
- VIT, Velloor, Chennai
- Raman Research Institute -Bangalore
- Dept. of Photonics and Physics-CUSAT
- School of Chemical Science-M.G University, Kottayam.

Research institute facilities utilized:

- Jawaharlal Nehru Tropical Botanical Garden and Research Institute (JNTBGRI), Palode, Trivandrum
- Rajiv Gandhi Centre for Biotechnology, Trivandrum
- VSSC, Trivandrum
- Department of Polymer Science and Rubber Technology, CUSAT

3.3.5. Provide details on the library/ information resource center or any other facilities available specifically for the researchers?

- The College has 81,141 books including reference books and bound volumes of journals. Besides, the library subscribes to the N-LIST package of the INFLIBNET which provides approx. 6200 e-journals and 3 million e-books.

- Besides, all Departments have good library facilities that cater to the needs of the students as well as faculty members.
- Internet, Wi-Fi facilities are available to all students and research scholars.
- Copies of projects of UG & PG students are made available for easy reference at Departments.
- Online facility for quick and easy reference of Ph.D. thesis and M. Phil. dissertation are made available for research scholars and students.
- Hard copies of all Ph. D theses by research scholars and faculty members are made available in the Departments and in the Central library for ready reference.

3.3.6. What are the collaborative research facilities developed/ created by the research institutes in the College? (For ex. Laboratories, library, instruments, computers, new technology etc.)

- Faculty members who are research scholars in other University centres make use of facilities like lab, library and new technology that are available.
- Faculty members such as Dr. M. Anil Kumar, Dr. Anila E.I., and Dr. Rachel Reena Philip who have undertaken Major and Minor projects have collaborations/ linkages with other institutions inside and outside the country (Eg. CUSAT, CINVESTAV, Mexico etc.)

3.4. Research Publications and Awards

3.4.1. Highlight the major research achievements of the staff and students in terms of Patents obtained and filed

- Faculty member from the Department of Chemistry Dr. Simi Pushpan has filed a Patent with no. EP2170874A4 for „Novel Compounds and their Use“ in August 31, 2011.

Research studies or surveys benefitting the community and social development

- Developed protocol for Micro propagation of Arrowroot in the tissue culture lab of Biotechnology Department. Extension activities will be carried out in a big way to create awareness among the public on cultivation, processing and marketing of arrowroot powder so as to provide sufficient amounts of arrowroot powder to industries in Central Kerala. This will help the rural farmers/ women to find an addition source of income via marketing of raw tuber and starch powder.
- The Department of Economics conducted a Socio-Economic Survey of the Karumalloor Grama Panchayat. The survey covered areas such as Education, Housing, Asset Ownership, Access to Services, Consumption Expenditure, Financial Inclusion, Employment, Health, Sanitation, Vulnerability, Social Mobility, Migration, MGNREGA, Ageing etc. of the households in Karumalloor Panchayat area. It also examines the growth and composition of the Revenue and Expenditure of the Panchayat during the last five years. The survey provided a means for improving the understanding of local resource management systems,

resource use and the relative importance of resources for households and villages. They also helped to elicit insights on interaction with government decision-making systems, community perceptions of trends and priority issues, and community-based institutions and their role in the sustainable use and conservation of natural resources. This has reflected in the policy formulation of the local government.

3.4.2. Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

The Institution published the following conference proceedings in the accreditation period

- Proceedings of the UGC national conference on „Genes and Genome Research in India“, edited by Anilkumar M (2013)
- Proceedings of the UGC national conference on „Advanced Material Science“ edited by Benny Cherian (2014)
- Proceedings of the UGC national conference on „Major Issues in Centre-State Financial Relations in India“, edited by Rajan Varughese (2014)
- Proceedings of the UGC national conference on „Health and Lifestyle“ edited by Anil Thomas Koshy and Bindu M (2015)
- Proceedings of the UGC national conference on „Advances in Mathematical Modelling and its Application“ edited by E S Jeevanand (2016)
- Proceedings of the UGC national conference on “Recent trends and Advances in Plant Sciences research” edited by Manju M George (2016) ISBN No. 978/93/5267/163/2.

3.4.3 Give details of publications by the faculty and students:

(List provided in the annexure)

Table 3.10: Details of publications by the faculty and students

	Number
Paper Published in journals	346
Students Publications	61
Chapters in books and Edited	54
Books Published	16
Books with ISBN number	6

3.4.4. Provide details (if any) of Research awards received by the faculty**Table 3.11: Research awards received by the faculty**

Department of English	Smt. Akhila Narayanan	FLAIR-2015
Department of Malayalam	Dr. Muse Mary George Dr. Aju Narayanan:	M. P. Paul Award-2015 Best Research Guide UGC Research award-2012
Department of Hindi	Dr. Ruby Elsa Jacob	Sahitya Puraskar-2015 Best Research work
Department of Physics	Dr. Resmi R Dr. Anila E.I	FLAIR-2015 UGC Travel grant 2011, Best paper award (NCAMS) 2012
Department of Botany	Dr. Justin R. Nayagam Mrs. Anumol Jose	Best paper award-2015 FLAIR Programme-2014
Department of History	Dr. Sebastian Joseph Dr. Jenee Peter	British Council Charles Wallace Travel Grant-2013 Won the award for the best paper- Centre for Heritage Studies (CHS)
Department of English/Malayalam	Sri Cheri Jacob Dr. Aju Narayanan:	Special Kerala State Film Award - 2015

3.5. Consultancy**3.5.1. Give details of the systems and strategies for establishing institute-industry interface?**

- The College encourages each Department to establish institute-industry interface.
- A committee of consultancy service for promoting faculty members to render their expertise and knowledge to the community is functioning in the College.
- Department of Physics, Botany, Biotechnology, Psychology, Bioinformatics, Computer Science, and History offer consultancy services to industries, academics and to the local community.

The major areas of competence offered by each Department are given below:

- The Department of Chemistry provides UV& IR facilities for research. The Department is offering these instrumentation facilities to Physics, Botany and Biotechnology Departments of our College free of cost and also to various Colleges and industries
- The Department of Computer Science offers coaching for students to clear HSST computer science examination. Out of the 40 participants 15 of them are in the short list of the PSC.
- The Department of Zoology has established a vermiculture unit inside the campus. Earthworms have been introduced to the unit and fed with organic

and household waste. Vermicompost was prepared and used in organic farming practices in the campus, and provided for sale.

- The Department of Mathematics conducted mathematical quiz competition for Higher Secondary Students to popularize mathematics among school students.
- Department of Physics provides the equipment Fluoromax4 Spectrofluorometer for researchers from other colleges and Cochin University of Science and Technology.

3.5.2. What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

The stated policy of the institution to promote consultancy is to offer expertise that benefits society. The faculties are encouraged to share their expertise with industry/institution, free of cost. However, when income is generated, it is used for the development of the concerned Department. An amount of Rs.3, 46,585/- was generated through consultancy.

3.5.3. How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

Teachers are encouraged to undertake consultancy services by making use of the facilities available in the College. Details of major consultancy services provided by the faculty are listed below:

Table 3.12(a): Consultancy services provided by the faculty members

Sl. No.	Faculty	Department	Area of expertise	Beneficiaries
1	Dr. Neelima Renjith	Psychology	Parenting skills	Parents of pre- school children, Rajagiri school, Kalamassery
2	Ms. Syna Soosan Abraham	Psychology	Member, panel of expert	Aviation security CIAL
3	Prof. Shyam Mohan	Bio informatics	Bio informatics	Students St Mary's College Trissur
4	Dr. Sebastian Joseph	History	Research Work Consultant	Research students of other Institutions
			Environmental history	Students and teachers of various Colleges and universities.
5	Mr. Cijin K Paul	Computer Science	Computer	Coaching for Kerala State Public Service Commission
6	Dr. P.V. Sreenivasan	Chemistry	Provides UV& IR facilities	Research Scholars
7	Dr. Shirley Thomas	Zoology	Vermicomposting	Community
8	Ms. Elizabeth V. Mathew	Zoology	Ornamental fish rearing and breeding	Community
9	Dr. Aju K.N.	Malayalam	Expert advisor in the Muziris Heritage Project	Kerala State Tourism Department
10	Dr. Anila E I	Physics	Provides Spectrofluorometer Guidance of project	Researchers in and outside the College MSc students from other Colleges
11	Dr. Pramod Dominic	Physics	Guidance of project	MSc students from other Colleges

3.5.4. List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

Table 3.12(b): Major consultancy services provided by the institution

Areas of consultancy	Department	Income Generated
Provides UV& IR facilities for research	Chemistry	Rs.3000/-
Coaching for KPSC HSST computer science	Computer science	Rs.40000/-
PL and spray research facility	Physics	Rs.50000/-
NET coaching	Computer science	Rs.15000/-
Counseling	Psychology	Rs.4000/-
Psychological assessment	Psychology	Rs.2000/-
Consultancy in Arachnology (Taxonomy of Spiders)	Zoology	Rs.1000/-
Consultancy in Vermicomposting	Zoology	Rs.420/-
Consultancy in Ornamental fish rearing and breeding	Zoology	Rs.630/-
Organic Farming	Zoology	Rs.600/-
Provides lab facility and technical assistance for the conduct of JAIIB & CAIIB exam by sify Provides lab facility and technical assistance for the conduct of online entrance test for Sikkim & Manipal university	MCA	2,29,935/-
	TOTAL	Rs.3,46,585/-

3.5.5. What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

The consultancy services offered by the faculty are mostly free of cost. However, remuneration or small amounts that have been received from many agencies are utilised for the development of the concerned Departments. A formal policy is to be framed and approved by the management of the College.

3.6. Extension Activities and Institutional Social Responsibility (ISR)

3.6.1 How does the institution promote institution- neighbourhood- community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

- Extension activities and outreach Programmes beneficial to the local community and neighborhood institutions are organized by various clubs, Department associations and Women's cell, to promote social responsibility among the students to develop their personality and leadership quality. The IQAC Coordinator and member in charge of extension activities coordinate and monitor these activities.
- NSS and NCC units functioning in the College undertake socially useful activities, promoting the holistic development of student
- PTA/Alumni contribute resources/finance to the institution's social endeavors in addition to their own extension activities.
- Department of Economics and Physics conduct programmes with student and community support for public awareness on environmental issues, nature and energy conservation

3.6.2. What is the Institutional mechanism to track students' involvement in various social movements/ activities, which promote citizenship roles?

- The election of College Student's Council provides an opportunity for realizing democratic values and responsibilities among the students.
- Several clubs (Registered and others) are functioning in the College and students are encouraged to take membership in any of these clubs. Students get the opportunity to plan and execute programmes through these platforms.
- Organizations such as NSS, NCC organize forums for students to involve in community oriented activities such as Pain and Palliative Care Unit, blood donation, Home for poor etc. and the teacher in charge ensures participation. All groups maintain and update records or registers of their activities.

3.6.3. How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

Feedback on academics, extracurricular activities and infrastructural development are collected regularly from,

- Students through suggestion boxes in selected locations.
- PTA executive and general body meetings
- Staff meeting conducted regularly
- Open house for parents
- Alumni during alumni meet conducted annually

3.6.4. How does the institution plan and organize its extension and outreach programme? Providing the budgetary details for last four years, list the major extension and outreach Programme and their impact on the overall development of students.

- Each Department plans its extension activities and outreach programme at the beginning of the academic year and prepares an action plan.
- The NCC, NSS and College students council are also actively involved in the task of organizing the extension and outreach programme.
- The IQAC monitors, plans and executes its own extension and outreach programme

Table 3.13: Budgetary details of extension and outreach programme

Major extension / outreach programme	Budget Utilized				Outcome
	2012-13	2013-14	2014-15	2015-16	
Environment Awareness	24,000/-	60,000/-	38,000/-	1,02,000/-	Created awareness among students and public and developed positive attitude towards nature.
Academic Assistance	21,000/-	31,000/-	23,000/-	20,750/-	Inculcated the values of care and affection towards the fellow students and the needy community
House Construction	-----	565000/-	100000/-	212000/-	Compassion to poor
Medical Support	65000/-	94000/-	24000/-	123000/-	Instilled empathy in students
Orphanage visit	4000/-	-	5000/-	-	Created awareness about the Compassion for lonely ones
Disaster Relief Fund	-----	10000/-	-	12000/-	Developed the spirit of compassion
Service learning projects (UBCHEA)	65 Lakhs				Students and Community

3.6.5. How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?

- NSS Programme officers attended Facilitator Training Workshop under the auspices of the Active Citizenship Programme jointly organized by Rajiv Gandhi National Institute of Youth Development and Mahatma Gandhi University. This was assigned to our institution for taking up socially oriented activities through NSS. The Programme officers trained thirty NSS volunteers of our institution.
- Students are encouraged to join the activities like the NCC, NSS, at the time of their admission. The spirit of service and goodwill are instilled in the students through mentoring, value education and awareness programmes.
- The teacher coordinators conduct orientation classes to inspire students.
- Students and teachers participate in blood donation camps and campaigns; extend help to patients of palliative care and victims of natural calamities.
- Students are awarded marks for their participation in NSS/NCC activities as per University norms.
- The students are honoured with certificates and cash prizes for their achievements, on the College Day.

3.6.6. Give details on social surveys, research or extension work (if any) undertaken by the College to ensure social justice and empower students from under-privileged and vulnerable sections of society?

- The Economics department conducted Health, Economic and Social Surveys in the nearby village and compiled the survey report, drawing a blue print of the Programmes to be organized.
- Training/skill development Programme arranged for widows by MCA and MBA Departments.
- Women's Cell arranges self-defense classes every year to empower women and underprivileged sections of society. Women's cell organized a Programme for the *Kudumbasree* members to equip them in soft skills and to make them capable of self-employment.

3.6.7. Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment how they complement students' academic learning experience and specify the values and skills inculcated.

The extension activities have contributed immensely in complimenting the students' academic learning process.

Table 3.14: Expected outcomes of the extension activities

Extension Programme	The values and skills inculcated
Educational sponsorship: 1. Taking special tuition regularly for boys and girls from V H Colony, Aluva by Psychology department	Developed a sense of social responsibility, concern for fellow beings in need.
1. <i>Harithavarsham</i> : 2. Eco-friendly activities. 3. Water auditing	Spreads the idea of sustainable development Developed ecological sensitivity and need for conservation of resources
1. Detergent making 2. Awareness Programme	Developing a skill of self-employment Sensitizing towards ecofriendly power conception
Programme against alcoholism & drug abuse Janamithri police, Kerala action Force	Awareness among students
Lab visits by neighbouring schools	Sharing resources with the less privileged and instilling the sense of social responsibility
Self-defense classes for women	Self confidence
<i>Swachh Bharath Abhiyan</i> - Cleaned, KSRTC buses, public road side-walks, <i>Harithavanam</i> , College premises	Environmental consciousness
Exhibitions conducted by Physics, Chemistry and E&CM Departments	Scientific temper and Learning experience

3.6.8. How does the institution ensure the involvement of the community in its reach-out activities and contribute to community development? Detail on the initiatives of the institution that encourage community participation in its activities?

- The institution ensures the involvement of the community in its reach out activities for community development organized by NSS, NCC, Sports and other Departments.
- In all community and extension programmes, local community leaders are invited and the College ensures their active cooperation.
- The College takes initiative in convening meetings with the local administration for the implementation of all extension activities.
- The local authorities also extend their whole hearted support for the extension programmes envisaged by the institution.
- The NSS, NCC, Nature action club, etc. collaborate with the local bodies in their various projects related to health, traffic awareness, hygiene, sanitation, literacy, renewable energy, pollution control, social evils, blood and eye donation, environment conservation etc., and contribute much to community development and social progress.

3.6.9. Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

The institution has constructive relations with other institutions of the locality. The following constructive relationships have been forged with other institutions in the locality for working on various outreach and extension activities. The extension activities carried out by various Departments are the following:

The College has association with various Government and Non-Governmental agencies to provide extension and outreach services.

- The Ernakulam District Sports Council conducts camps and matches to select Ernakulam District teams for hockey and netball.
- Ernakulam District baseball Association conducts inter club baseball league championship.
- Ernakulam district hockey Association conducts senior district league championship.
- Ernakulam district cricket Association conducts summer camp for School children.
- 22 Kerala Bn. NCC, Aluva and 7 Kerala Girls Bn.NCC conduct annual training camps and RD selection camps. The College is the centre for B and C certificate examinations.

- Plus two students from various schools are doing their project the laboratories free of cost (St.Mary's Public School, Thamarachal and Aluva Settlement Higher Secondary School).
- Departments of Physics (In association with ISRO, TVM), Chemistry and E&CM conducted exhibitions during the accreditation period. Around 1000 people including students from nearby Schools and Colleges were benefited from this.
- Inter-collegiate and inter-school quiz competitions are conducted by different Departments annually. Students from various Colleges and Schools participate in these competitions.
- The Department of Economics conducted a Socio-Economic survey to identify the prospects and problems of Karumalloor Grama Panchyat, Aluva.
- An Ayurvedic camp was conducted in collaboration with Arya Vaidya Sala, Kottakkal on 4th June, 2015. All the residents of the Karumallor Grama Panchayath were invited to the camp.
- Associated with Handloom promotion Department, Government of Kerala in the one day awareness seminar held in the College for the NSS students in December 2013
- Associated with Khadi unit at Kunnukara (Cleaning project of NSS)
- YMCA Alangad (Summer Coaching Camp, Football tournament etc.)
- Associated with Paristhithi Samrakshana Sangham (Training for school students)

3.6.10. Give details of awards received by the institution for extension activities and/ contributions to the social/community development during the last four years.

Nil

3.7. Collaboration

3.7.1. How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives -collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

The Departments of the institution take the initiative to collaborate with research laboratories, various universities and industry for research activities.

TPS-21 Day Training (ASAP Additional Skills Acquisition Programme) is conducted by the Department of English in collaboration with the Government of Kerala. The screening examination of the course (APTIS) is conducted in collaboration with the British Council.

Department of Physics has collaborative research with the following Institutions:

1. Cochin University of Science and Technology.
2. IUC-DAE Consortium, Indore.

3. BITS Goa.
4. IIT Madras, Chennai.
5. Hope College Michigan.
6. Universitat politecnica de Catalunya, Spain
7. CINVESTAV, Mexico
8. International Christian University, Japan.
9. VIT, Chennai

Students and faculty members of the Department published papers in collaboration with scientists of these institutes. Dr. Madhu K. has been associating with BITS, Goa as a research guide.

Department of Chemistry is conducting a Certificate course in Environmental studies sponsored by UBCHEA (United Board of Christian Higher Education Asia)

3.7.2. Provide details on the MoUs / collaborative arrangements (if any) with institutions of national importance/ other universities/ industries / Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

MOUs

1. International Christian University (ICU), Japan.
2. Hope College, Michigan, USA.
3. Fu Jen Catholicate University (FJCU), Taiwan.
4. Government of Kerala (ASAP).
5. Synthite Industries, Kolenchery.
6. Medical Mission Medical College (MMC), Kolenchery.
7. CARE Keralam Ltd, KINFRA Park, Koratty, Thrissur.
8. FACT, Udyogamandal, Eloor, Ernakulam, Kerala.
9. Central Marine Fisheries Research Institute, Ernakulam.
10. Start-Up Mission, Governemnt of Kerala.
11. Centre for Development of Advanced Computing (C-DAC), Kochi.
12. Centre for Advancement of Global Health, Kochi.
13. IPSR Solutions Ltd., Kottayam.

The College has faculty exchange programme with Hope College and student exchange programme with ICU & FJCU. Students from Department of Biotechnology do their internship in Synthite Industries and MMC. Government of Kerala provides financial assistance to initiate start – ups. Additional Skill Acquisition Programme (ASAP), Government of Kerala

facilitates the employability quotient of Undergraduate students of Arts and Science Colleges.

The collaboration with the Hope College, USA resulted in the Publication of research papers.

3.7.3. Give details (if any) on the industry-institution - community interactions that have contributed to the establishment/ creation/ up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories/ library /new technology / placement services etc.

The College has been collaborating with various companies and industrial agencies such as Tech Mahindra, Wipro, UST Global, IndusInd Bank, Infosys, TCS etc., which resulted in the placement of graduates of the College in such companies. Almost 200 students have been placed during the assessment period (Refer Table 5.4).

3.7.4. Highlighting the names of eminent scientists/ participants who contributed to the events, provide details of national and international conferences organized by the College during the last four years.

Table 3.16 Eminent scientists who contributed to international/National/ conferences

Sl. No.	Name	Institution	Department
1	Dr. Dona Mathew Scientist SG	Head, Advanced Polymers and Ablative section, Polymers and Speciality Chemicals, VSSC	Chemistry
2	Dr. Suresh Mathew Director	School of Chemical Sciences, Mahatma Gandhi University, Kottayam.	Chemistry
3	Dr. Deepthy Menon Associate Professor	Amrita Centre for Nanosciences and Molecular Medicine, Kochi	Chemistry
4	Dr. Saju Joseph, Assistant Professor	Center for Nanoscience and Nanotechnology, Mahatma Gandhi University	Chemistry
5	Dr. Eby Thomas Thachil Professor & Head	Polymer Science & Rubber Technology, CUSAT Cochin	Chemistry
6	Dr. C. Gouri Scientist SG	LFCD-ESG, VSSC, Trivandrum	Chemistry
7	Dr. C.P. Reghunathan Nair, Scientist SG	Group Director, Polymers & Special Chemicals Division VSSC, Trivandrum	Chemistry
8	Dr. K.R. Dayas, Director	(C-MET), Trichur	Chemistry
9	Dr. Sabu Thomas Director	School of Chemical Sciences MG University, Kottayam	Chemistry
10	Dr. S. Prathapan , Assistant Professor	Cochin university of Science and Technology	Chemistry
11	Dr. S. A. Ilangovan	Head, Energy System Group, VSSC, Trivandrum	Chemistry
12	Dr. Sajan Joseph	Senior Scientific Advisor, Discovery Research and Technologies USA	Chemistry

13	Dr. Sreekumar, Professor and Head	Department of Applied Chemistry, CUSAT	Chemistry
14	Dr. K.R. Muraleedharan, Controller of Examinations & Professor in Statistics,	Kerala Fisheries University	Mathematics
15	Dr. E. I. Abdhul Sathar	Resource Person for course work of Ph.D. Programme,	Mathematics
16	Dr. Vishnu Namboothri K., Assistant Professor,	BJM Govt. College, Chavara	Mathematics
17	Dr. P. Vinod Kumar, Assistant Professor,	Department of Basic Science, Rajagari Engineering College.	Mathematics
18	Prof. Irudaya Rajan	Centre for Development Studies, Trivandrum	Economics
19	Dr Venkatesh Athreya	Professor, Pondicherry University	Economics
20	Prof. Praveen Jha	JNU, New Delhi	Economics
21	Dr. Prabhat Patnaik	Professor, JNU New Delhi	Economics
22	Prof. Amit S Ray	Director, CDS, Trivandrum	Economics
23	Dr. Surajit Das	JNU, New Delhi	Economics
24	Dr. K.K George	Director, CSES, Kochi	Economics
25	Dr. Susan Thomas	Professor, IGIDR, Mumbai	Economics
26	Dr. B Ekbal	Former VC, Kerala University	Economics
27	Mr. C J George	MD, Geojit Securities	Economics
28	Prof M.A Oommen	Emeritus professor, ISS, New Delhi	Economics
29	Dr Anuradha Balaram	Member secretary, Kerala State Planning Board	Economics
30	Prof. Rajan Gurukkal	Professor, IISC, Bangalore	Economics
31	Justice K.T Thomas	Retired Judge, Supreme Court of India	Economics
32	Dr. T.M. Thomas Issac MLA	Former Fellow, Centre for Development Studies, Trivandrum & Former Finance Minister, Govt. of Kerala.	Economics
33	Dr. K.M. Seethi	Professor, School of International Relations & Politics & Director, KN Raj Centre, Mahatma Gandhi University	Economics
34	Dr. Shaji Varkey	(Professor, Department of Political Science, Kerala University)	Economics
35	Dr. Jose Sebastian	(Associate Professor at <i>Gulati Institute</i> of Finance and Taxation, Trivandrum)	Economics
36	Dr. D. Prasanth	(Chief, Plan co-ordination Division, Kerala State Planning Board, Trivandrum)	Economics
37	Dr. D. Narayana	(Former Director, <i>Gulati Institute</i> of Finance and Taxation, Trivandrum)	Economics
38	Dr. Harikumar S.	(Professor, Department of Applied Economics, Cochin University)	Economics

39	Dr. Martin Patrick	(Director, Rural Academy of Management Studies, Cherai)	Economics
40	Rev. Prof K V Paulose	(Former HOD, Department of Economics, Baseliious College, Kottayam)	Economics
41	Mr. Midhun V.	(Assistant Professor, Govt. Law College, Trivandrum)	Economics
42	Dr. Tomy Varghese	(Former HOD, Department of Economics UC College, Aluva)	Economics
43	Mr. R. Mohan	(Additional Commissioner, Income Tax Department, Kochi)	Economics
44	Dr. Mathew Kurien	(Joint Director, KN Raj Centre, Mahatma Gandhi University, Kottayam)	Economics
45	Dr. C.A. Antony	(Director, School of Management Studies, UC College, Aluva)	Economics
46	Dr. Sunil P. Ilayidam	(Professor, Sree Sankara University of Sanskrit, Kalady)	Economics
47	Dr. K.N. Raghavan IRS	(Customs Commissioner, Kochi)	Economics
48	Dr. P.S. Mohanakumar	(DC School of Management, Technopark)	Economics
49	Dr. P.A. Mathew	(Director, FISAT Business School, Kochi)	Economics
50	Dr. N.J. Kurien	(Professor, Centre for Social Development, New Delhi)	Economics
51	Dr. N. Ajithkumar	(Former HOD &Principal, Cochin College, Ernakulam)	Economics
52	Dr. K.P. Mani	(HOD, Department of Economics, University of Calicut)	Economics
53	Dr. K. Muraleedharan Dr. B. Dinesh	Kottakkal Arya vaidya sala	Bio Technology
54	Dr. Sarala Samuel,	Head,Research & Developement, Kerala Ayruvedic	Bio Technology
55	Dr. Sajan Joseph,	Research Director, Eli Lilly, USA	Bio Technology
56	Dr. Jayashree Acharaya	Head- Dept. of Sports Psychology, Lakshmibai National Institute of Physical Education ,Government of India	Physical Education
57	Dr. S. Sivasankaran	Professor, Sree Chitra Tirunal Institute Medical Sciences and Technology, Trivandrum	Physical Education
58	Dr.Shailaja Mohan Trivandrum	Head – Department of Sports Psychology,Lakshmibai National College of Physical Education	Physical Education
59	Dr.Binu Areeckal	Assistant Professor in Community Medicine, Medical College, Kottayam	Physical Education
60	Dr. K. Chandrasekaran Chairperson School of Education Professor & Head	Department of Physical Education, Madurai Kamaraj University, Madurai	Physical Education

61	Dr. Jaideep Menon Consultant Cardiologist	Amritha Institute of Medical Sciences, Edappally & Sree Narayana Institute of Medical Sciences, Chalackal, Paravur	Physical Education
62	Mr. Brahma Nayakam Mahadevan	Special Educator, Motivational Speaker, Sahajeevan, Kaniyapuram, Trivandrum	Physical Education
63	Dr. George Mathews M.B.B.S,	Assistant Professor L.N.C.P.E, Trivandrum	Physical Education
64	Dr. Arshad. A.A	Medicine Specialist Daisman Ayurkendra Kuruppath, Kondotty	Physical Education
65	Dr. Binu George Varghese, Assistant Director and Head	School of Physical Education and Sports, M.G.U - Kottayam	Physical Education
66	Dr. David Haines	Queens university of Belfast	English
67	Ms Mamta G Sagar	Centre for Klannada studies, Jana Bharati Campus Bangalore	English
68	Ms Priya A S	Malayalam Writer	English
69	Ms Summer Dunsmore	University of Berkeley, California	English
70	Dr Manju John	Johns Hopkins university	English
71	Swami Sachidananda Bharathy,	The founder of Acharya guru of national regeneration movement.	MCA
72	Dr. R V G Menon,	Director of ANERT and President of Kerala Sasthra Sahithya Parishad, the "Peoples' Science Movement	MCA
73	Sri. Prince Joseph,	Senior Scientist, NPOL	MCA
74	Mr. Sunil Balakrishnan,	Global Head for Center Operations and Center Head for Kochi Center, UST Global	MCA
75	Dr Sajan Joseph	Research and director, Eli Lilly, USA	Zoology
76	Dr. P V Joseph,	Associate Professor , Dept. of Chemistry, Maharajas College Kochi	Zoology
77	Dr Thomas Philip	Former Principal, U C College Aluva.	Zoology
78	Prof. Oommen Mathew	Regional Director, IMG Cochin	Zoology
79	Dr. Jacob Baby,	Consultant Pulmonologist and Immunologist Aster Medcity, Kochi –	Zoology
80	Prof S. Sitaraman,	Sree Sankara College kalady and Convenor of Kerala, Nadeesamrakshana Samithi	Zoology
81	Zabeth Janet Laury	Newyork	Psychology
82	Rev. Joseph Mitchell	Director, Passionist Earth spirit centre, Newyork	Psychology
83	Leorna Jarvis	Prof. & Head, Dept. of Psychology, HOPE College, USA	Psychology
84	Dr. Thomas Mathew	Psychologist to rehabilitation of delinquent, New Jersy, USA.	Psychology

85	Dr. S. Ananthanarayanan,	Former Director, Defense Research and Development Organization, India	Psychology
86	Hon. Justice Kemal Pasha	High court of Kerala.	Psychology
87	Dr. V.C. George, President	Indian Association of Clinical Psychologists	Psychology
88	Dr. Kiron Rao.	Former Head, Clinical Psychology, NIMHANS. Bangalore.	Psychology
89	Dr. George Mathew,	Former Head, Department of Psychology, University Campus, Kariavattom	Psychology
90	Dr. S. Raju,	HOD, Department of Psychology University Campus, Kariavattom, Thiruvananthapuram	Psychology
91	Dr. Razeena Padmam, ,	Former Director, School of Behaviour Sciences. M. G. University, Kottayam.	Psychology
92	Dr. M. K. Mathew,	Former Head, Department of Psychology, K. E. College, Mannanam.	Psychology
93	Dr. Sani Varghese,	Clinical Psychologist, District Hospital, Kottayam	Psychology
94	Mr. Rajan Mathai.,	Clinical Psychologist, Kusumagiri Mental Health Center. Ernakulam	Psychology
95	Dr. Wilson P.C.	Former Head, Department of Psychology S. N. College, Kollam	Psychology
96	Dr. Geethanjali Natarajan.	Clinical Psychologist, AIMS, Kochi	Psychology
97	Mr. Anoop K. V.	Clinical Psychologist, Kozhikode Mental Health Center.	Psychology
98	Mr. S. Sreejith, IPS.	(DIG of Police). Chief Investigations officer (CIO) of the Kerala State Human Rights Commission	Psychology
99	Adv. Jayasankar, Senior	High Court of Kerala and Popular Political Critic.	Psychology
100	Dr. Jeevan Job Thomas.	Writer and Researcher in Physics	Psychology
101	Ms. Reena Cherian,	Reader, Department of Social Work, Delhi University	Psychology
102	Mr. Manoj Menon, ,	Associate Professor, Rajagiri School of Management, Ernakulam	Psychology
103	Ms. Ajitha.	Social activist and founder of „Anweshi“	Psychology
104	Dr. Asha Rao.	Associate Professor of Social Work. Vimala College, Trissur.	Psychology
105	Dr. Prasad Sundhararajan,	Alumnus, Union Christian College, Aluva.	Psychology
106	Ms. Glarmina P.,	Counsellor, Mukthi Sadan, De-addiction Center	Psychology
107	Dr C. Sudheesh,	Associate professor, IIST Trivandrum	Physics
108	Prof. Joaquim Puigdollers,	Micro and Nanotechnologies Research Group, Department of Electronic Engineering, Universitat Politècnica de Catalunya	Physics

109	Prof. P.B Sunil Kumar,	Director, IIT palakkad	Physics
110	Prof. C.S Unnikrishnan,	TIFR Mumbai	Physics
111	Prof. M. K Jayaraj,	CUSAT, Cochin	Physics
112	Prof. K V Kunhikrishnan	Chari person, Kerala State Library Council	Economics
113	Anath	Eminent Malayalam Novelist	Malayalam
114	Dr.K.S.Ravikumar	Professor,Short Story Critic S.S.U. Kalady	Malayalam
115	E.P.Rajagopalan	Critic,Teacher	Malayalam
116	Prof.T.M. Yesudhasan	Professor, Cultural critic, C.M.S College,Kottayam	Malayalam
117	Dr.Ajay Sekher	Professor, Film Literature Critic S.S.U. Kalady	Malayalam
118	DR.Valsalan Vathusseri	Short story writer, Professor, S.S.U. Kalady	Malayalam
119	Dr.K.M Bharathan	Folklorist, Professor, Registrar Incharge, Malayalam University	Malayalam
120	Dr.K.M Sherif	Literary Critic Professor, Calicut University	Malayalam
121	Dr. K. M. Anil	Literary Critic,Professor, Calicut University	Malayalam
122	Dr. Pradeepan Pampirikunnu	Professor, Cultural Critic S.S.U. Kalady	Malayalam
123	Dr. Mini Prasad	Literary Critic, Professor, Marthoma College, Chungathra	Malayalam
124	Mr. Rameshan Blathur	Writer	Malayalam
125	Dr. Joseph Scaria	Professor, Literary Critic.S.B.College	Malayalam
126	Dr.G.Ushakumari	Professor, Feminist Literary Critic, Maharajas college	Malayalam
127	Mr. Yacob Thomas	Literary Critic Govt.Colege,Kattappana	Malayalam
128	Dr.K.B.Selvamani	Literary Critic, Professor, University College, Thiruvananthapuram	Malayalam
129	Dr.M.R.Rajesh	Literary Critic, Professor, Sree Kerala Varma College, Thrissur	Malayalam
130	Dr.DeyaBbhai	Tribal Activist Writer	Malayalam
131	Mr. Civic Chandran	Poet, Writer, Social Critic	Malayalam
132	Dr.C.R.Rajagopalan	Folklorist,Professor, Dept.of Malayalam, Kerala University	Malayalam
133	Dr.Soman Kadaloor	Painter,Accademician,Critic,Folklorist	Malayalam
134	Dr. K. P. DileepKumar	Literary Critic, Professor,S.S.U.S Kalady	Malayalam
135	Dr.P.Renjith	Tribal Activist	Malayalam
136	Dr.A.K.Nambiar	Folklorist academician, Literary Critic	Malayalam
137	Dr.K.M. Bharathan	Folklorist, Professor, Registrar Incharge, Malayalam University	Malayalam

138	Dr. Sukatha Kumari	Eminent Malayalam Poet	Malayalam
139	Prof. Balachandran Chullickad	Eminent Malayalam Poet	Malayalam
140	Mr. Rafeeqe Ahammed	Eminent Poet, Film Song Writer	Malayalam
141	Dr. Manoj Kuroor	Critic, Poet, Professor, NSS College Changanasserry	Malayalam
142	Dr. P. M. Girish	Critic, Linguistics, Professor, Madras University	Malayalam
143	Dr. Sister Noel Rose	Critic, Professor, Nirmala College Muvattupuzha	Malayalam
144	Dr. Sunil P. Elayidam	Critic Professor, S.S.U.S. Kalady	Malayalam
145	Mr. K. C. Narayan	Literary Critic, Editor, Bhasaposhini, Malayalam	Malayalam
146	Dr. P. Pavitran	Literary Critic S.S.U.S. Kalady	Malayalam
147	S. Joseph	Poet, Critic, Maharajas College, Ernakulam	Malayalam
148	Dr. C. R. Pradasad	Critic, Professor, Kerala University	Malayalam
149	Dr. N. Ajayakumar	Critic, Professor, Sree Sankara University of Sanskrit, Kalady	Malayalam
150	Dr. T. K. Santhoskumar	Poet, Professor, St. Xavier's College, Tumba	Malayalam
151	Dr. Sivadas. K. K	Folklorist, Critic Professor, Kannur University	Malayalam
152	Dr. M. B. Manoj	Critic, Poet, Professor, Calicut University	Malayalam
153	Rajesh Chirappat	Critic, Poet, Journalist	Malayalam
154	Sajai k. V	Critic Poetry, Professor.	Malayalam
155	Dr. K. P. George	Critic, Professor, Iqbal College, Periganmala, TVM	Malayalam
156	Dr. A. G. Oleena	Critic, Professor, M G College TVM	Malayalam
157	Dr. Ushakumari	Professor, Feminist Literary Critic, Maharajas college	Malayalam
158	Dr. G. Padma Rao	Critic, Professor, Kerala University, TVM	Malayalam
159	Dr. E. P. Rajagopalan	Literary Critic, Teacher	Malayalam
160	Dr. Pramod Kumar P. N	Critic Professor	Malayalam
161	Dr. Sheeba K. S	Critic, Professor, University College, TVM	Malayalam
162	Dr. Sheela Kumari	Critic, Professor, S.S.U.S. Kalady	Malayalam
163	Dr. Seema Jeron	Critic, Assistant Professor, Kerala University, TVM	Malayalam
164	T. M. Abraham	Dramatist, Writer, Critic	Malayalam
166	Dr. P. S. Radhakrishnan	Critic Professor. School of Letters Mahatma Gandhi University. Kottayam	Malayalam

167	Dr.T.M Satheesan	Dramatist, Critic	Malayalam
168	Dr.S.Sunil	Critic Professor, Film maker, Professor, School of Drama Trissur	Malayalam
169	Dr.B.Prathapan Pilla	Literary Critic, Professor, D B College Thalayolapparambu	Malayalam
170	Dr.Ajayakumar	Literary Critic and Professor, Sree Sankara University of Sanskrit, Kalady	Malayalam
171	Dr.M.R.Rajesh	Critic ,Professor, Sree Keralavarma college, Trissure	Malayalam

3.7.5. How many of the linkages/ collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/ or facilitated-

The institution has 13 MoUs and numerous agreements with industries/ other institutions. MOUs have been signed with 03 foreign Universities namely Hope College, Michigan, USA, Fu Jen Catholic University, Taiwan, International Christian University, Japan, for Student-Faculty exchange programme and service learning programme. Apart from these, we have MOUs with Central Marine Fisheries Research Institute, Ernakulam, Medical Mission Medical College, Kolencherry, Synthite Industries, Kolencherry, Startup Mission, Government of Kerala.

Student Placement

Nineteen students who have successfully completed the ASAP training Programme are already placed in various institutions as trainers.

Informal linkages

1. UBCHEA, Unibiosys Research Laboratories, Kochi, Scientific Biominds, Bengaluru, Biscos Life Sciences, Bengaluru, Shodaka Life Sciences, Bengaluru, the Centre for Heritage Studies, Tripunithura and Centre for Heritage, Environment and Development, Corporation of Cochin, Rajiv Gandhi Centre for Biotechnology, Trivandrum, Amala Cancer Research Institute, Thrissur

Biocon, Bangalore, Kerala Forest Research Institute, Peechi, Rice research Institute, Vyttila, Kerala Agricultural University, Mannuthy, Thrissur, Central Marine Fisheries Research Institute, Cochin, Central Institute of Fisheries Technology, Cochin, Cashew Export Promotion Council of India, Kollam, Ceribiotech, Bangalore.

Curriculum development/ enrichment

- Faculty members in charge of Add-on course in History Department have prepared Curriculum as per the guidelines of the Centre for Heritage Studies, Tripunithura.

- The curriculum for the enrichment certificate programme in Environmental Sciences (CES) was prepared as per the guidance of UBCHEA.
- Linkages with the industries/ Institutions facilitated the preparation of the curriculum for Programmes for M.Sc. Bioinformatics and Biotechnology courses.

Internship/ On-the-job training

- Many students of M. Sc. Bioinformatics, Biotechnology have benefited from the association of the College with other institutions where they are offered facilities to do their Internship training projects/OJTs.
- Internship training is given to M. Sc. students for completion of research projects .
- As part of ASAP Summer Skill Acquisition Programme, students are offered internship in Public Sector Undertakings, Local Bodies and Small Medium Scale Enterprises.

Faculty exchange and professional development

- Faculty members and Students from Fu Jen Catholic University, Taiwan, and International Christian University, Japan with which we have collaborative understanding, visit our campus and interact with our students. Our faculty members are invited to these institutions for seminar presentations and invited talks.

Research

The College has linkage with the following Institutions for collaborative research:

1. Cochin University of Science and Technology.
 2. IUC-DAE Consortium, Indore.
 3. BITS Goa.
 4. IIT, Madras,
 5. IIIT, Mumbai.
 6. Hope College Michigan.
 7. Universitat politecnica de Catalunya, Spain
 8. CINVESTAV, Mexico
 9. International Christian University, Japan.
 10. VIT, Chennai
- The New Initiatives of Higher Education, Government of Kerala, has launched a Programme named FLAIR (Fostering Linkages in Academic Innovation and Research). Two of our faculty members successfully completed national and international internships.

Consultancy

- The College provides consultancy services regarding material analysis with the sophisticated equipment. The College generates limited revenue from its consultancy services.

Extension

- UBCHEA provide financial support for extension activities through service learning projects. (environment protection programmes, Counselling and complete health care for blind students , audio records of study materials for blind students, herbal botanical garden in the THSS, Aluva, development of library, etc.)

Publication

Collaboration with other institutions has resulted in 39 publications in international Journals

3.7.6. Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/ collaborations.

- A committee for international linkages coordinated by an experienced faculty member oversee the planning and implementation of collaborative initiatives.
- The College encourages faculty members to do the following:
 - Attend various programmes arranged by other institutions.
 - Guide PG projects and MPhil/PhD thesis of other universities
 - Participate in various extension activities such as invited talks, paper presentations, community and social service.
 - Be members of Boards of Studies of various universities and autonomous Colleges.
- The College utilizes the connection with its alumni and former faculty members working in other universities and institutions in India and abroad as a means of establishing linkages and collaborations.

CRITERION IV:

INFRASTRUCTURE AND LEARNING RESOURCES

4.1. Physical Facilities

4.1.1. What is the policy of the institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

The infrastructural development plan of the College is participative and largely transparent in nature. The Departments, officers-in-charge of various facilities, and individual faculty members are encouraged to submit their proposals for infrastructure development, upgradation & maintenance of existing infrastructure etc. every year. The members of the Staff Council make necessary suggestions in this regard. The Staff Council constitutes committees to prepare proposals to be submitted to funding agencies such as UGC, DST, UBCHEA, etc. These committees consider the requests received from stakeholders and prepare proposals.

Besides, the College has a Works Committee - consisting of Principal, Manager, Bursar and three selected teachers - to plan and supervise the civil works of the College. This Committee meets periodically to plan the infrastructure development and maintenance, and submits its report/recommendations to the Governing Board (GB) of the College, for approval. The works committee implements the work based on approval by the GB. Where funds are not currently budgeted, the GB proposes the estimate for the next Annual budget of the College. Major civil works such as construction of new buildings, are supervised by committees constituted by the GB.

4.1.2. Detail the facilities available for

a) Curricular and co-curricular activities:

The College has an extensive campus with lush green lawns, shadowy trees and fragrant flowers adding to its exotic locale spreading over an area of 42.4 acres. 33 buildings (5, 13,354.6 sq. ft.) house the College with following facilities:

- 67 classrooms with proper ventilation and power supply with a built-up area of about 1,21,761.8 sq. feet (approx.)
- There are 20 Department staff rooms and a common staff room
- Apart from the central library of the College, there are 18 Department libraries and 02 libraries under projects of the Centre for the Study of Religion and Society (CSRS) and Ford Pathways Cell.
- 07 smart classrooms are equipped with interactive boards. (MCA, MBA, Psychology, Economics, Commerce, Botany & Mathematics)
- The College has adequate audio-visual facilities. There are 05 LCD and 20 DLP projectors, and fifteen Over Head Projectors. Three Departments have television sets and the Dept. of English uses LD players for regular teaching.

- The archaeology museum developed and maintained by the Dept. of History supports the educational purposes of Archeology students and History students. The museum is open (with permission) to outsiders as well.
- Nine Departments are approved research centres of Mahatma Gandhi University.
- Eight fully furnished seminar/conference halls provide space for academic and non-academic discourses. (T.B Ninan Hall, Mitrapuram hall, MCA New seminar hall, MCA Hall, Prof. T.R Anatharaman Memorial hall, Seminar halls in the departments of Mathematics, Physics and English)
- There are 28 laboratories (to serve postgraduate and undergraduate courses), 11 computer laboratories and a language laboratory.
- There are 02 botanical gardens with about eighty rare and endangered plant species and an Arboretum (O. M. Mathen Memorial Arboretum). The College also maintains a Poly house, Green house and a pond.
- The Departments of Chemistry, Physics and Botany have instrumentation rooms.
- The College has a maintenance centre for computers with the service of a full-time system administrator.
- The College facilitates the examination valuation camps of Mahatma Gandhi University, and provides 02 rooms for this purpose
- There are 03 auditoriums with seating capacity of 2000, 400 and 450 each
- The College has 02 open stage
- 03 major playgrounds, each exclusively for cricket, hockey and football
- 01 outdoor stadium for Basketball and Tennis
- 01 indoor stadium
- 01 Volleyball court (renovated during 2015-16 on an outlay of Rs.50,000/-)
- Well-equipped Gymnasium (renovated with UGC funding of Rs.2.5 Lakhs) is functioning on the campus with 12 stations.
- A yoga centre also functions on the campus for teachers and students, supervised by trained instructor (under the Physical Education Department. Dr. Bindu M., Assistant Professor, is a certified Yoga instructor)
- Tie-up with the Rural Medical Mission Hospital for medical assistance. The hospital is a sister concern of the College
- Rest rooms with adequate number of toilets for gents and ladies are available on the campus.

- A counselling centre (BLISS) is functioning in the College under the supervision of the Psychology Department with weekly consultation by eminent clinical psychologists
- The College has 02 NCC offices and stock rooms along with firing range and obstacle course
- An office for National Service Scheme (NSS)
- An office room has been made available for the College Students' Union.
- Public address system connecting all class rooms
- Fully furnished Development office

b) Support facilities

- Broadband -10mbps internet connection (NME/ICT of MHRD)
- Network (fibre optic backbone) connectivity to all teaching depts., library, administrative office, and placement cell
- Wi-Fi connectivity inside the campus
- Co-operative store to sell stationery items
- A Co-operative Credit Society for permanent staff members
- Hostels – 02 for men and 05 for ladies
- Staff quarters (07 independent quarters, eight apartments, and one quarter for non-teaching staff), and Principal's quarters
- Guest house
- Day Care Centre (16 kids)
- Three Generators (15KV,30 KV,63KV) and one incinerator

4.1.3. How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (enclose the master plan of the institution/campus and indicate the existing physical infrastructure and the future planned expansions if any)

The College follows a plan document - Vision 2020 - to ensure that the College grows in line with a prescribed plan. During the last five years the College has strived to enhance the infrastructure facilities. Following are the specified projects undertaken during the last five years:

- The second phase of MCA/MBA block is already completed, which has 08 class rooms and the third phase is progressing with the completion of 08 class rooms at a cost of Rs.1.2 Crores.
- Sports: Developed a volleyball court (Rs.50,000/-)

- Renovation: administrative block, canteen, staff quarters, ladies waiting room, Principal's office and T.B Ninan hall (Rs.6.5 Lakhs)
- An academic block (MB block) completed utilizing teachers' contribution
- Toilet complex cum teachers' recreation room
- Ladies hostel (East)
- Office automation
- Local Area Network with Wi-Fi
- Installation of CCTV

4.1.4. How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

The policy of the College is to integrate the differently abled individual's right into the general campus population. The following measures are taken in this regard:

- Ramp facility provided at appropriate places for the physically challenged students at different elevated regions
- Laptop enabled with Braille software provided to Blind student on a merit cum need basis (Ms. Keerthy Babu, P.G Economics student)
- A pool of scribes has been prepared and appropriate seating arrangements made for blind students during examinations
- Audio records in the form of study materials as learning support have been prepared and made available by the Departments of English and Malayalam.
- Preferential allotment of Hostel facility for visually and physically challenged students.

4.1.5. Give details on the residential facility and various provisions available within them

a) Student Hostels

- Accommodation:
 - The College has two hostels for boys – Chacko hostel and a Sports hostel. The Chacko hostel accommodates 46 students, and sports hostel accommodates 18 students
 - Five women hostels including a sports hostel together accommodate 323 students.
- Recreational facilities: All hostels have recreational facilities such as common room with audio-visual equipment. Extra-curricular activities are promoted by providing facilities for indoor games (chess, table tennis, carom board etc.) and badminton, and open stages for cultural activities. The hostels also have ecumenical prayer halls, yoga centre and sick rooms with first aid facilities.

- Hostellers are permitted to use personal laptops and are given locker facility for safe custody.
- Library: Inmates manage library within the hostel (approximately 285 books), journals and newspapers (two vernacular dailies and one national daily)
- Security: All the hostels have walled compound, security room and watchmen
- Protected well water with filter system is provided for ensuring constant supply of safe drinking water
- Two of the hostels have mini provision stores.

b) Staff quarters

- There are 19 staff quarters for staff of the College, including the Principal's quarters. This includes 10 independent houses, one non-teaching staff apartment and eight faculty apartments. As a policy of the College, the Principal resides within the College campus.
- Additional accommodation facility available in the hostels for teachers.

c) Guest house

- The College has two Guest houses with a total of six rooms

d) Day care

- A day care centre and a crèche also functions in the College

4.1.6. What are the provisions made available to students and staff in terms of health care on the campus and off the campus

- The Rural Medical Mission hospital is a sister concern of the College and is located adjacent to the College.
- A Counseling centre (BLISS) also functions in the College with weekly 3 hour session by a clinical psychologist and full-time assistance from the Department of psychology.
- Rest rooms are provided for students and teachers and a vending machine for sanitary napkins as well as an incinerator has also been installed for hygienic disposal
- Purified drinking water facility is provided in each block, in the canteen, and in the library
- A physical fitness centre is managed by the Dept. of Physical Education

4.1.7. Give details of the common facilities available on the campus

- The **canteen** of the College is located in the non-resident students' centre. It has a special area for women with toilet facility, partitioned space for faculty and office staff. It is well furnished and has adequate facilities for ensuring food safety, including renovated kitchen, refrigerator, freezer, regular supply of filtered drinking water and electric power. The canteen facilitates dining cum get-togethers on special occasions for students, teachers and staff.
- Waste management is appropriately done using biogas plant and incinerator
- Separate space has been provided for IQAC office, Development office, etc. An exclusive space is allotted for Server maintenance.
- The College has a well-functioning Placement Cell and Guidance Bureau managed by a full time placement officer. It provides reference facilities to the students, providing periodicals with career information, and computers with internet access.
- A furnished recreational room is available for the teachers, and a ladies waiting room is available for the female students
- The College has set up incinerators in ladies waiting room and auditorium, a vermi-compost unit and biogas plant for waste management
- The College also has a fully furnished Development office
- The College has a rain water harvesting unit with a capacity of one lakh litres
- The College has a College Co-operative store to sell stationery items, and an Employee's Co-operative Credit society to address the financial need of the employees.
- 08 units of CCTV cameras are installed in the campus, and 04 units in library as per the regulations of the university and UGC for monitoring examinations and security purpose
- The College has installed 03 electric generators to ensure uninterrupted supply of electricity. A transformer (325 KV) has been allotted separately for the College by the Kerala State Electricity Board
- The College has a workshop (carpentry and welding) under the supervision of the Works Committee for the maintenance and upkeep of class rooms and other facilities
- The College has a dedicated space for examination management.
- Two rooms are allotted for M.G. University for managing centralized valuation camp.
- Space for Post office

4.2. Library as a learning resource

4.2.1. Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

The library committee comprises of 07 members including Principal as the Chairman, Librarian as the Secretary, and 05 heads of Departments as members. The committee meets to discuss and decide on policy matters, service initiatives etc. It also acts as a liaison between faculty, administrators and library.

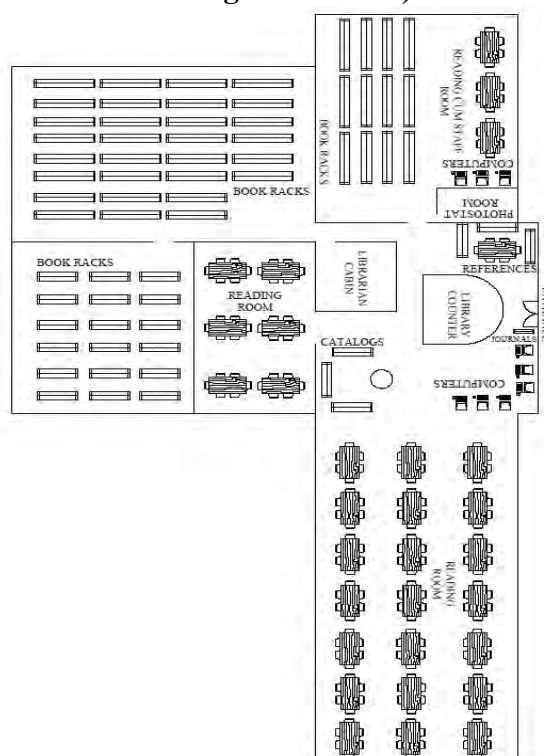
The committee met in 2013 December, and made a major policy change to provide complete Open Access to all students from 2014 January (Until 2013, the whole collection was open to Postgraduate students and final year undergraduate students only). It was also decided to increase the number of fiction books to meet the users' needs and thereby increase the library usage. The Committee meeting on June 2015 advised to install an automated mechanism to ascertain the number of walk-ins to the library.

4.2.2. Provide details of the following:

- Total area of the library (in Sq. Mts.) : 9300 sq. ft.
- Total seating capacity : 222

Working Hours	
On working days	9.00 a.m. to 4.30 p.m.
Saturdays	9.00 a.m. to 4.30 p.m.

Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources):



- Entrance Hall: Circulation Section with a counter, New Arrivals Display Area, OPAC (6 desktops), Print Journals Section, Closed Reference Books Section, Teachers' newspaper reading area, Reading room for Girls, Card Catalogue, and Librarian's Cabin (3800 sq. ft.)
- Hall no. 2: Boys Reading room, and Stack Room for a few subjects (1700 sq. ft.)
- Hall No. 3: Separate collection of less-used books, Reprographic facility, Bound vols. reading room for teachers and research scholars. (2000 sq. ft.)
- Hall no. 4: Stack room (1800)

4.2.3. How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

At the beginning of every academic year, the library request proposals/ wish lists from teaching Departments for resources to be purchased for the library. The Departments usually suggest syllabus oriented titles. The library procures these resources from vendors and makes them available for use at the earliest. Purchases are made from book exhibitions also.

Table 4.1. Details of current titles, print and e-journals and other reading materials and the amount spent on procuring during the last four years

Library Holdings	Year (12-13)		Year (13-14)		Year (14-15)		Year (15-16)	
	Number	Total cost	Number	Total cost	Number	Total cost	Number	Total cost
Text books/ Reference Books	117	1,16,060	669	3,10,376	1818	6,74,361	456	1,52,124
Journals/ Periodicals	28	29,400	25	31,000	30	32,800	36	74,980
e-resources	5500 Jnls + 97000 e-books	5000	5500 Jnls + 97000 e-books	5000	5500 Jnls + 125000 e-books	5000	6000 Jnls + 135000 e-books	5750
Any other	Institutional Membership	3000	Nil	-	Nil	-	Institutional Membership	3000

4.2.4. Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- **OPAC**: The Online public access catalogue is accessible from 8 machines available in the library and from all the machines available in the Departments.

- **Electronic Resource Management package for e-journals**

The library subscribes to the N-LIST programme of the INFLIBNET, through which more than 6200 e-journals and more than 3 million e-books are accessible. Students are free to access all these resources from the library, Departments, placement cell, labs, and from their homes. The College also subscribes to IEEE database.

- **Federated searching tools to search articles in multiple databases:**

Not available

- **Library Website:** <http://library.uccollege.edu.in/>

- **In-house/remote access to e-publications:** Accessible with login details

- **Library automation** : The library is automated with – *Alice for Windows* - an international software package. The online public access catalogue is accessible in all the machines inside the library and computers at various locations connected through the LAN.

- **Total number of computers for public access** : Eight desktops inside the library, and all the machines available in the staff rooms.

- **Total numbers of printers for public access** : One

- **Internet bandwidth/ speed** : 10 Mbps

- **Institutional Repository** : An institutional repository that archives all the publications of our faculty is under development with open-source software *DSpace*.

- **Content management system for e-learning** : Nil

- **Participation in Resource sharing networks/consortia (like INFLIBNET):**

: INFLIBNET; American Library, Chennai

4.2.5. Provide details on the following items:

- **Average number of walk-ins** : 270

- **Average number of books issued/returned** : 246

- **Ratio of library books to students enrolled** : 36:01

- **Average number of books added during last three years** : 382

- **Average number of login to opac (OPAC)** : No data available

- **Average number of login to e-resources** : 10,171 (in 2015);
:27,723 (in 2016).

- **The College was one among the top 10 users of NLIST during January - March, 2016**

- **Average number of e-resources downloaded/printed:** Accurate data not available

- **Number of information literacy trainings organized** : 11/ year

- **Details of “weeding out” of books and other materials:** We have been keeping the less used and inactive documents in a separate collection. Approximately 30,000 books are there in this section.

4.2.6. Give details of the specialized services provided by the library

- **Manuscripts** : No resources available
- **Reference:** A separate collection of closed-reference documents such as encyclopedias, dictionaries etc. is kept for in-house reference. Besides, there is a collection of books for those preparing for competitive examinations, NET/JRF etc. which students can borrow for short durations.
- **ILL (Inter Library Loan Service):** The College has institutional membership in American Library, Chennai. The resources of this library are available on loan for a period of one month.
- **Information deployment and notification (Information Deployment and Notification):** Through library website, and notice board inside the library. Newly arrived books are displayed near the entrance of the library for getting users' attraction.
- **Download:** All the machines kept inside the library are used by students to download online resources.
- **Printing:** Students and faculty can make use of the printer available in the library.
- **Reading list/Bibliography compilation:** Bibliographies and citation details of online resources are provided to postgraduate students and research scholars at the time of their dissertation preparation.
- **In-house/remote access to e-resources:** All the resources under the NLIST programme could be accessed from both the campus and users' home. The login details are provided to postgraduate students and faculty.
- **User Orientation and awareness:** Information literacy sessions are conducted at the beginning of the academic year to all the freshmen. This session of 60 - 90 minutes each includes in-class lecture on information use, their evaluation, plagiarism, scholarly literature and ethical usage etc, along with a library visit
- **Assistance in searching Databases** : Professional assistance is provided to access both NLIST resources and Open Access Journals.
- **INFLIBNET/ IUC facilities** : The library has been using the services of INFLIBNET since 2011. Besides the NLIST e-resources, we encourage our students to use Shodhganga (Repository of Theses, UGC) as well at the time of their project preparation.

4.2.7. Enumerate on the support provided by the Library staff to the students and teachers of the College.

The library staff proactively support our user community to satisfy their academic needs, such as: help to search catalogue, locate information from both printed and online resources; prepare bibliography of appropriate resources using NLIST; announce conferences/ seminars/ academic programmes, etc. collected from newspapers and journals, and jobs through the library notice board; documentation of College activities; and provide referral guidance to other libraries, institutions and resources external to the College for collecting information

4.2.8. What are the special facilities offered by the library to the visually/physically challenged persons? Give details.

We have been developing the following:

- A collection of audio records of textbooks and lecture notes with the help of volunteers. 9 volunteers are participating in recording of these resources.
- A collection of already recorded materials has been made available for visually challenged students in a separate section.
- For physically challenged students, personalized services are provided to locate and collect relevant resources.

4.2.9. Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)

- Orientation sessions conducted by the library
- Faculty members collect views of the students during the tutorial meetings.
- Comments and views reported at the time of annual sent-off meetings (every year the College organizes send-off meetings to both UG and PG students) are also noted.
- The major issues related to policies are discussed in the Library Committee to make appropriate changes; other issues are solved or rectified by the librarian in consultation with the Principal.

4.3. IT infrastructure

4.3.1. Give details on the computing facility available (hardware and software) at the institution

Table 4.2: Details on the computing facility available in the College

Laptops	40
Desktops	384
Licensed software CDs	293
Open source software	<ul style="list-style-type: none"> Linux (Ubuntu) , KOHA, Qtcreator, django, MySQL, Programming languages-C,C++, Java, Python (MCA) department, Genopluster for Gene identification, Lead-IT Flex-x-Software for drug designing(Bio-Informatics) Linux (Ubuntu) Computer Science
Internet connectivity	10 Mbps on main campus and 2 Mbps in MCA campus. The main campus, library, administrative block, placement cell, and all teaching Departments are connected through a LAN and Wi-Fi
Wi-Fi facility	Wi-Fi is available on the campus
Printers	62
Scanners	19
Photocopiers	9
UPS	56 (5 KVA-12, 3 KVA-8, 1 KVA/ 600 VA-36)
Smart boards	7
Video/still camera	7
Projectors	LCD-5, DLP-20, OHP-15
Public Address System	72 speakers (inside the class rooms)
Audio system	7
Voice recorder	2
Computer-student ratio	1:5

4.3.2. Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus

- Staff rooms in each Departments are equipped with a minimum of 02 desktops (one exclusively used by students) with internet (Wi-Fi) facility and printers. The faculty also use personal laptops and those procured under UGC minor/major projects
- The students have access to desktops in the library and the Placement Cell with internet facility. One desktop each with internet facility is made available to students in Department common room. Besides, the

Departments of Computer Science, Commerce, Physics, Mathematics and MCA have well equipped computer laboratories.

4.3.3. What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associate facilities?

- A major share of the expenses towards developing, upgrading, and maintaining of LAN and IT infrastructure is met by the College management (Installation of Local Area Network with an Optical Fiber Cabling– Rs.2 lakhs, Wi-Fi – 4 lakhs, fully equipped MCA lab).
- Additional funds are sourced from agencies such as UGC, UBCHEA, Union Christian College Association of North America, DST etc. whenever there are provisions. As mentioned in 4.1.1, the proposals are usually discussed in the staff council.

4.3.4. Provide details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution (year wise for last four years)

The College has set up a Computer maintenance room and appointed a full time technician

4.3.5. How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching / learning materials by its staff and students?

- Teaching/learning facilitated by smart classrooms
- Tutorial sessions are utilized to motivate and assist students to prepare computer-aided seminar presentations
- Familiarization of students with ICT resources by showing presentations of eminent faculties of international universities, screening documentaries etc.
- For internal assessment weightage given to seminar presentations using multimedia; and students are provided with required equipment.
- Faculty members are encouraged to prepare and upload learning material including lecture notes, in the personal pages of College website.

4.3.6. Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching-learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching/learning process and render the role of a facilitator for the teacher

- Language laboratory
- Interactive boards
- Smart class
- PPTs for teaching and learning

4.3.7. Does the institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

- INFLIBNET availability
- Subscribed to NME ICT broadband connection of 10mbps

4.4. Maintenance of Campus Facilities**4.4.1. How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?**

Table 4.3: Details of budget allocated for maintenance and upkeep for facilities in the College.

Utilisation	2012-13	2013-14	2014-15	2015-16
Building	1382997	6906521	8520044	18794163
Furniture	258308	170576	755353	887515
Equipment	2238500	63702	634678	368019
Computers	1825949	386762	1623307	1818868
Any other	601497	308557	1613000	1397215

4.4.2. What are the institutional mechanisms for maintenance and upkeep of the infrastructure facilities and equipment of the College?

- The College has a Works Department to oversee minor civil works under the supervision of a works superintendent and a faculty as in-charge
- The Works committee studies the proposals submitted by the Departments and initiates action
- Every major construction project undertaken by the College is under the supervision of a faculty
- There are separate committees to undertake purchases made from UGC funds. Purchases, stocks and other such transactions are done only by inviting quotations/tenders as per the guidelines of the Government, and accounts are audited by approved chartered accountants
- System administrator for service and maintenance of computers
- Expert committee for maintaining and updating College website
- Heads of the Departments maintain stock register
- Librarian is assisted by the Library committee
- Campus Beautification committee to oversee natural vegetation

4.4.3. How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?

Periodic calibration and maintenance done by the faculty and servicing done by professionals

4.4.4. What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

- Constant supply of power ensured through UPS and generators
- Constant supply of water ensured through direct supply from protected well and rain water harvesting tank

4.4.5. Any other relevant information regarding infrastructure and learning resources which the College would like to include

Nil

CRITERION V:

STUDENT SUPPORT AND PROGRESSION

5.1. Student Mentoring and Support

5.1.1. Does the institution publish its updated prospectus handbook annually? If „yes“, what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes

1. Separate, updated prospectus for aided and un-aided UG and PG programmes are published every year. They contain necessary information that students may like to know about the College in general, the course details, fee structure and eligibility criteria for admission to each course of study.
2. The annually updated College handbook/calendar contains:
 - A brief history of the College together with its motto, goals and objectives.
 - Brief biographical sketch of the founding fathers.
 - The succession list of Managers, Principals, Standing Council, Governing body, Executive Committee, Board of Directors and the College fellowship.
 - List of members in charge of administrative units.
 - List of teaching staff and non-teaching staff along with contact details.
 - Courses offered, fee structure, fee payment dates etc.
 - Details of scholarships and fee concessions provided by College, government and university.
 - College rules and library rules.
 - A College almanac, telephone numbers of teaching, non-teaching, retired staff and friends of the College.
 - Academic calendar issued by the affiliating university is published in the College calendar.
 - A committee for the creation of the academic calendar

5.1.2. Specify the type, number and amount of institutional scholarships/freeships given to the students during the last four years and whether the financial aid was available and disbursed on time?

Scholarships derived from endowments instituted by the Alumni in USA (UCCAANA), Kuwait Alumni, Abraham C Kulangara, Trinity Scholarship etc. have been disbursed annually, and the amount is distributed among students. Some other endowments are made as fixed deposits and scholarships are disbursed from the interest received from the deposits. So these scholarships are distributed every year.

- Free noon meal is provided to a group of needy students with the help of a few philanthropic teachers.
- Teachers give financial support to students and a few students are sponsored by alumni also.
- Text books and notebooks are supplied free of cost to needy students identified by respective teachers
- All the scholarships and freeships are made available and distributed on time.
- Some scholarships are Department specific and some others are general and the provider has the freedom to suggest the procedure for selection of students.
- A selected senior teacher is accountable for identifying the needy and meritorious students. All the Departments submit proposals to the teacher and a list is created taking into consideration the terms specific to each scholarship.

Table 5.1: List of newly instituted Scholarships in the College

Year	Scholarship Name	Amount allotted in the year	Number of students benefited
2011-2012	Scranton Scholarship	57,830	5
	Kano Yama motto	83,283	25
	Abraham C. Kulangara	5,24,000	60
	Trinity scholarship	35,000	30
	Sosamma Philip Endowment	1,00,000	45
	K K Leelamma Endowment	10,000	2
2012-2013	Scranton Scholarship	57,830	5
	Kano Yamamoto	22,000	11
	Abraham C kulangara	5,24,000	14
	Trinity scholarship	35,000	15
2013-2014	Scranton Scholarship	1,23,730	15
	UCCAANA	54,174	28
	Kano Yamamoto	22,000	22
	Trinity	35,000	19
	Abraham C Kulangara	3,00,000	55
	K N Dabu	40,000	5
2014-2015	Scranton	1,95,100	60
	Kano Yamamoto	1,52,769	40
	Trinity	35,000	32
	Sheelakumari issac endowment	30,000	2
	Govindankutty Menon Edowment	1,00,000	1
	Physics batch 83	30,000	2

	L Sushama/ V. K. S./ M. P. Endowment	50,000	2
	P G Nair endowment	14,00,000	15
	UCCAANA	2,15,255	30
	Kuwait Alumni	88,000	28
	Kesavan Potty Edowment	20000	1
	Raju K John Endowment	50000	1
2015-2016	UCCAANA	1,98,300	34
	Kano Yamamoto	1,73,656	15
	Anantharaman memorial	5,00,000	40
	Abdulla memorial	3,30,500	15
	K C Chacko endowment	3,61,076	15
Total		59,53,503	689

5.1.3. What percentage of students receives financial assistance from state government, central government and other national agencies?

Table 5.2: No. of students receives financial assistance from state government, central government and other national agencies?

Scholarship Name	2011	2012	2013	2014	2015
Post metric	40	44	50	52	55
Centre Sector	50	70	80	80	80
Suvarna Jubilee	12	18	18	20	22
C H Muhammed Koya	18	20	26	26	27
Hindi	6	8	8	8	8
KSHEC	8	9	12	10	11

Scholarship Name	2011	2012	2013	2014	2015
Post metric	40	44	50	52	55
Centre Sector	50	70	80	80	80
Suvarna Jubilee	12	18	18	20	22
C H Muhammed Koya	18	20	26	26	27
Hindi	6	8	8	8	8
KSHEC	8	9	12	10	11
Prathibha	3	3	4	3	5
Inspire	3	4	3	5	6
District Merit	12	12	15	17	17
Student aid fund	45	45	45	45	45
Total	197	233	261	266	276
Total strength	1895	1890	1955	1990	2250
Percentage	10.3	12.3	13.3	13.3	12.2

5.1.4. What are the specific support services/facilities available for students from SC/ST, OBC and economically weaker sections?

The socially and economically backward sections are integrated into the College community and their education is rendered hassle-free through various promotional measures at the governmental and at the institutional level.

Admission: The College ensures that 20% of seats are reserved for SC/ST in each UG & PG Programme as per the Government and University rules. They are exempted from paying tuition fee, exam fee and special fee and can avail of stipends, conveyance allowances and study tour allowance. Economically weaker sections avail themselves of the KPCR fee concession, conveyance allowance and special allowance.

A Student Aid Fund is made available to SC/ST students.

- Financial assistance is provided to economically weak students who commute long distances
- Students are encouraged to help out each other financially, emotionally and academically, besides Department- wise supportive interventions.
- Remedial Coaching, NET Coaching, coaching for Bank tests, and Civil Service Coaching are conducted to motivate, assist and equip all students for life careers.
- Counseling services, Orientation Programme and the activities of all the Departments and clubs are meant to encourage and empower the students.
- The institution arranges special classes for the SC/ST students.

Overseas students

*LDST scholarship and fee concessions are meant for overseas students.

Students to participate in various competitions/ National and International

- Parents Teacher Association has been supporting the students financially for extra coaching other than the normal physical education Department training. The staff association discusses about the participating events and allocates financial assistance to the students.
- The Management and staff of the College take keen interest in encouraging student participation in various competitions. Various committees and clubs are organized to identify, nurture and expose the talents of the students.
- Department Associations, Inter-Departmental Cultural and Sports Competitions, Annual Sports and Arts Festival promote student participation.
- Quiz Competitions, Talent Search, Literary Fest, Speech and Debates on contemporary issues, Power-point Presentation Competition, Campus Photography Competition, Short Film competition etc. are conducted almost every year under the aegis of various Departments and clubs.

- Details of competitions in the College and in other institutions are announced as well as displayed on the noticeboard.
- Teachers in charge of various committees and class teachers take initiative in grooming and sending the talented students to various competitions.
- For competitions outside the College, teachers accompany the participants.
- Financial assistance and attendance are provided to such students.
- Names of winners are announced and displayed on notice boards so as to motivate, encourage and inspire the students.

Medical assistance to students: health centre, health insurance etc.

- First aid Kits of essential medicines, ointments, balms, bandage, cotton, hot water bag etc. are available at 3 centres to provide immediate aid
- The benefits of Health Insurance from LIC are also extended to students at a premium of Rs.10 per year through Mahatma Gandhi University
- Financial support is provided by respective Departments. Staff association and the Management for the treatment of sick students.
- Awareness classes are organized to sensitize the students about Life Style Diseases, HIV/AIDS, Chikungunya, Cancer, Drug and Alcohol Addiction.
- Blood Group detection and Blood donation camps are organized for the students and staff of the College under the initiative of the NSS and NCC Unit.
- Rural Medical Mission Hospital near the College is our sister concern and it provides Health services to students. All the students are insured by the university by an annual payment of Rs.5 from the fees. Apart from this, the PTA has been providing insurance to students.

Organizing coaching classes for competitive exams

Under the supervision of the Department of Computer Science, we have been organizing civil service coaching as well as coaching for entry into the services by utilizing UGC grants. UGC has provided with the college a fund for conducting NET coaching and this fund was shared by the Departments which have PG courses, and fully utilized.

Skill development (spoken English, computer literacy, etc.,)

Additional Skill development Programme (ASAP) is a government initiative to equip students with IT skills and language skills. We are a training partner institution to the Government. We train the trainers selected from our College and those students get placed as trainers in different Higher Secondary Schools. The Government have rated the ASAP courses conducted in U C College with FIVE Stars (highest level). Every year we train two batches of ASAP students and the selection of these students is done by the Government of Kerala on an all Kerala basis.

Support for “slow learners”

The remedial coaching for slow learners is systematically implemented in the College. The class teacher identifies the slow learners and they are directed to the corresponding subject teacher. We had received UGC fund of Rs. for remedial coaching classes and the fund was shared among Departments based on proposals received from them. Slow learners are identified through tutorial sessions. The extra time, care and coaching given to the students have helped us to create higher outputs out of them.

Exposures of students to other institution of higher learning/ corporate/ business house etc.

An entrepreneurship club is functioning in the College and the club arranges programmes that provide valuable exposure to the students. Seminars frequently organised by the placement cell are of great help to students. Some courses such as B.Sc. BT & SP, and M.Sc. Bio Informatics have industry linkages and these students are regularly involved in industry visits and application projects. The Psychology Department provides help to society by conducting free counseling, relief counseling during the occurrence of natural disasters and accidental disasters. We have collaboration with universities in Japan and Korea and every year we have Youth Exchange Programme. As a part of this Programme 3 students from Japan visited and attended academic sessions at U C College over a period of 3 months. Three students were selected to visit Japan and they spent 4 months in a university in Japan. Apart from this, the College extends the hands of friendship to Korea through youth Exchange Programme.

Publication of student magazines

Every year the College releases a student magazine in the printed form. Different departments separately publish manuscript magazines every year and there are magazine competitions among Departments. The Departments of Hindi and Malayalam have been bringing out periodicals.

Table 5.3: Details of Publication of Departments

Departments	Year and name of publication			
	2012-13	2013-14	2014-15	2015-16
Malayalam	<i>Darpanam</i>	<i>Darpanam</i>	<i>Darpanam</i>	<i>Darpanam</i>
Hindi			<i>Dastak</i>	<i>Dastak</i>

5.1.5. Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

An entrepreneurship club is functioning in the College and the clubs arranges programmes that stimulate the students to develop the entrepreneurial temper. The club is guided by the Mathematics Department.

5.1.6. Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co- curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.

- Due consideration is given to students who excel in extracurricular and co-curricular activities at the time of admission.
- NCC and NSS play a vital role in the overall development of students, and groom them to be disciplined and socially committed. Activities of the College Union, Arts Fest, Departmental Associations and various clubs like Quiz club, Debate club, Drama club, Writer's Forum, Science Club, Music club, Film club etc. help to expose and develop the talents of students. Information regarding competitions is communicated to the students and those who wish to participate in inter-collegiate or inter-Departmental competitions are encouraged. Names of winners are announced and displayed on the noticeboard. Financial assistance is provided to meet the expenses of the students participating in competitions.
- Two inter collegiate tournaments are organized by the College every year.
- The Annual Sports Day,
- Inter-College and Inter-Department sports competitions offer excellent exposure to those interested in sports and games.
- The health club and Gymnasium help maintain fitness.
- Balanced diet is provided regularly to sports students.
- Item-wise uniforms and sports equipment are provided to the students.
- Accommodation is made available for deserving high-performing sports students.

Additional academic support

- Attendance condonation is granted to students who have missed classes for practice and participation in competitions.
- Extra help is provided by teachers by holding personalized academic sessions, arranging lab-work etc.

5.1.7. Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC- CSIR- NET, UGC-NET, SLET, GATE/ CAT/ GRE/ TOFEL/ GMAT/ Central/ State services, Defense, Civil Services, etc.

- The College has a career and Placement Cell with a full time placement officer. The Guidance Bureau notifies information of courses and careers. The announcement posters of admission tests in various National level institutions like IITs, IISC are displayed by the Bureau. The Bureau prepares the students for competitive examinations and organises Leadership Training sessions.

- The general Library has a separate collection of materials for Civil Service aspirants. Many Department libraries provide study materials for various tests like NET, JRF etc. The Malayalam Department organizes a formal programme for PG students after the normal class hours. The College has been conducting coaching classes for NET using the UGC grant sanctioned for the same from the academic year 2010-11.
- During the reporting period the following number of students qualified in various competitive examinations:

JRF	NET	GATE	ICMR
7	45	8	2

- The Quiz and Debate Clubs functioning in the College organize programmes to promote competitive skills.
- Personality Development Programmes are also taken up by various Departments with the help of guest faculty.
- Department wise Associations meet regularly and equip the students with the skills, techniques and confidence to act as torchbearers of society for the new generation.

5.1.8. What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)

- The College takes special care in the spiritual enlightenment of students and had a full time chaplain (till March 2016) with rich experience in student counselling. The chaplain was available in the forenoon of specific working days and students having problems which cannot be handled at the teacher-level had been directed to the chaplain. Many students have benefited out of this.

- **BLISS**

The Psychology Department has a counselling centre which is open to all students of the College. Teachers as well as non-teaching staff can refer students to this centre. The retired Head of the Department Dr. K. E. Leelamma serves as the visiting counselor and all the Psychology teachers serve as counsellors. Service is provided to those students who require support and assurance in relation to academic and emotional aspects.

- **Value education classes**

The College has a well-structured value education system. A senior faculty member is placed in charge of the value education classes every year. The first hour of day 5 is allotted as value education hour in all Departments in even semesters. Training classes of 10 hours duration is given to all faculty members. The faculty members who are eager to handle classes are selected and allotted to classes other than their home Department. This provides exposure to both faculty members and students, and the opportunity to put the potentials of both to the best use. Attendance is also maintained for these sessions as a feedback measure, and to benchmark the importance of these sessions.

Value education classes serve to instill positive attitude in students. Teachers engage value education classes, and also conduct tutorial group meetings.

- Teachers give academic counselling to the students, which helps them to choose proper disciplines for PG join proper institutions for higher studies, select a job from various options etc.

- **Tutorial classes:**

- Even though the classes end at 3.30 pm, all the faculty members are available till 4.30 pm. This time is spent for tutorial sessions which include face to face interaction between faculty members and students. A student group of not exceeding 20 is allotted to each faculty so that maximum attention may be given to the students. The activities of tutorial sessions vary depending on the creative ideas of the faculty, and the specific requirements of the student group. However, nearly always, these sessions give a better understanding to the student of his/her learning abilities, problem areas, student-student relations, and student-faculty relations.
- All the tutorial reports are collected and maintained by the faculty-in-charge at the end of year. These reports are referred to by the faculty while planning their activities for the next year.
- Informal Counselling is provided by the class teachers to needy students, both at UG and PG level.

- **Open Houses**

Parent-Teacher meetings contribute significantly to improving the academic and non-academic potentials of the students. During an Open House session the faculty enters into face to face engagements with the parents and their wards. The first such session during a course has the ice-breaking function, and subsequent sessions reinforce mutual trust. Over the years, we have grown in confidence about the utility of these sessions to ensure the overall development of the students, and the development of their personality.

- **Career and placement cell:**

The College has a full time guidance officer who assists all students to take decisions about their future. In his office he allows the students to use Internet facilities and to take hard copies of valuable information.

- **Study Tours**

Study tours and field visits are arranged by all Departments. Economics Department conducted a survey in the nearby Karumalloor Panchayat to identify the living status of the people in the panchayat and the Panchayat and the Government to take policy decisions used the output of this survey

5.1.9. Does the institution have a structured mechanism for career guidance and placement of its students? If „yes“, detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the Programme).

The Parent Teacher Association of the College gives special interest to placements and so we have a fulltime placement officer having MBA qualification, who promptly informs students about career openings, arranges training classes, conducts mock tests and finally presents them for the interview, so that the students have the preparation, and therefore, the opportunity to get placed in first attempt itself.

Table 5.4: Company names and total number of students placed

Sl. No	NAME OF THE COMPANY	TOTAL PLACEMENT	DATE
1	Tech Mahindra	21	12/10/2014
2	Wipro	27	24/01/2015
3	UST Global	2	26/12/2014
4	Sutherland Global Services	5	27/03/2015
5	INDUSIND BANK	2	23/05/2015
6	Infosys	4	02/02/2015
7	TCS	3	01/10/2015
8	Employment Mobility Centre	20	26/09/2015
9	Microtec Events	5	28/01/2015
10	Atees Infomedia	5	23/05/2015
11	CIAL Nedumbasserry	28	22/01/2016
12	TCS	1	12/01/2016
13	Mphasis	1	13/01/2016
14	Federal Bank	23	20/05/2016
15	Coral Business Solutions	8	29/06/2016
16	UST Global	3	27/04/2016
17	Godrej	1	25/06/2016

Total 159

A separate placement cell functions associated to the MBA programme as facilitating intermediary for career opportunities related to the business and financial sector.

5.1.10. Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Yes. The grievance redressal cell of the College has the following members. The grievance redressal cell accepts grievances from students as well as staff of the College and takes appropriate steps to satisfy the grievance.

Table 5.5: Details of student grievance redressal cell

Name	Designation
Dr. M.I. Punnoose	Convener
Dr. Thara K.Simon	Associate Professor
Dr. Muse Mary George	Associate Professor
Dr. Mini Alice	Assistant Professor
Dr. Sebastian Joseph	Assistant Professor

The institution gives great priority to understanding and redressing the grievances of students. A complaint/suggestion box is kept in the women's waiting room and another in front of office; the complaints are tracked every month. Students' representatives in the union also bring students' grievances to the attention of the Management. A Student Grievance Redressal Cell is constituted regularly. Some of the grievances reported and redressed are given below:

- More toilet facilities with necessary amenities have been made available.
- Classrooms are kept neat and tidy, properly electrified, fans are also provided.
- Water purifier facility has been provided for pure drinking water.
- Necessary facilities in the girls' rest rooms like Medical kit, Napkin Wending Machine, etc.

5.1.11. What are the institutional provisions for resolving issues pertaining to sexual harassment?

The College has an Anti- sexual harassment cell consisting of the following members constituted by the staff council of the College and the College follows university norms for this.

Table 5.6: Details of Anti- sexual harassment cell

Name	Designation
Dr. Mini Alice	Convener
Dr. P. V. Sreenivasan	Associate Professor
Ms. Julie Ann Joseph	Assistant Professor
Dr. Neena Joseph	N.G.O Representative

We have provisions for women students to report gender discrimination complaints in the College website. The College has 05 women's hostels and the students are encouraged to discuss their problems with the hostel wardens. We have complaint boxes placed in ladies' rest room and canteen to accept complaints. The complaints are directed to the respective committees immediately for appropriate follow-up.

The College conducts an orientation programme for students along with their parents before the commencement of the course both in UG and PG and all

the facilities in the College are described and introduced during the meeting. The institution ensures a comfortable learning and working atmosphere for women and any sort of harassment - personal, social or sexual are duly dealt with. Special care is taken to ensure equal opportunities for women, as majority of our teachers and students are women. The Women's Cell in the College also ensures a free and safe environment for women students. Counselling is done at the College level in general and at the Department level in particular. No Major problem of sexual harassment has been reported so far.

5.1.12. Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

Yes, the College has an anti- ragging committee constituted by the Staff Council and follows the norms provided by the University and state Government.

The following measures have been effective in curbing the menace of ragging on the campus:

- At the time of admission a statement is signed by the student that he/she will refrain from any sort of anti-social activities.
- Class teachers are instructed to be vigilant in detecting and preventing any attempt of ragging.
- The information about the anti- ragging committee is displayed at different parts of the College including at the entrance and at the canteen.

Table 5.7: Details of Anti- Ragging cell

Name	Designation
Dr. P. Thomas Mathew	Principal
Dr. M. I. Punnoose	Dean-Student affairs
Dr. C. Jacob George	Dean-Academic
Mr. C. Sivaraman	Administrative Assistant
Ex. Officio member	Circle Inspector of Police, Aluva
Mr. M. P. Joseph	Area Reporter, Malayala Manorama Daily
Dr. Neena Joseph	N.G.O Representative
Ex. Officio member	President, Karumaloor Panchayat
Ex. Officio member	Vice President, P.T.A.

5.1.13. Enumerate the welfare schemes made available to students by the institution.

Table 5.8: Details of welfare Schemes and Coordinating Department

Name of scheme	Coordinating Persons/Department
Canteen	Dr. M. I. Punnoose, Dean-Student affairs
Cooperative society	Dr. P.V.Sreenivasan (President) Mr. P.K.Paulose (Secretary)
Hostels at reduced rate	Dr. Thara K.Simon, Bursar
Merit cum means scholarships in different Departments	Dr. Thara K.Simon, Bursar
House construction, medical aids, list circulation, staff association contribution to union, needy treatments,	Dr. Jenish Paul-Staff Advisor Mr. Kurian C. Soman- N.S.S.Programmee Officer Dr. Anil Kumar M - P.T.A.Secretary
Post Office	Manager, U. C. College
Sports Hostel	Physical Education Department

5.1.14. Does the institution have a registered Alumni Association? If „yes“, what are its activities and major contributions for institutional, academic and infrastructure development?

Yes, we have Alumni chapters in different parts of the world. UC College Alumni Association is a registered one and conducts Alumni meeting and a get together with family once a year, on the second Saturday of November. In addition, we have alumni chapters as UCCAANA (U. C. College Alumni Association of North America), Kuwait that supports us by instituting an amount Rs.18, 209.67.00 as endowments from the year 2012 to 2016.

A special website is designed and hosted for Alumni, so that they can register their names and stay connected with their alma mater.

5.2. Student Progression

5.2.1. Provide the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

Table 5.9: Details of the percentage of Students Progression percentage

Year	UG to PG	PG to M. Phil	PG to PhD	Campus Selection	
				UG	PG
2012	20%	2%	3%	5%	6%
2013	26%	1.6%	3%	6%	10%
2014	30%	2%	3.5%	3.5%	8%
2015	27%	3%	3%	4%	9%

5.2.2. Provide details of the Programme wise pass percentage and completion rate for the last four years (cohort wise/ batch wise as stipulated by the university)? Furnish Programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.

Table 5.10: Details of the pass percentage in Post Graduate programme

Departments	2012-13		2013-14		2014-15		2015-16
	UCC	OC*	UCC	OC*	UCC	OC*	
History	100.00		60.00		75.00		Result awaited
Economics	93.00		61.50		70.00		
English	85.00	58	24.00	32	61.50	32	
Malayalam	88.00		90.00		81.25	69	
Mathematics	44.00		57.00		84.62		
Physics	67.00	93	92.30	80	66.67	66	
Chemistry	64.00		55.50		50.00		
Botany	69.00		66.60		53.23		
Zoology	-----				58.00		
Psychology	56.00		90.00		77.78		
Bio Technology	68.00		33.30		72.20		
Bio informatics	79.00		44.40		100		
M.C.A	80.00		50.87		65.00		76.30
M.C.A(Lateral)							58.06
M. B. A					61.05		17.39

*OC: Other College, St. Xavier's, Aluva

Table 5.11: Details of the pass percentage in Under Graduate programme

Departments	2012-13		2013-14		2014-15		2015-16	
	UCC	OC	UCC	OC	UCC	OC	UCC	OC
History	78.00	-	63.00	-	84.6	-	25.00	-
Economics	84.00	93	81.00	92	81.4	82	27.08	52
English	89.47	92	90.69	93	84.44	92	50.00	39
Malayalam	68.00	85	57.50	80	57.8	81	7.89	33
Mathematics	92.00	82	86.00	83	77.5	87	59.09	67
Physics	80.00	97	91.00	97	64.5	84	48.21	45
Chemistry	81.00	96	76.00	100	83.7	100	50.00	73
Botany	96.00	100	79.00	95	93.50	100	48.19	55
Zoology	85.00	100	96.00	100	82.00	90	67.86	52
Psychology	70.00		86.00		97.00		54.29	
Computer Science	92.00		95.00		75.8		50.00	
E & Computer Maintenance	96.00		59.00		40.6		29.03	
BT & SP	82.00		100		84.6		60.87	
B. Com (Tax)	-----		----		----		-----	
B. Com (Computer)	-----		-----		-----		43.59	93

Table 5.12: Details of ranks in M. G. University

Year	Ranks in M. G. University exams	PG	UG
2011	First	4	6
	Second	1	2
	Third		3
2012	First	2	1
	Second	4	1
	Third	1	1
	Fourth	1	
2013	Second	3	
	Third	1	
	Fourth	1	
	Seventh	1	
	Ninth	1	
2014 (CBCSS)	A+	1	2
2015 (CBCSS)	A+	2 (A)	
2016 (CBCSS)	A+	3 (A)	10

5.2.3. How does the institution facilitate student progression to higher level of education and/ or towards employment?

We have 15 PG courses and research facilities in 9 Departments which themselves serve as an inspiration and encouragement to pursue higher education. Announcements about placement opportunities, higher education notification opportunities and vacancies to courses and job positions are displayed at library and placement cell.

Table 5.13: Details of action plan, result and the method of implementation by the institution to facilitate student progression to higher level of education

Method Implemented	Action & Result
Tutorial Groups	The tutor assesses the difficulties of the students and conveys this to the relevant channels.
Remedial Teaching	During the first semester itself the teachers identify the slow learners and provide extra care after regular hours
Zero hour	Special time tables are set by teachers to complete the syllabus by compensating missed classes.
Subject Knowledge evaluation method	The Departments evaluate the student knowledge level in the subject through discussions or tests and courses are given to the weaker students so that all the students may begin the course at approximately the same level.
Seminar/ Conference/Workshops	Every Department conducts at least 2 invited talks or seminars on recent trends on their own subjects and allows students to participate and present papers.
Mock Placement drives	The placement cell conducts mock placement drives after providing aptitude classes and reasoning classes. Resume preparation workshop, group discussion trainings and mock interviews are also organized.

5.2.4. Enumerate the special support provided to students who are at risk of failure and dropout?

- We have very low drop out ratio from our College.
- Presently the girl students contribute 70% of total strength of College and the marriage of these students at the age of 21 or less contributes to a few drop out number.
- Dropout due to other reasons is practically nil because of the best practices followed by the College like:
- Good teacher student relationship: Teachers, making themselves available to the students, outside class hours for clearing doubts and making close personal relationship.
- Conducting add- on courses which enhance employability of students.
- The College plans and executes well defined academic and supporting programmes such as Tutorial system, Remedial coaching, peer teaching in some cases, Open House programmes, Student Counselling, Value education classes and Placement services.

- Financial support by individual teachers, Departments and alumni abroad (as sponsorship) are provided to the students (in cases identified by respective teachers) as follows:
 - Free food arranged through the College canteen.
 - Text books and notebooks free of cost.
 - Hospital expenses for students (and in special cases to needy parents also).

5.3. Student Participation and Activities

5.3.1. List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and programme calendar.

Table 5.13: Details of achievements in Sports activities (M.G. University)

Sl. No	Sports/ Games events	Position-MGU Championship			
		2012-13	2013-14	2014-15	20-15-16
1	Athletics	P(M/W)	P(M/W)	P(M/W)	P(M/W)
2	Aquatics	P(M)	2 nd (W)3 rd (M)	2 nd (W)3 rd (M)	2 nd (W)4 th (M)
3	Basketball	P(M)	P(M)	P(M)	P(M)
4	Baseball	1 st (W)3 rd (M)	1 st (M)2 nd (W)	1 st (M) 3 rd (W)	2 nd (M)
5	Cricket	1 st (W)P(M)	P(W) P(M)	P(W) P(M)	P(W)P(M)
6	Fencing	1 st (W)	1 st (W)	1 st (W)	2 nd (W) P(M)
7	Football	3 rd (W) P(M)	P(W) P(M)	P(W) P(M)	P(W)P(M)
8	Hockey	1 st (M/W)	1 st (M/W)	1 st (M/W)	1 st (M/W)
9	Judo	2 nd (W)	1 st (W)3 rd (M)	2 nd (W) 3 rd (M)	2 nd (W)3 rd (M)
10	Netball	2 nd (M)	1 st (M)	1 st (M) 2 nd (W)	2 nd (M) 4 th (W)
11	Shuttle Badminton	P(W)P(W)	P(W)P(M)	P(W)P(M)	P(W)P(M)
12	Softball	1 st (W)P (M)	1 st (M)2 nd (W)	1 st (M)2 nd (W)	2 nd (M)
13	Table Tennis	3 rd (W)	P(W)P(M)	P(W)P(M)	P(W)P(M)
14	Tennis	3 rd (W)	3 rd (W)	4 th W)	
15	Water-polo	4 th (M)	1 st (M)	1 st (M)	2 nd (M)

Abbreviations:

- P - Participation
- 1st - Winner
- 2nd - Runners up
- 3rd - Third
- 4th - Fourth
- M - Men Team
- W - Women Team

Table 5.14: Sports Events Organized by the College

Year	District level	MGU Level	State level	National Level
2012-13	Ernakulam district Senior league	Hockey(M) Baseball	Dr.A.K.Baby Memorial South Zone Hockey tournament	South Zone All India Inter University Women Championship
	M. G. University championship	Baseball Cricket(W)		
2013-14	Ernakulam district Senior league	Hockey(M) Baseball	UCC Basketball Tournament Dr. A.K.Baby Memorial South Zone Hockey tournament	
	M.G.University championship	Hockey(W) Netball(M/W)		
2014-15	Ernakulam district Senior league	Hockey(M) Baseball	Kerala State Senior Hockey girls and boys championship	35 th National games selection trials and first phase camps for Hockey men and women section.
	PYKKA – Women Ernakulam district	Hockey –		
	Ernakulam district School championship	Hockey	Run Kerala Run – January 20 th 2015	35 th National games selection trials in Netball men and women Kerala team
	YMCA inter school tournament	Football		
	M. G. University championship	Judo(M/W) Hockey (M)		
2015-16	Ernakulam district Senior league		UCC Basketball Tournament	Kerala state Hockey sub-junior girls and boys championship Kerala state Hockey Senior girls and boys championship
	PYKKA – Women Ernakulam district	Hockey –	Dr. A .K. Baby Memorial South Zone Hockey tournament	
	Ernakulam district School championship	Hockey		
	YMCA inter school tournament	Football		
	M. G. University championship	Hockey(W) Basketball(W)		

5.3.2. Furnish the details of major Student achievements in co-curricular, extracurricular and cultural activities at different levels: University/ State/ Zonal/ National/ International, etc. for the previous four years.

Table 5.15: Major students' achievements in Sports

Sports/ Games Events	Year & Achievements 2012-13			
	MGU Championship	Over all Position in MGU	Students Participation - AIU	Students participation - Nationals
Baseball	Winner (W) Third (M)	Fourth	6(W) 2(M)	
Cricket	Winner (W)		4(W)	Silver-2(M)
Fencing	Winner(W)		4(W)	
Football	Third (W)			

Hockey	Winners (M/W)		13(W) 9(M)	P-6(W)
Judo	Runners up (W) Fourth(M)		3 (W)	
Netball	Runners up (M)		1(M)	Silver-2(M)
Softball	Winner (W) Third (M)		4(W) 2(M)	Gold-2(W) Silver-1(M)
Table Tennis	Third (W)			
Tennis	Third (W)		1(W)	
Water-polo	Fourth (M)		1(M)	

Sports/ Games Events	Year & Achievements 2013-14			Students Participation - Nationals
	MGU Championship	Over All Position in MGU	No. of students** Participation - AIU	
Aquatics	Runners up (W) Third (M)	FIFTH	1(W) 1(M)	
Baseball	Winner (M) Runners up (W)		4(W) 5(M)	P(1-W) P(5-M)
Fencing	Winner (W)		4(W)	
Hockey	Winner (M/W)		9(W) 8(M)	P(12-W) P(3-M)
Judo	Winner (W) Third (M)		2(W) 1(M)	
Netball	Winner (M)		5(M)	P(4-M)
Softball	Winner (M) Runners up (W)		4(W) 4(M)	Gold-1(W) Silver – 1(M)
Tennis	Third(W)		1(W)	
Water polo	Winner (M)		6(M)	

Sports/ Games Events	Year & Achievements 2014-15			Students Participation - Nationals
	MGU Championship	Over all Position in MGU	No. of Students” Participation -AIU	
Aquatics	Runners up (W) Third (M)	FIFT H	1(W)	
Baseball	Winner (M) Third (W)		2(W) 5(M)	P(1-M)
Fencing	Winner (W)		5(W)	
Football	Fouth(w)		1(W)	
Hockey	Winners (M/W)		8(W) 8(M)	P(2-W) P(2-M)
Judo	Runners Up (W) Third (M)		1(W)	P(1-W)
Netball	Winner(M) Runners up (W)		2(W) 5(M)	Bronze -3 (M— 35 th National Games) Bronze- 1(M-Sr.Nationals)
Softball	Winner (M) Third(W)		3(W) 5(M)	P(2-M)
Tennis	Fourth (W)			
Waterpolo	Winner (M)		7(M)	
INTER-NATIONAL Shilpa Catherine (BASEBALL)				

Sports/ Games Events	Year & Achievements 2015-16			Students Participation - Nationals
	MGU Championship	Over all Position in MGU	No. of Students** Participation AIU	
Aquatics	Runners up (W) Fourth (M)	Fourth	1(W)	
Baseball	Runners up (M)		4(M)	P2(M)
Cricket			1(1)	
Fencing	Runners up (W)		2(W)	
Hockey	Winner (M/W)		9(W) 9(M)	P(7-W) P(5-M)
Judo	Runners up (W) Third (M)		1(W)	
Netball	Runners up(M) Fourth (W)		2(W) 2(M)	
Softball	Runners up (M)		3(M)	
Water-polo	Runners up (M)		2(M)	
Throw Ball				Bronze-1(M) P-Senior National-2(M)

**Table 5.16: Students' achievements in
M.G.University Arts/Cultural event**

Cultural activity	Year & Achievements 2013-14	
	Over All Position in MG University	University Place
Kavya keli	4 th Position Ms. Neenu Rajeev Kalathilakam	3
Akshara slogam		3
Elocution-Malayalam		1
Mono Act		1
Fancy Drees		1
Katha Prasangam		2
Kolash		2
Western Group song		2

Cultural Activity MGU Championship	Year & Achievements 2014-15	
	Over All Position in MG University	University place
Mono Act	7 th Position	2
Kathaprasangam		1
Malayalam Elocution		3
Kavyakeli		1
Sasthreyya sangeetam		3
English Story Writing		1

Cultural Activity MGU Championship	Year & Achievements 2015-16	
	Over All Position in MG University	University Place
Aksharaslogam	6 th Position	1
Film Review		1
Mono Act		2
Mime		2
Best actor		1
KavyaKeli		2
Kathaprasangam		2
Quize		2
Photography		2

Table 5.17: Major students' achievements in N.C.C

Year & Achievements in N.C.C. 2012-13	
Students' Participation in All India level	
Name	Event
SUO Vima Valsan, JUO Joice Jolly, JUO Ragi Rajendran Sgt. Judy Ambrose-	All India Girls Trekking Camp at Nilgiri from 14 to 22 May, 2012
CSM Oshin Jacob, Cdt Jisma Baby-	National Integration Camp at Mysore from 25 May to 5 June, 2012
CSM Oshin Jacob-	IGC in Shooting at Kottayam from 10 to 19 May, 2012
Sgt Suby-	IGC of Thal Sainik Camp selection at Kozhikode from 31 July to 9 Aug, 2012
Sgt Suby-	Army Attachment Camp at Officer's Training Academy, Chennai from 17 to 28 September, 2012
UO Shyam Sunder	TSC
CSM Gokul Janardanan	RDC ,IMA

Year & Achievements 2013-14	
Students' Participation in All India Level	
Name	Event
SUO Shubin Shaji Varghese CSM Haridas M Naik	RD Parade (2014)
LCpl. Meenu Jose SGT Sowraf Purushothaman	Thal Sainik Camp at New Delhi
SGT. Basil P Varghese SGT Dheeraj Mohanan	NIC-Jammu

Year & Achievements 2014-15	
Students' Participation in All India Level	
Name	Event
SUO Jayalakshmi MP, JUO Aathira Nair, Sgt. Meera Jacob- SUO.Mohammed Irfan CSM Akhil Alias	Republic day parade (RD) 2015
JUO. Ajith Jayasankar	TSC-Delhi
Sgt.Jithin Johnson L.Capt. Basil P.Baby CQMS Sumi Maria Sunny-	NIC(Punjab/Assam)
SUO.Mohammed Irfan JUO Aathira Nair Sgt. Meera Jacob-.	YEP

Year & Achievements 2015-16	
Students' Participation in All India Level	
Name	Event
JUO Aathira Nair-	YEP Singapore
JUO Meera Jacob-	YEP Bhutan
SUO Sefi George	YEP Srilanka
JUO Siji Elsa Paul, SUO Sefi George SUO Basil Jose	Republic day parade(RD) 2016
CQMS Dhananjay K.S. CQMS Reshma R SUO Dilsha Davis JUO Sam Shaji JUO Reshma Sunilkumar CPL Ajith P.V. CSM Vishnu V.V.,SGT Melvin Jose,SGT Jithin K Manoj	NIC Kozhikode NIC Kozhikode NIC Malappuram NIC Alappuzha NIC Alappuzha NIC Mumbai National Trekking(Malayattor,Bihar,Maharastra)
CSM Sruthy Sreedharan	Rock climbing camp Gwalior

Table 5.18: Students' Participation in Cultural events in All India level

Year & Achievement 2012-2016		
Students' Participation in Cultural Events in All India Level		
Name	Year	Event
Mr. Blesson George	2013-14	Western Music-First Place In the All India Inter University Competition
Mr. Blesson George Ms. Donna Achamma Ninan	2014-15	Western Music-First Place In the All India Inter University Competition
Ms. Donna Achamma Ninan	2015-16	Western Music-First Place In the All India Inter University Competition

5.3.2. How does the College seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

Based on a well-structured feedback Proforma, assessments of teachers by students is being done on a continuing basis. Based on the feedback form, the pros and cons are identified in the Departmental staff meeting and corrective measures are immediately taken so as to enable the student community to improve their involvement in various activities in the College. The Alumni meetings serve as good feedback sessions. Since our Alumni are spread across the world, and occupy different positions, all kinds of opportunities and routines across world are analyzed by the College.

We have an Alumni website maintained separately by the College in which all alumni can register and can stay in touch with the College. All the news and events are intimated to the Alumni through the website and we have provision to send mails to them group wise, batch wise or individually. These feedbacks help to improve quality and performance of the College every year.

5.3.3. How does the College involve and encourage students to publish materials like catalogues, wall magazines, College magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.

The College is actively involved and encourages students to take necessary steps to publish the materials every year. The College provides financial assistance for the publication of the College magazine. The Editorial board comprising of teachers and students' representatives evaluate and edit the manuscripts for the final publication.

Table 5.19: Details of College student union Magazine

Year	Magazine Name
2012	–Engeda - Randu U.C”
2013	Nil
2014	–Ente”
2015	–Camera”

5.3.4. Does the College have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

College elections are conducted every academic year to get representatives of students through presidential mode of elections as per the direction of the university. The College has a College union fund for the events of the College. The council consists of following representatives.

Table 5.20: Details of College student Council

Name of post	Number
Chairman	1
Vice chairperson	1
University Union Councilor	2
Arts Club Secretary	1
General Secretary	1
Lady representative	2
First UG representative	1
Second UG representative	1
Third UG representative	1
First PG representative	1
Second PG representative	1

5.3.5. Give details of various academic and administrative bodies that have student representatives on them.

Table 5.21: Student representatives in academic and administrative bodies

Name of committee	Number of students
Anti-ragging Committee	02
Canteen	01
Hostel	Secretary
Department Associations	Secretary
Athletic committees	Team Captains
Seeks help for seminars, workshops	Association Secretary
College union election	02
NCC-Boys and Girls	03+03
NSS	02
Library committee	02

5.3.6. How does the institution network and collaborate with the Alumni and former faculty of the Institution.

- Alumni are the strength of the institution which is moving towards its centenary. Our alumni are spread all over the globe. They occupy strategic positions in a variety of professions. Many work for the government. There are several who occupy senior positions in universities, media houses, and industries. The alumni associations have an international reach. . The chapters in North America and Kuwait have been closely following, and promoting the progress of the institution.
- We conduct two Alumni get together meetings in a year as official get-togethers and all Departments have their own Alumni day separately. We have different batches coming together. There is one batch or the other meeting informally on Saturdays. The major Alumni meet is held in the month of November (second Saturday). On the second Saturday of July, every year, the Alumni from the Middle East meet on the campus.
- Former faculty members are our blessings and guides for the young generation. We have a family get together of all faculty members once a year. All Departments arrange get-togethers of their faculty members both present and retired. The retired teachers' association meets once a year and share views and opinions regarding the functioning of the College. They participate actively in various functions organized by the College and the Departments.

CRITERION VI:

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1. Institutional Vision and Leadership

6.1.1.State the vision and mission of the Institution and enumerate on how the mission statement defines the institution’s distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution’s traditions and value orientations, vision for the future, etc.?

Vision:

Serve the nation by facilitating and modeling wholesome and socially relevant education to actualize the values of humanism in accordance with the revelation in Jesus Christ

Mission

The Union Christian College, extending God’s love to all, is committed to providing such education that facilitates the growth of the whole person and brings out the best in him or her that they would serve our nation and humanity at large and the ecosystem as intellectually competent, morally upright and spiritually inspired persons.

The College strives to live out its commitments by the following strategic initiatives in line with its unique history and cherished values.

1. Programmes and activities aimed at improving academic standards and achieving academic excellence
 - Faculty Improvement programmes: special training events for teachers in curriculum development, academic audit, alternative teaching and assessment techniques
 - Student evaluation of teachers and peer evaluation to enhance the performance of teachers
 - Remedial education and tutorial programmes; mentoring and peer teaching
 - Providing better library facilities and training students in the use of technology supported learning
 - Evolving inter-departmental and inter- disciplinary educational programmes
 - Strengthening Research programmes and Research Centers: Facilitating research orientation among teachers and students
 - Facilitating national and international seminars and collaborative research

Innovation in academic activities by offering courses designed to enable students to be competent in community life and to render them fit for the challenges of their personal and professional lives.

2. Provide add-on courses that have a practical and vocational orientation
3. Provide extra-curricular opportunities that facilitate maximum student-
4. Teacher interaction in the form of sports and games, clubs and societies, Cultural and literary activities
5. Strengthening the residential system, providing maximum opportunities for out of the class interaction

Establishing greater international linkages, promoting international seminars and conferences, facilitating faculty and student exchanges, joint publications of journals and books and encouraging collaborative research. Further internationalization of education to meet global standards and facilitate solutions to global concerns

6. Provide adequate infrastructure for the (qualitative and quantitative) Higher Education
7. Enhancing student services by improving student amenities like library facilities access to internet and placement services
8. Providing structures and programmes that would ensure women empowerment and gender equity
9. Facilitating ethical discourses through the Center for the Study of Religion and Society; offering programmes to ensure value orientation to learning and to provide alternative models in sacrificial service
10. Provide service-learning and community extension opportunities to the neighboring communities, especially the most marginal communities under the initiative of each Department.
11. Resource mobilization for the development of the College through a Development Office manned by the Development Officer

The Vision and Mission of the College are well aligned with the objectives of the higher education policy of the nation. Established in 1921 out of indigenous initiative, Union Christian College has always been in the forefront in adapting to the changing needs of the society while continuing to pursue its goals and objectives. The special features of this institution are interdenominational basis of administration, participation of the faculty in the governance of the College, cosmopolitan and liberal campus life, and ample opportunity for interaction between students and teachers in and outside the class room activities. All the academic, administrative and co-curricular initiatives of the College are aimed at achieving the mission of the College, by focusing on the holistic development of students, empowering them intellectually, morally, emotionally and spiritually to take up their part in nation building. The College strives to ensure transparency, participation, and quality at all levels of administrative and academic functions. Besides, it enables students and teachers to extend their knowledge, skills and expertise to surrounding communities, especially to those who are most marginalized and vulnerable. It provides special care to the needs of the surrounding community through various extension activities and service-

learning initiatives and strives for academic excellence on a par with international standards through various programmes to augment and supplement the regular academic activities and to foster international linkages.

The goals and objectives of the College are four-fold; academic goals, social goals, character building and value orientation. The College commits itself to the promotion of justice and peace, preservation and enhancement of the integrity of creation, fostering of a wholesome simple life style combating the ill-effects of corruption, powerlessness of the marginalized, violence and criminalization. Empowering the powerless, particularly the tribals, dalits, women and other vulnerable sections of the society form a significant part of this commitment. It seeks to nurture probity in public life and to promote national integration. A student acceptance/application ratio of <10% by the College is a sign of the College's academic standing.

The College has students coming in from different backgrounds of religion; economic status and society. Almost 40 percentage of the students belong to minority groups and are from rural areas. In allegiance to the Vision and Mission, the College constantly strives towards the upliftment of students from these sections of the society.

Academics

The College functions within the framework of an affiliated system, but has always sought to make a difference through the choices made regarding the courses offered as elective and open courses. Here, students get an opportunity to keep themselves updated. Interdisciplinary open courses giving importance to environmental and health issues such as Environmental History, Floriculture, Health, Physical Education and Life skills, etc. are also offered. In addition to the existing regular courses, the College offers M. B. A and M. C. A., M. Sc. Biotechnology and M. Sc. Bioinformatics and UG programmes in Computer Maintenance and Electronics, Biological Techniques and Specimen Preparation, B. Com and Advanced diploma in Archeology and Museology in the Self-Financing stream.

Research and Faculty Development

The College takes a commendable lead in research with 115 research students working in our 9 research centers; more than 82% are women scholars. More than 200 research papers have been published during the assessment period, and the College has successfully established much international collaboration that are of great benefit to the students. The College extends its facilities to the research Departments and the research forum; the research forum of the College organizes various educational events for the research students including functions as a recognized centre for Ph. D course work of Mahatma Gandhi University.

The College management has always been supportive in providing maximum facilities to its staff in quality improvement. Union Christian College selects and appoints faculty purely based on merit. The management is committed to inducting highly qualified faculty; it provides maximum opportunity for faculty improvement by encouraging them to go for doctoral and post-doctoral studies and national and international conferences and seminars. The management facilitates international

faculty exchanges with the support of international bodies like UBCHEA and with Government support (like FLAIR). In recent years, many members of the College could spend considerable time in international institutions to get training in administrative leadership, engage in collaborative research, and learn more about new pedagogical approaches in higher education. In addition, the Management, under the auspices of the IQAC, organizes seminars and workshops aiming at faculty development.

International Linkages

During the past five years, 14 faculty members have undergone around 26 faculty development training programmes in reputed international Universities and institutions in USA, Japan and other Asian countries such as Hong Kong, Thailand and Indonesia and Taiwan. Apart from teaching learning and research, this training includes leadership, governance, library science, service learning, interreligious understanding and peace building, local knowledge initiatives and environment & health.

Ample opportunities were provided to five students; three students spent a semester each in International Christian University Japan and two students participated in Women's Leadership Seminar at Scranton Centre S Korea.

The partnership with United Board, USA and Hope College, Holland MI, USA were strengthened during the term. Four faculty members from Hope College visited UCC as exchange faculty. The students of Centre for Environmental Studies received a gift of \$1000 from Hope College for their environmental initiatives in service learning. The college signed MoU with International Christian University Japan and Fugen Catholic University Tavian. Faculty from these Universities also visited the college annually. The following is the list of faculty members.

United Board Fellows Programme (2 Year programme spending two semesters in Asia and USA)

1. Dr. Rachel Reena Philip : *Leadership training* and research (USA, Japan, Hong Kong)
2. Dr. M. I. Punnose : *Leadership training* (USA, Tavian), Local Knowledge initiatives (Indonesia)
3. Dr. Mini Alice : *Leadership training* (USA, Philippines, Hong Kong)

List of faculty members participated in International Programmes in various countries

1. Dr. T Thomas Philip : *Curriculum design in Peace Building* (Japan, USA)
2. Mr. Cherian K George : *Library Science* (Canada)
3. Mr. Eldo Varghese : *Environment and Health* (Philippines)
4. Dr. Sunil Abraham Thomas : *Environment and Health* (Philippines)
5. Dr. Jenee Peter : Local Knowledge Initiatives (Indonesia) *Peace Building and Curriculum design*(Philippines)

6. Dr. Raju K John : Strategic Planning and Resource Mobilisation (Hong Kong)
7. Dr. Thara K Simon: Interreligious Understanding Service Learning (Japan)
8. Dr. A Benny Cherian : Administration (Hong Kong)
9. Dr. Sebastian Joseph *Library visit*(UK)
10. Dr. P Thomas Mathew *Leadership training* (Hong Kong)
11. Dr. Justin R Nayagam *Service learning*, (Hong Kong, China) *Best Paper award in Biological research*(Japan)

In the accreditation period, the College received USD 2000 towards expense of students' exchange in service learning

Residential System

The College was started as a purely residential institution to maximize out-of- the class room interaction between teachers and students. However, the College, due to certain socio-political compulsions, had to modify the model to a mix of residential and day scholars. Gururji Rabindranath Tagore inaugurated the first Hostel for students in 1922, which was named after him, the Tagore Hostel. At present, the College runs 7 hostels for students (2 for men and 5 for women) and 14 staff quarters on the campus; construction work for a new hostel for women is in progress. The College is making all-out effort to restore its residential life; the first effort in this direction is to improve its academic profile and create a distinctive edge over other higher educational institutions by building on its unique heritage.

Service learning & Community Extension Activities

The extension activities of the College are well in tune with the vision-mission statements of the College. The Service Learning Center (SLC) conducts a variety of programmes to help the physically challenged and the socially and economically disadvantaged. It initiates programmes like audio recording of textbooks, course preparation, etc. for the blind students in the College and for the students in the Kerala School for the Blind, Aluva. A **pain and palliative care unit** constituted of students and faculty functions under the SLC to offer regular physical and financial aid to those who are in need of their services. Continuing extension programmes are initiated through the NCC and NSS units, Women's Cell, the Centre for Environmental Studies, Science Forum and the Student Christian Fellowship. Each Department is also encouraged to have a community extension/service learning component in their academic activities.

A **Counselling Centre** functions within the College under the suggestive name "**BLISS**" under the care of a counselor who regularly visits the College; the counsellor is further helped by trained faculty from the Psychology Department and a member of the faculty from each Department of the College. The College has a **Career Guidance and Placement cell**, which guides the students in their choice of careers and helps in finding placements of their liking and potential. Regular Value Education sessions are conducted every week in the second term of the academic year of the College under the programme *Issues and Ethical Responses* to nurture the

students in a value based system. The regular morning worship is attended by students and staff of the College irrespective of caste and creed. There are a few outreach programmes by students under the supervision of faculty from Physics and Botany Departments like **„the sewage water treatment project'**, and the **„river bank protection project'** that are focused on inculcating students with a wider awareness of the societal and environmental issues and play a role in educating the rural communities.

The Crèche Facility (Kid"s Dale) newly established on the College campus extends its services to both the College community and the public in the neighborhood of the College. With a majority of women faculty, it helps them to have the comfort of having the babies close to them and feed them during intervals. **Remedial Tutorial classes** are arranged to cater to the academic upliftment of students weak in different subjects, and **„the Walk with Scholar"** and **„Additional Skill Acquisition Programme"** (ASAP) for students with greater potential for leadership are being conducted in the College in an exemplary manner.

A **Folk Lore centre** functions in the College to organize ethnical and tribal studies and is focused on building up a database on tribal life and culture. The **Centre for the Study of Religion and Society (CSRS)**, which was established and sustained through the financial resources, offered by distinguished alumni of the College, organizes lectures, seminars, workshops and awareness programmes that sensitize and enlighten students on ethical issues that confront our society and raised by advances in science and technology. A series of lectures have been organized under the auspices of CSRS to facilitate encounter with personalities with unique contribution and distinction in different realms of life. Another programme on studying **„Alternative Lives"** have been initiated to study the lives of people who, by their extra-ordinary lives of service and commitment made a difference to this world; students interview them, study their lives, document them and finally would publish the outcome in book form. This provides students with various skills in interviewing, writing, editing, etc. and at the same time, presents with models of extra-ordinary courage and conviction that they can opt to follow as models in life.

Infrastructural Projects

The Works Department of the College takes up all the works of the College under the Supervision of Works Superintendent, a senior faculty and a committee to assist him/her. The New Academic Block, MBA block, the renovated and additional rooms in the Women"s Hostel, are some of the newly added structures on the College campus. The following infrastructural facilities were renovated to augment the existing facilities: renovation of BT&SP block, modified warden"s quarters and staff quarters, Principal"s office, Hockey court, etc. The building of a new women"s hostel is in progress and a proposal has been submitted to the USAID (United States AID) for the construction of a New Library building with modern facilities. Wi-Fi connection is made available to all the Departments in the College and soft-skill development programmes are initiated under the auspices of the computer Department.

Physical Education

The Department of Physical education offers an enriching and conducive ambience to its students to excel in sports and games. The College could make great strides in sports and games at the University level competitions; the College has produced a number of national players. The College runs a sports hostel for hockey (men) and hockey (women); it has five playgrounds and a gymnasium. It supplies the students with sports accessories.

Mobilization of Funds & Development Office

In the past five years, the College has been able to mobilize more than 2.3 crores INR through national and international research projects, grants and in addition, around 50 lakhs INR as endowments and scholarships instituted by the alumni and well-wishers of the College. The faculty contributed 35 lakhs INR for the building fund. A Development Office has been established with the objective of a nodal center for alumni relations, community relations and funding partner relations to further the strategic objectives of the College in integrating, transmitting and applying knowledge. It also has the responsibility of coordinating the various constituencies of the College and of facilitating the envisioning of its goals and priorities in keeping with its distinctive tradition and values. It is expected that this Office will mobilize the College to prepare for and embark upon many developmental projects aiming at the College Centenary in 2021.

Women Empowerment

While the latest UN Human Development report (14 December 2015), indicates that India ranks very low in Human Development Index and in Gender Inequality Index (130th), the College has contributed significantly to women empowerment. 68% of the teaching faculties are women and 88% of the postgraduate students and 82% of the research (Ph. D) students in the College are women. Activities of the Women's Cell in the College are aimed at addressing issues of gender inequality and to facilitate women empowerment. The Cell offers talks, seminars, workshops and other programmes to enlighten students of both genders on the need for women empowerment and gender equity and their role to act as agents of social change.

6.1.2. What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The College, since 1961, has been a registered entity under the Kerala Non-Trading Companies Act. It is owned by **the Union Christian College Association** and managed by its **Standing Council**, which is the apex body of decision making. The Association/ the Standing Council is constituted of 4 members from each of the Cooperating Churches, 8 members from the present faculty who are members of the Inter Church Fellowship (ICF) and the Manager, Principal and the bursar of the College. **Inter Church Fellowship (ICF)** is a voluntary organization of the present faculty from the four co-operating churches involved in the management of the College who commit themselves to serve the College with self-less devotion as God's calling.

The Governing Body/Board of Directors (GB) is constituted of the Manager, Principal, Bursar, four representatives from each of the four co-operating churches and two representatives of faculty who are members of the ICF. GB acts as a subcommittee of Standing Council which is the apex body of the College. The GB of the College meets regularly to make policy decisions in tune with the guidelines issued by the University and Government periodically and to empower the various committees in the College to act upon them, focusing on the various needs in the College community. Decisions that need immediate action are taken up by the Internal Management Committee (IMC) of the College, which is a sub-committee of the GB itself. All the resolutions taken by GB and IMC are presented in the Standing Council for their approval. **The Inter Church fellowship (ICF)** constituted of the teaching faculty from four different Christian denominations - like Malankara Syrian Orthodox Church, Syrian Jacobite Church, Church of South India and Marthoma Syrian Church- is one of the primary stakeholders and play a key role in initiating many of the policy decisions of the College, thus ensuring a democratic and participatory system of management. The ICF members are actively involved in the academic, administrative, cultural and religious activities of the College.

Deans

The Administrative Dean, Academic Dean and Dean of student affairs help the Principal in carrying out his/her responsibilities delegated to them in the most efficient manner.

The College Staff Council consisting of the Principal, the Heads of Departments, the Librarian and two elected members of the teaching faculty acts as a statutory advisory body that advises the Principal, in decisions on academic and disciplinary matters of the College. The decisions made in the Staff Council will be announced in the Staff association meeting consisting of all the teachers of the College.

The Principal as the final administrative authority of the College ensures its smooth functioning with the support of all the above bodies.

6.1.3. What is the involvement of the leadership in ensuring:

- The policy statements and action plans for fulfillment of the stated mission
- Formulation of action plans for all operations and incorporation of the same in to the institutional strategic plan
- Interaction with stakeholders
- Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders
- Reinforcing the culture of excellence
- Champion organizational change

a. The policy statements and action plans for fulfilment of the stated mission;

The Governing Board, Internal Management Committee (IMC), ICF and Staff Council take special care to ensure that all policy decisions taken are well aligned with the stated mission of the College. The Principal ensures that all the plans are implemented to meet the timely needs of the stake holders and the society as a whole through the above mentioned statutory structures and other sub-committees formed by the GB or the Staff Council.

b. formulation of action plans for all operations and incorporation of the same into the institutional strategic plan

The policy decisions are translated into operational plans by the Governing Body and the Staff Council and other sub-committees that are formed from time to time.

c. Interaction with stakeholders

ICF consisting of the faculty of College meets every week and discusses the requirements of the College; those needing approval from GB and Standing Council are passed on to it through the Principal and the representative members. They also contribute in the development of strategic plans in tune with the vision of the College studying the needs of the changing society.

Committees- The following committees are constituted by the GB, help in policy implementation and recommend their plan of action with its budgetary implications.

- Campus Beautification
- Canteen Committee
- Works Committee
- Student Services
- Career Guidance and Placement
- Network & Website Committee

Meetings at Department level and College level are held regularly to discuss the activities of the College and sub-committees are constituted to carry out the plans.

Parent-Teachers Association (PTA) meets regularly and voice their appreciation, support and concerns regarding academic and co-curricular activities and student services and amenities. Their feedback is taken into account for taking further action to improve the quality of the academic activities and other student services.

The College has one of the oldest and largest alumni network. **The Alumni Association** is established with a bye-law recognized by the Association of the College. The Alumni Reunion takes place on every second Saturday in November. It is organized by the Alumni Association Executive Committee which meets frequently to plan its activities. The Alumni Association has its chapters in the US and Kuwait, which function independently as separate entities. The U. C. College Alumni

Association of North America (UCCAANA) remains one of the mainstays in the development of the College. They provide a sizable amount for Scholarships and could mobilize funds for specific developmental projects of the College.

The Retired Teachers' Forum meets occasionally. The Associate Members of the ICF (ICF members who are retired from service in the College) are invited once in a month for the ICF meeting and their concerns are shared with the ICF and they are ploughed back to sharpen the focus and contribute to the development of the College.

Faculty in charge of various Clubs/ Forums/ Association submits the annual report of the activities to the Principal.

Student appraisal of teachers is carried out annually. Students are given the right to voice their needs and concerns directly to the College authorities through the head of the department and class teachers. A **Grievance Redressal Cell** functions to address the grievances of staff and students.

d. Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders

1. The Standing Council is constituted with experts from education and other areas, who help the research analysis and conduct of need analysis, while taking or implementing any policy decision.
2. Internal Quality Assurance Cell (IQAC) also provides their inputs while framing policies after analyzing the current opportunities in the context of contemporary realities.
3. Regular consultations and discussions with the stakeholders like faculty, students and parents are conducted at various levels based on the need of the situation, before the Management takes necessary steps to plan and frame policies for the development of the institution.

e. Reinforcing the culture of excellence

The College always strives to maintain a culture of excellence in its activities.

Union Christian College is one among the first batch of Colleges in India that went for NAAC accreditation.

Appointments of faculty are based purely on merit ensuring the services of highly qualified faculty, most of who have completed their studies and have completed their Ph. D's from top tier institutions of India.

f. Champion organizational change

Decentralized, democratic and transparent administrative system in the College enables active involvement of all the stakeholders of the College in the administration of the College. Regular and systematic academic audit ensures excellence in academics. High thrust is given to research and extension activities of the faculty and departments have resulted in excellent publications at both national and international level and also in championing social change.

6.1.4. What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

- Governing Body meetings are convened regularly to discuss the status of the implementation of policy decisions and to monitor its progress. The Principal, Manager and Bursar report all the major events concerning the respective administrative matters of the College in the governing body and seek advice regarding effective management.
- The Administrative Dean, Academic Dean and Dean of student affairs take special care to ensure smooth implementation of the action plans formulated in the respective areas of their concern.
- IQAC, the Staff Council and the Sub- committees constituted by the Governing Body co-ordinate and evaluate timely changes needed in academic and administrative matters and formulate and monitor the action plan.
- Regular Staff Council meetings are convened by the Principal to discuss important academic initiatives and to formulate Programme for action.
- Principal reports and discusses major policy decisions; needs and matters regarding the College in the Inter Church Fellowship meetings conducted every week.
- Regular Department meetings are conducted for the effective implementation of the academic Programme. Heads of the Departments submit periodical report of the various activities and needs of the department to the Principal. The reports are evaluated by the Principal and communicated to the Management for further actions. Department level faculty meetings are conducted to frame and monitor the Departmental level initiatives. Faculty in charge of department association submit periodic reports of their activities to the Head of the Department.
- An effective mechanism of communication through public address system functions to notify the students and staff of the major events in the College. These matters are published on the notice board as well. Student feedback is taken systematically on every academic activity.

6.1.5. Give details of the academic leadership provided to the faculty by the top management?

The Deans system constituted of teachers serving as academic, administrative, and student affairs, being involved in planning, implementing and monitoring various activities of the College, bridges gaps, if any, between the top management and the faculty. Almost all the major administrative matters relating to the academic and disciplinary matters are solely dealt by the Principal with the involvement and authority of the Staff Council, which is the statutory body envisaged in the University Act. Appointments, promotions, financial planning, budgeting, and such other management related decisions are taken by GB and the Standing Council (SC), only on the basis of

recommendations from the ICF, Departmental Committees, and other sub-committees for the purpose. Regular academic retreats and orientation for teachers together with the top management are conducted and action plans for various academic Programmes are formulated. Regular staff association meetings are convened to discuss academic matters. Periodic review meetings are conducted at various levels to evaluate the academic performance of the students.

6.1.6. How does the College groom leadership at various levels?

- The fellowship system of management and the committee system for all academic, co-curricular and extra-curricular activities provide rich opportunities to groom leadership at various levels.
- **Principal**, who is the Head of the institution, is selected from among the faculty through a very democratic and transparent procedure of appointing a nomination committee by the Association/Standing Council of the College. Usually a person who has previous experience in serving the College at various levels like Bursar, in-charge of Works committee and member of Governing Body, Standing Council, ICF, Staff council, etc. is chosen as the Principal of the College. He will serve in that post for a period of five years or till his retirement, whichever is earlier. The College, using the Fellowship of the UBCHEA, sends its faculty in positions of responsibility to US and Asian academic institutions to learn their best practices as part of its leadership training.
- **Administrative, Academic and Students’ Deans:** The Deans are appointed from among the faculty providing them an opportunity to excel in their administrative skills and also learn from working in those capacities. Their inputs in terms of administrative and academic actions are seriously taken into account in decision making by top level functionaries.
- **Bursar** of the College is appointed from among the faculty and undertakes the responsibility of overseeing financial matters and he or she takes on this additional duty along with teaching.

A teaching Faculty serves as **Superintendents of works** to coordinate all the construction, renovation and maintenance works of the College.

Faculty serves as **Staff Council Secretary, Staff Association Secretary, ICF Secretary, IQAC Coordinator, Coordinators and Conveners of various committees** and clubs etc., thus getting trained in leadership.

Head of the Departments co-ordinate all the activities at the Department level. The rotation system of Heads for a period of 3 years gives opportunity for almost all the faculty to be involved in overseeing the activities of the Department and serve in such statutory bodies as Staff Council. This further helps in preventing power getting entrenched in certain individuals and provides equal opportunities to all. This also helps in developing democratic and serving style of leadership, which is a very distinctive mark of the College.

6.1.7. How does the College delegate authority and provide operational autonomy to the Departments / units of the institution and work towards decentralized governance system?

A decentralized governance system is followed in the College. Each Department is given the freedom for planning and implementing activities of the Department within the policy framework of the College.

The Departments form their own Associations with the Head of the Department, Faculty in charge of the Association and the Student Secretary of the Association forming a team to coordinate all the Association activities. All the Department level activities are planned by the Association and implemented after notifying the Principal. The rotation of the HOD every three years prevents entrenchment of authority in the hands of a few and facilitates democratic administrative procedures. The HOD coordinates and monitors the faculty with empathetic understanding and also takes decisions in consultation with them in the faculty Meetings, He or She assumes a democratic leadership taking the whole faculty into confidence while allocating responsibilities. Conducive atmosphere is always maintained in the Department for the faculty members to pursue their ideas for the betterment of the Department, to attend quality improvement Programme, Seminars, Workshops and Conferences and to implement innovative methods of teaching.

Necessary infrastructure facilities like Seminar hall, Library, Computer facilities, Laboratories and Smart classrooms are managed by the Departments themselves. NSS, NCC, Placement Cell, Counselling Centre and various clubs also function with operational autonomy.

6.1.8. Does the College promote a culture of participative management? If „yes“, indicate the levels of participative management.

U.C College functions through a fellowship system of administration, where the posting to management leadership positions as that of **Principal, Bursar, Deans, co-ordinators of various, clubs and committees** are selected from among the faculty through a democratic and transparent procedure. All the academic and disciplinary matters associated with the daily administration of the College are wholly left to the Principal to handle in consultation with the Staff Council constituted of Heads of Departments and two elected representatives of the staff. The ICF consisting of teaching faculty belonging to the four different congregations takes active participation in the day to day governance of the College. Almost half of the faculty are members of the ICF.

Teaching faculty who are members of ICF have representation in top level management such as Governing Body, Standing Council and the College Association, thus having direct involvement in administrative matters. Of the total membership of 9 in the GB, four are from the present members of the teaching faculty who are members of the ICF. Almost all the activities of the College are executed through committee systems constituted by faculty

members. Thus, the institution ensures the participation of the entire faculty of the College.

6.2. Strategy Development and Deployment

6.2.1. Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes. The College has made known its vision in the vision document –Vision 2020 published in 2008. The document emphasized academic goals, social goals and character building along with re-establishing the relevance of the core values of the institution in the changing scenario of higher education. The areas identified for quality improvement are teaching, research and community extension.

- The IQAC coordinates the teaching- learning aspects of the College. Union Christian College gives special emphasis for the holistic development of students. Various clubs, associations and other formal and informal groups encourage creativity and critical thinking among students. The selection of faculty is based on merit, and the College strictly follows all reservation policies of the state and central Governments in staff and student selection. A sizeable proportion of the faculty is involved in curriculum development of the parent university and other universities. There is an active interest among teachers in updating technology enabled learning. In house and expert training sessions for teachers are conducted regularly. MoU's are signed with 5 foreign institutions for scholar exchanges and leadership training programmes.
- A committee for research was formed; new research centers have been established and the number of research scholars, national and international research projects and the quality of UG/PG level projects as reflected in publications and seminar presentations have made substantial qualitative advancements.
- The College is committed to develop social responsibility and sensitivity among teachers and students. The College abhors all kinds of discrimination and caters to large proportion of women students and students from Scheduled castes and Scheduled tribes. The College has a very active NSS, NCC and Pain and Palliative Care Unit. The Service Learning Center of the College in addition to projects by faculty and various Departments have initiated many community extension activities focusing on the under privileged in our society, sections of the population below poverty line, people with disability, tribal population and Government schools, etc.

6.2.2. Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Vision 2020 has specified short term and long term goals for the College.

- Improve interdisciplinary interactions within the College by encouraging interdisciplinary research, starting of interdisciplinary courses and human resource development Programmes.

- Organize various community extension programmes to a single platform: The College plans to adopt the nearby settlement for Dalits as the major recipient of community extension Programme by the various Departments of the College.
- Mobilize financial resources to help in the infrastructure development of the College by exploring and channelizing various financial sources like the Alumni, aids offered by national and international agencies in terms of projects, etc.
- Improve international linkages and exchange Programme for students and faculty.

6.2.3. Describe the internal organizational structure and decision making Processes.

The organizational structure is as follows:

Academic: Staff Council-a statutory advisory body to the Principal in all academic and disciplinary aspects. It consists of the Principal (ex-officio), Heads of all Departments, the librarian and two elected teaching staff representatives.

Staff Association: Consists of all the faculty members and the Principal (ex-officio). The Secretary is elected from the faculty from time to time.

Administration:

Internal Management Committee-

Consist of the Manager (Chairperson), Principal (Secretary), Bursar and two elected members from the Governing Board.

Governing Board/Board of Directors/Executive Committee

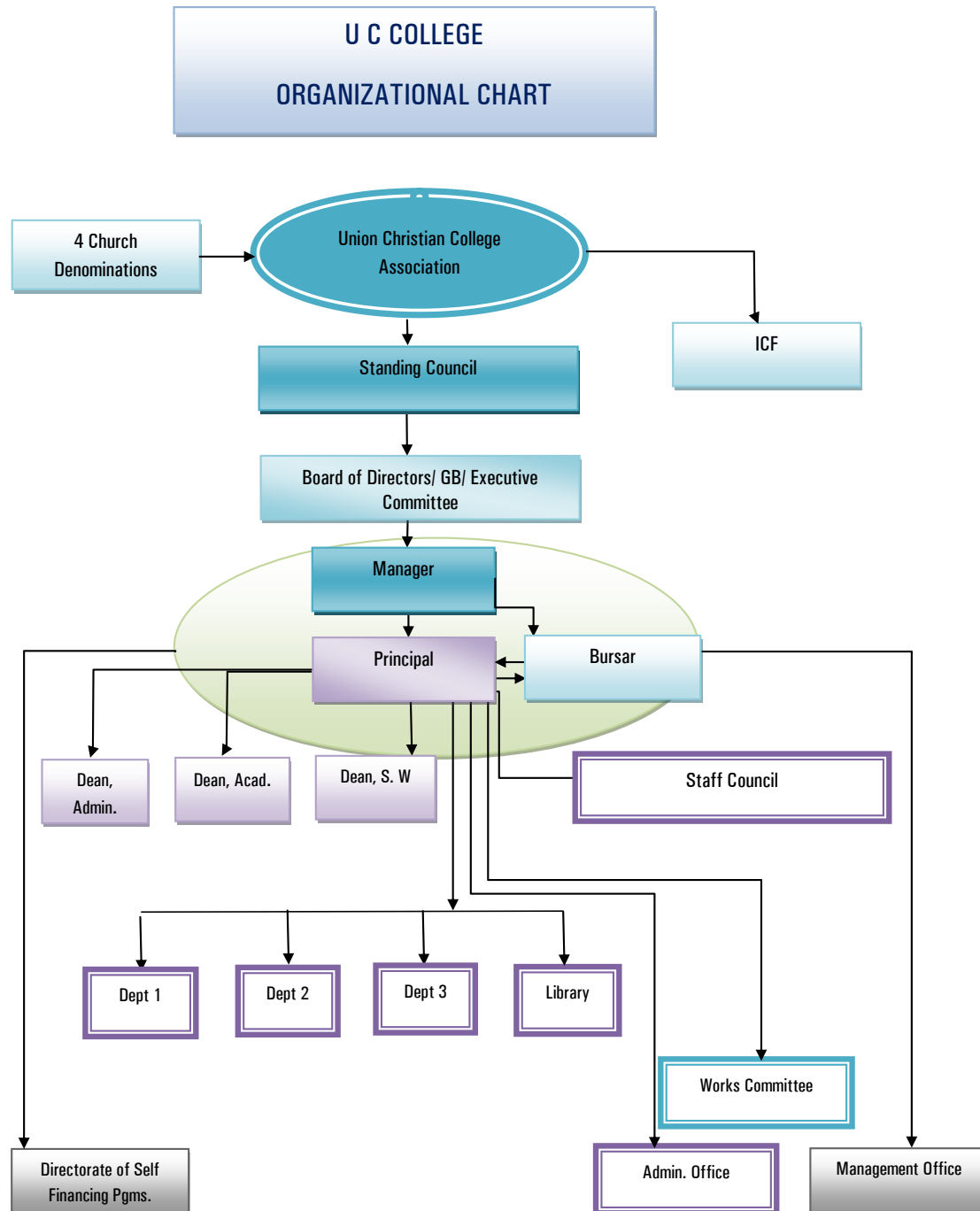
Consist of the Manager (Chairperson), the Principal (Secretary), the Bursar and six elected members from the standing Council (Two members from ICF and one members representing each of the four constituent Churches of the College).

Standing Council

Consists of four members representing each of the four constituent Churches of the College, eight ICF members, the Manager, the Principal and the Bursar (ex-officio). It is the supreme body of administration of the College.

Union Christian College Association

It is the parent administrative body in which constitutional amendments are made. The decision taken in this body are executed through the Standing Council.



6.2.4. Give a broad description of the quality improvement strategies of the institution for each of the following.**Teaching & Learning:**

The College has a systematic process for internal evaluation, tutorial and remedial coaching and open house, Associations of departments, faculty feedbacks, coaching for UGC/NET and civil services examinations etc. The College ensures academic dynamism through ICT enabled class rooms, well equipped laboratories, College library and reading rooms with access to international books and journals so as to enhance the teaching learning practices. Refresher and orientation courses, interaction with experts, seminars and invited lectures are regularly organized.

Research & Development:

The College facilitates scientific temper which is reflected in the number of research/projects undertaken by the faculty with financial assistance from the National and state level funding bodies like UGC, FIST, BRNS, KSST and international organizations like UBCHEA. There are 9 research centres in the College with 110 research scholars guided by 12 faculty of the College and 15 faculty members from different institutions. Graduate and undergraduate students undertake at least one research project during their course and many have presented their work in national seminars and published in journals of repute.

Community engagement:

Departments and faculty organize community extension Programme using the help of N.S.S, N.C.C, Service Learning Center, Pain and Palliative Care Unit. Their activities include surveys to analyse the need for assistance, awareness and motivational classes for women and children of settlements for tribal population and below poverty line sections, training in good learning practices and counselling for children from government schools, technical and resource support for special schools, blind school and geriatric centers and so on. Based on such experiences, teachers of the College could contribute in curriculum modifications and syllabus revisions.

Human resource management:

Students and faculty participate in seminars and training Programmes at national and international level and invited lectures are organized by the different Departments of the College every year. Programmes like ASAP, Walk with a Scholar, skill training Programme to improve computer proficiency, analysis of research data, moral and ethical practices in personal and professional life, etc. are conducted regularly. Through various projects and programme aided by UGC, UBCHEA, Ford pathways, CSRS, etc. experiential learning opportunities are created.

Industry interaction:

Various Departments provide facilities of internships and many organizations absorb our students on completion of their programme. Experts, especially distinguished alumnus of the College, interact with and guide students to be fit for industry demands and improve employability potential. Students also work with alumni who associate with projects of various Governmental and Non-Governmental organizations. .

6.2.5. How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

The **Department Staff Meeting** offers a forum for the faculty to reflect on the tutorial meetings, assistance to be offered for weaker students, plan the activities of the department, etc. The HODs keep the Staff Council informed of major matters. Annual reports of the tutorial meetings, work of major clubs, etc. are submitted to the Principal.

The **College Staff Meeting**, held at least once every month, also provides a platform for exchange of ideas and feedback so that informed decisions are made by the Principal and the top Management.

The weekly **Staff Council Meetings** assist the Principal and heads of the Departments in keeping up to date with the activities of various Departments and major incidents on the campus.

Weekly meetings of the **Inter Church Fellowship (ICF)**: The Principal, who is the Chairman of the I.C.F., would share the policy and other administrative decisions of the management then receive feedback before they are finally implemented.

The **Governing Body** meets every month where the members, including the Manager, are informed of the activities in the College. In such meetings of the GB, the first item in the agenda will be “Principals Report” which keeps the Body updated on all the major events in the College. The Manager submits annual report to the College Standing Council. The **Internal Management Committee (IMC)** meets in between GB meetings.

The **College Standing Council** meets twice a year or as often as necessary and combined meetings of the Standing Council and ICF are held to discuss crucial issues as often as needed. Through these meetings and the reports by the Principal and Manager the management bodies are briefed about the activities of the whole College.

The Principal of Union Christian College is selected from the faculty of the College itself, and resides on the College campus. He /She is accessible to all students, faculty, management and other stakeholders of the College.

PTA and Alumni Association are active and meetings are held frequently to collect their feedbacks and suggestions.

6.2.6. How does the management encourage and report the involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

The College Staff Council, consisting of the Principal, the Heads of Departments, the Librarian and two elected members of the teaching faculty acts as a statutory advisory body to the Head of the Institution, to make decisions on all academic matters. It takes final decisions on matters of immediate concern.

The Staff Association, consisting of all the teachers of the College, is informed about all the decisions of the Council. Final decisions and implementation of the decisions are executed through committees constituted by the Staff Association.

The Administrative Dean, Academic Dean and Students' Dean are selected from the teaching staff based on seniority and efficiency from among the faculty.

Members of Inter Church fellowship (ICF) have substantial representation in top management of the College such as the U. C. College Association, Standing Council and the Governing Body. They work as a bridge between the faculty and other governance structures.

Thus, the faculty of the College is an important stakeholder in decision-making, they have a major role in the implementation and the functioning of the College and the College very much depends on their efficiency, commitment to its goals and dedication to the College. The administrative structure and the committee system reveal the democratic and decentralized functioning of Union Christian College.

6.2.7. Enumerate the resolutions made by the Management council in the last year and the status of implementation of such resolutions.

- Create a separate directorate for self- financing courses. It was implemented
- To construct a new campus and infrastructure for self-financing courses.

In accordance with the above resolutions a directorate for self-financing courses was constituted and efforts are underway to raise finances for the infrastructure.

- Circulated the assurances and commitments of the subcommittee on introducing Autonomy in the College to the staff and students of the College. The assurances are listed out in a document which was circulated among the stakeholders.
- Construction of a world class Library with all Electronic learning facilities; the project has been prepared and it is in the final stage of submission to the US Organization, United Board for Christian Higher Education in Asia (UBCHEA), for ASHA Grant (American School and Hospital Aid)

6.2.8. Does the affiliating university make a provision for according the status of Autonomy to an affiliated institution? If yes, what are the efforts made by the institution in obtaining autonomy?

The College has initiated steps towards autonomy. Since the team of experts could not complete their visit, the conferring of Autonomy remains undecided yet. The College aims to attain the status of an autonomous institution or a Deemed to be University.

6.2.9. How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

The College follows the guidelines provided by the UGC, AICTE, MG University, Kerala State Government, the Higher Education Department of the State and Court directives. Students' Grievance Redressal Cell, Anti- Ragging Cell, Women's Cell, Complaints Committee to deal with sexual harassment etc. besides the College Union, various student and faculty bodies, Tutorials, Associations of Departments, Staff Association and Staff Council, ensure that grievances or complaints are addressed promptly. The College endorses its democratic tradition by allowing Student and Faculty unions. Parent – Teachers' Association and Old Students' Association help the College, the Administration and the Management, to connect with the public and address the grievances from all constituencies and take remedial action.

The kind of student-teacher relationship unique to this institution, the selection of Principal from among the staff, and a very benign presence of the Manager, ensures that even the youngest of the faculty or a new student has access to higher authorities.

6.2.10. During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

Nil.

6.2.11. Does the Institution have a mechanism for analyzing student feedback on institutional performance? If yes, what was the outcome and response of the institution to such an effort?

The teachers hold formal meetings with students twice a month in groups and one-on-one and personal basis in **tutorial meetings**. Students share their opinions of the teaching- learning process, facilities provided to them, curricular and co-curricular activities, etc. during these meetings. Feedbacks on teacher performance are collected from students formally and informally. The teacher- in-charge of the tutorial groups submits an annual report to the Principal.

There are **weekly meetings of Department Associations** where students from all courses offered by the Department and faculty come together for one hour and students are given freedom to conduct the meeting and voice their

opinions. In addition, there is an executive committee of the association constituting representatives of each batch along with the faculty.

Orientation programmes at the beginning of a course inform the parents of various curricular and extracurricular opportunities available to the students. **Open house programmes** are conducted every semester to keep the parents informed about the progress of their wards, and **PTA meetings** help the College to receive suggestions from parents.

The College facilitates a **vibrant College union** and also Clubs and Associations cater to the varied interests and talents of the students. Faculty in charge of these bodies collects continuous feedback. The **College magazine and the manuscript magazines** of the Departments also are sources of feedback.

The **resident wardens and the faculty wardens of College hostels** are also sources of feedback from students regarding the impact of the College on the student's academic, personal and spiritual life.

Every year the College organizes a **farewell meeting** for the outgoing students. Representatives of each course share their experiences in U. C. College, which is an ideal opportunity for the College to reflect on its impact on students. The **Alumni meetings** conducted twice a year and separate **alumni meetings of various Departments** and batches of students offer a feedback mechanism that the College can make use of for its improvement and correction.

The democratic functioning of the College empowers the students and faculty to resolve many concerns at the level of its inception itself. The Staff Association, Staff Council and the ICF reflect on the reports and take necessary preventive and remedial steps.

Based on these reports the College has made several improvements in the facilities provided to the students. The College library system of accessing books has been changed, better and modern facilities for sanitation for girl students are in place, value education classes have been restructured, counselling services and fitness Programmes have been initiated and services offered to students with disabilities are being improved. Interactive sessions with alumni to inspire students to explore new job opportunities are organized and students themselves are given the opportunities to initiate and execute their own programmes of academic nature, service learning activities, clubs for showcasing their literary, artistic and aesthetic talents, etc. to name a few.

6.3. Faculty Empowerment Strategies

6.3.1. What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?

To enhance the professional competency of the teaching and non-teaching staff and to make them capable of facing the challenges of the contemporary situation, the College carries out the following:

- Orientation Programme for the newly appointed faculty to introduce the history, background and the goals of the College
- Methodology workshops with external experts
- Facilitating in-service, refresher programmes
- Skill (IT, Communication, handling ICT, smart boards) development Programme for teachers.
- Academic orientation at the beginning of every year
- Skill development trainings organized for non-teaching staff – Selected members sent to external training Programmes for updating their knowledge in their concerned areas of functioning.

6.3.2. What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

- Motivating faculty and provide opportunities for acquiring knowledge on latest pedagogical inputs.
- Organizing empowerment/skill development Programme and workshops on capacity building.
- Faculty members are encouraged to attend orientation Programme conducted by UGC and Academic Staff Colleges within the first three years of joining and to attend refresher courses from time to time.
- The College motivates the faculty members to organize and attend seminars, conferences and workshops
- Faculty members are assigned various responsibilities such as student relations, Cultural and Arts Associations, sports and games, wardenship of hostels, Nature Action club, NCC and NSS, and are encouraged to attend related training events
- Young faculty are encouraged to apply for more research and study projects and work on them earnestly

6.3.3. Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

- To evaluate the performance of the faculty in teaching - learning, research, and extension Programme, the College follows the mechanism of self-appraisal (Copy of the *proforma* is attached as Appendix – 6.1)
- The Principal along with the Administrative Dean holds meetings with the administrative staff on a quarterly basis with a view to discuss problems encountered in various aspects in administration and relevant changes are being made in the system after discussion with Heads of Departments, Staff Council and Governing Body.

- Heads of Departments evaluate the performance of the teaching and non-teaching staff working in individual Departments internally and report to the Principal.

6.3.4. What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

The data collected through the Performance Appraisal are processed and evaluated. The performance appraisal report is the basis for promotion. The Management also evaluates the performance of the faculty. The management depends a great deal on the HOD's and the Principal for their appraisal of each faculty. The Principal conveys the evaluation results to the teachers and administrative staff.

Matters that need to be taken up with the faculty as a whole will be placed before the Staff Council and then, the Principal will share his concerns and steps to be taken to facilitate correction at the Staff Association meeting.

On general matters of morale, motivation and policy direction, the Manager will meet the staff and communicate the same to the staff.

6.3.5. What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

- The teaching and non-teaching staffs receive the benefits of the welfare schemes of the government.
- Limited family quarters are available within the campus, which is open to faculty for family accommodation. This is availed on first come first serve basis. Bachelor accommodation is provided to the women faculty in Women's Hostels; they may also be asked to serve as wardens; they avail this facility at nominal rent.
- The Cooperative society provides various financial welfare schemes (Chitty, Festival time consumer goods sales) for both the teaching and non-teaching staff.
- Non-resident student center (canteen) provides food at subsidized rates.
- The Management provides financial support for the recreational activities of the staff. Recreation cubs, Annual Family tour Programme and Annual Get-together Programme are organized for both teaching and non-teaching staff.

6.3.6. What are the measures taken by the Institution for attracting and retaining eminent faculty?

- Faculty recruitment is purely merit based and they are respected for the gifts that they bring to the College.
- A very congenial and cordial liberal atmosphere is maintained as part of its heritage

- The faculty is provided with residential facilities inside the campus and also a crèche, Kids Dale, to take care of toddlers and children below the school going age.
- Great deal of academic freedom is provided to teachers; they are encouraged to avail themselves grants and do research in their areas of interest.
- The HODs with their teachers are trusted to deliver what is expected of them.
- Adequate research facility is available in the College with two FIST labs and ten research centers.
- Encourage and support faculty with doctorate degree who have ongoing research activities and recent publications, to secure Ph.D. guide-ship to extend research activities and to attract research students
- The faculty is encouraged and provided with overseas exposures whenever possible using the College's international partnerships.

6.4. Financial Management and Resource Mobilisation

6.4.1. Institutional mechanism to monitor effective and efficient use of financial Resources.

The efficient use of available financial resources is monitored by the Internal Management Committee, Governing Body and the Standing Council. In addition, there are other sub-committees like UGC Committee, Purchase Committee, and other sub-committees that make proposals and estimates which the Works Department and the Bursar's Office vets for final approval by the GB or IMC. There various stages of checking and verifying the expenditure. The Principal is the Chief Accounting Officer of the College accounts. The Principal and Bursar hold joint responsibility for maintaining Management accounts.

The various committees meet regularly to discuss utilization of financial resources. The grant requests are made as per UGC schemes for the development projects of the institution.

6.4.2. Mechanism for internal and external audit and its details

The College has an effective mechanism for internal and external audit. The external audit for the College accounts are carried out by the Office of the Accountant General and the Directorate of Collegiate Education. The Management accounts are audited internally every year by an External Chartered Accountant. The comments of the auditors are discussed in the General Body and necessary corrective measures are taken.

The last Government audit, in the institution by the Accountant General's office was carried out from 29.9.2015 to 5.10.2015 for the period 2010-2015. Audit queries raised were satisfactorily answered. The audit by the Directorate of Collegiate Education was conducted for the period from 1.4.2013 to 30.4.2015.

6.4.3. What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited Income and Expenditure statement of academic and administrative activities of the previous four years and the reserve fund /Corpus available with Institution, If any.

The major sources of institutional receipts/funding is grant-in-aid provided by the government. Deficits, if any, are always met by the Management. The Management has been maintaining a reserve fund to meet contingencies.

The major sources of finance of the College comes through

- Assistance from the Government of Kerala (grant-in-aid for salary of teaching and non-teaching staff)
- UGC is one of the major sources of funding for developmental activities and academic Programme. Teachers receive Major and Minor Research Project Grants for research purposes. UGC Seminar Grants are utilized to organise academic Programmes
- The College also receives financial support from DST, KSCSTE, KSHEC for research laboratory projects and academic Programmes.
- Funding received from UBCHEA, New York for Projects and faculty exchanges.
- Scholarship for Students is availed from Government of Kerala
- Income from Self-financing Courses run by the College
- Income from the Auditorium which is rented out to the public
- Contribution given every month by teachers to the Inter-church Fellowship (ICF)
- Student Amenity Fund maintained for developmental purposes
- Contributions of PTA, Alumni and Friends
- Management contribution for the construction of buildings, maintenance and infrastructural development of the College.

Consolidated balance sheet for the last four years provided as Annexure

6.4.4. Efforts of the Institution to Secure and Utilize Additional Funding

During the past decade, the College has been striving for self-sufficiency through additional resource mobilization from supporting agencies like Alumni, Well-wishers and the PTA. The additional funding is mobilized through

- Promotion of International funding/ linkages
- Travel Grants
- Ford pathways
- Scholarships /Scranton Scholarship, Kano Yamamoto Scholarship
- From well-wishers/Alumni

6.5. Internal Quality Assurance System (IQAS)

6.5.1. Internal Quality Assurance Cell (IQAC)

- a. **Has the institution established an Internal Quality Assurance Cell (IQAC)? If „yes“, what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

Yes. Union Christian College had formed an Internal Quality Assurance Cell (IQAC) in 2005 and it has been in action since then. Every year IQAC has been renewed and regular meetings have been conducted to outline the measures to be taken to assure quality. Founded on Christian values and with commitment to secular ideals, the founding fathers set the academic goals and ethical standards of the College- “To be a centre of light and life and a blessing to many, to enable teachers and students to grow in true love of knowledge which makes all study a discovery and a joy, leading them to intellectual maturity and commitment to truth, to foster in students the spirit of wonder and inquiry and the yearning to be made whole.” The Union Christian College aims for wholesome education of the young to bring out the best in each individual. It strives to produce intellectually competent, morally upright and spiritually inspired, patriotic men and women who will serve the country with dedication and fervor. The IQAC has been instrumental in fulfilling this mission by setting and implementing realistic quality objectives, reviewing and revising these as and when required. Some proposals are mentioned below

- Each Department should conduct national and international seminars so that the students get an opportunity to interact with experts across the world which may inspire them and provide them avenues for higher studies.
- Enhance various club activities to acquire leadership skills and learn beyond their field of study
- Introduction of smart class rooms and Wi-Fi facility which provides an opportunity to access across the world and learn through visual modality
- Centralized attendance entry which enables strict monitoring of attendance.
- Each Department should have community extension programmes which enhances experiential learning and social responsibility
- Monthly academic review in each Department
- Regular collection of feedbacks from all its stakeholders so that necessary correction can be made
- Mentoring, Remedial coaching and Peer tutoring to help scholastically weaker students without hurting their sentiments and dignity and to facilitate greater student-teacher relationship.
- Active functioning of a Counseling Centre (BLISS) transcending narrow focus on individual counseling and aiming at providing life skills training
- Strengthen the Career guidance and placement cell activities

- Efficient Web site management
- Provide open access to books in the library for all students
- Strengthen library facilities
- Encourage teachers to get actively involved in research activities
- Seminars, workshops and training programmes for teachers to improve their efficiency
- Orientation programme for students
- Establish tie up with various institutions and industries in India as well as abroad.
- Facilitate student exchange and teacher exchange programme

b. How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?

All decisions of the IQAC have been approved by the management and nine of them were implemented. These nine decisions are mentioned below

- Centralized attendance entry
- Encourage teachers to get actively involved in research activities
- Seminars, workshops and training programmes for teacher's to improve their efficiency
- Orientation programmes for students
- Provide open access to books in the library for all students
- Enhance various club activities to acquire leadership skills and learn beyond their field of study
- Mentoring, Remedial coaching and Peer tutoring in order to help scholastically weaker students and to strengthen healthy bond between teachers and students
- Monthly academic review in each Department
- Regular collection of feedbacks from all its stakeholders so that necessary correction can be made

The rest of the decisions are partially implemented details of which are discussed below. Five Departments have conducted national or regional seminars. Wi Fi facility is available in all the Departments and in selected locations of the campus and there are smart classrooms in all Science Departments. Three Departments have community extension programmes. Counselling centre has become active and former Heads of Psychology Department are available as counselors one day in a week. On other days, present teachers and research scholars of Psychology Department provide counseling for needy students. Four sessions of skills training programmes for

post graduate students were also conducted. Career Guidance and Placement Cell have enhanced its functioning by providing information regarding many career options, guidance in preparing for tests and interviews, preparation of CV, lectures by people successful in certain occupations, offering more campus selection and placement opportunities, providing options in higher studies and encouraging post-graduate students to register with the PSC. A website committee was formed for efficient website management and each teacher has been provided with a web page which they can upload and update with their details and revise it as and when required. Attempts have been made to upload all interesting activities at the earliest. Renovation of library has been given top priority and initiatives have already been taken to solicit funds from ASHA/USAID with the active mediation of the US basis Organization, UBCHEA. The College and each of its Departments have been making earnest efforts to establish tie up with various institutions in India and abroad. Two of our students spend one semester in International Christian University (ICU), Japan and three students from the I.C.U. make exchange visit for a month every year. In the last five years eight teachers from U. C. College attended training programme in overseas foreign institutions.

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Yes. The IQAC has two external members

1. Dr. K. K. George, Former Director, School of Management Studies, Cochin University of Science and Technology
2. Mr. George Thomas, Former Vice President, Binani Zink

d. How do students and alumni contribute to the effective functioning of the IQAC?

Feedbacks are collected from students and alumni periodically about various aspects of the College. Apart from these, class representatives of outgoing batches are given opportunity to give their feedback and suggestions in an open forum where the Manager, Principal and almost all teachers are present. Alumni and Parents give valuable suggestions to enhance better functioning of the College through the Alumni Association and PTA respectively. These comments and discussions are followed through for necessary action. Alumni extend financial aid to improve infrastructure facilities and student welfare. Distinguished alumni conduct training programmes and give special lectures in their respective fields of specialization; they are also helpful in connecting the College and the Departments with institutions and research bodies within India and outside. They also attempt to bring experts from various fields to the College.

e. How does the IQAC communicate and engage staff from different constituents of the institution?

The IQAC has representatives from all teaching Departments, administrative wing, students and alumni. This facilitates easy communication with these constituents. All the important information is mailed to the Heads and representatives and their feedbacks are collected. The IQAC is constantly in touch with the staff council. Major decisions are announced in the Staff Meeting.

6.5.2. Does the institution have an integrated framework for quality assurance of the academic and administrative activities? If „yes“, give details on its operationalisation.

Yes, the College has an integrated framework for quality assurance of the academic and administrative activities. The College functions with a committee system; it is a decentralized system of governance in which responsibilities are assigned to various committees. These committees develop action plans and work out cost estimates obtains approval, implements and report the outcome of its actions. The coordinators of the committees keep the Principal and Manager informed of important decisions. GB will decide on financial recommendations by the committee. Wherever action is required by other members of the staff, it is taken through the Staff Council. Academic, Administrative and Students’ Deans involve in and contribute to the working of committees that come under the area of concern. Academic activities are set at the beginning of an academic year and efforts are made to follow the calendar strictly. Periodic meetings of the Governing Body, Standing Council, Staff Council, Inter Church Fellowship (ICF), Staff Association, and Departmental Staff meetings facilitate the committee system and mutually influence the smooth working of the College.

6.5.3. Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If „yes“, give details enumerating its impact.

Yes. The institution provides training to its staff for effective implementation of the Quality assurance procedures. There were training programmes conducted on CBCSS, strategic planning, teaching learning process, etc. These programmes have helped the teachers to shape their teaching practices and interaction with students and to gain new insights in tackling their personal and professional issues effectively. These training programmes also help the faculty to update their knowledge and be innovative and interdisciplinary in their research. Some of the training events are given below:

- Mr. Johny Josphe, Management Consultant, “Institutional Goal setting and Strategic Planning” three lectures from December to February, 2015.
- Dr. Joe Jesudurai, Dean of Sciences, Loyolla College, Chennai – Autonomy and teachers(18/02/2015)

- Sri. T. P. Sreenivasan, The Head, The Council of Higher Education of the state of Kerala – Higher education in Kerala
- Dr. Jeyakar Chellaraj, Former Principal, Bishop Heber College, Tiruchirappalli - Value Education– Innovative Teaching Methods (10/09/2015)
- Dr. R. Mahalakshmi, Associate Professor, Centre for Historical Studies, JNU, New Delhi – Relativity in research(30/09/2015)
- Mr. Johny. K. Joseph, HRD consultant – Strategic Planning(16 - 20/11/2015)
- Dr. Latha Pillai, Director, Rajiv Gandhi National Institute of Youth Development – Teaching, Learning and Research: Exploring Creative Engagement(08/01/2016)
- Prof. M. K. Sanu, Retired Professor, Maharajas College& Dr. K. N. Ganesh, Former Head, Department of History, Calicut University –Orientation for teachers (09/06/16)
- Rev. Dr. Varghese Puthussery, Director, Santhwana Counselling Centre, Kochi – Achieving excellence in teaching with special focus on student mentoring

Training was provided to administrative staff in technical skill (Tally) which has improved their efficiency in handling office activities

6.5.4. Does the institution undertake Academic Audit or other external review of the academic provisions? If „yes“, how are the outcomes used to improve the institutional activities?

Yes. Monthly academic reviews are conducted in each Department. Academic audit is conducted annually for the whole College. It examines the number of working days; pass percentage in internal and University exams, percentage of attendance of students and teachers, percentage of students with shortage of attendance, percentage of students who received merit scholarships, percentage of students who pursue higher education and percentage of students who got placement. These reviews have helped to identify the short comings and take necessary corrective action.

6.5.5. How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/ regulatory authorities?

The internal quality assurance mechanisms examine the requirements of the relevant external quality assurance agencies or regulatory authorities in depth and try to move accordingly. There is always an effort to keep up with the NAAC requirements in all its seven areas. The College also attempts to perform the best as per the university guidelines on quality. There are attempts to equip students to meet the current demands and challenges.

6.5.6. What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome.

- Academic audit gives an overall view of the teaching learning process. Feedbacks are collected from students about every teacher who teaches them.
- Internal assessment result and percentage of attendance for each teacher's subject and class are also considered.
- Common PTA meetings as well as individual open houses are conducted after each semester.
- Review of each student's performance in comparison with his/her previous performances has also been done.
- Confidential evaluation of teachers by respective Heads is also taken into consideration.
- Mentoring, remedial education and peer tutoring have become more systematic
- These evaluations have helped to improve attendance, punctuality and performance of students and teachers, and enhanced the incorporation of various teaching aids and pedagogies.

6.5.7. How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

- The institution communicates its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders through newsletter, media, displaying notices on the notice boards of students, teachers, and non-teaching staff.
- Standing Council, Staff Council, PTA meetings and Alumni meetings also play significant role in the feedback loop.
- Elected members of students' union and leaders of approved student organizations will be informed about decisions relevant to them.
- There is also an announcement system to reach out to all students simultaneously.

CRITERION – VII

INNOVATIONS AND BEST PRACTICES

7.1. Environment Consciousness

7.1.1. Does the Institution conduct a Green Audit of its campus and facilities?

Yes, the institution conducted a green audit of its campus facilities. The report is readily available for perusal.

7.1.2. What are the initiatives taken by the Institution to make the campus eco-friendly?

- Our campus is well preserved, and remains as a lush green campus of pristine beauty
- While the college, through its nature action club has been planting trees, it strictly follows certain norms to protect existing trees, thus maintaining the greenery on the campus and the natural vegetation; trees are cut not for commercial purposes but only when they pose danger to people and buildings in their vicinity. Again, the College strictly follows the norm that minimum number of trees is destroyed and the natural environment is kept as it is, when new buildings are constructed on the campus.
- The infra-structure development strictly adheres to environmental compliance such as minimum damage to natural vegetation, energy saving by facilitating natural air flow and also using of solar energy for the energy needs of the building.
- We have a bio-gas plant to recycle the bio-degradable waste of the College Canteen and the gas generated from the plant has been used for cooking in the Canteen.
- Labeled waste-bins are installed for plastic, non-degradable wastes, and bio-degradable wastes.
- The college has taken up several steps to make the campus plastic free and eco- friendly.
- On every June 5, ‘Environmental Day’ is observed with the planting of saplings, organizing various competitions such as nature related quiz, poster designing, essay writing.
- Incinerators are provided in the college and hostel for eco-friendly disposal of sanitary napkins.
- Display boards bearing messages on the importance of keeping the campus eco- friendly are placed inside the campus.

Energy Conservation:

- Energy saving habits have been inculcated in the students and staff through awareness programmes, discussions, and environment related campaigns and exhibitions.
- Energy wastage is prevented by encouraging students and staff to switch off fans, lights and other electrical appliances when they are not needed.
- The wasting of electricity in the hostels is prevented by switching off the main connection for lights during college hours when the students are not expected to be in their rooms. (Fans are not switched off)
- Uninterrupted power supply is maintained through three generators installed in the college campus and in the hostel. To avoid damage of instruments through voltage fluctuation, stabilizers and UPSs are used.
- Stickers and Boards are displayed in every class room reminding students to switch off electrical appliances after use to conserve energy.
- Inspection and maintenance of pipes is done on a regular basis to prevent wastage of water.

Renewable Energy:

- The Institution is moving towards the use of solar energy an alternative energy resource to minimize electricity consumption.

Water Harvesting:

- Rain water harvesting unit with a capacity of approximately 100000 litres was set up in 2008. The rain water thus collected is used in the auditorium and in the botanical garden.

Efforts for Carbon Neutrality:

- Utmost care is taken to restrict vehicle entry into the campus during working hours.
- Effort is made to make the campus plastic free.
- Students of some departments have created an E-mail account for their group to facilitate peer learning.
- All the paper and other combustible wastes are properly disposed without producing any carbon emission.
- Messages from the Principal are given via e-mail and SMS to reduce the use of papers.

Plantation:

- The institution shows avid interest in nurturing a green campus. The students learn to love nature, co-operate in teamwork, and gain a sense of responsibility to care for nature.
- Dignitaries coming to the college are requested to plant saplings to commemorate their visit.
- The Botanical Garden maintained by the Department of Botany comprises rare plant species, green house and a water pond.
- The approach path to all buildings is beautifully lined with trees.
- The Institution shows keen interest in instilling eco-awareness in the students by celebrating Environment Day with the planting of trees, organizing various competitions such as nature quiz, poster making, essay writing, etc.
- One of the healthy practices of the Institution is the 'Green Campus'.
- The college participates actively in the *Haritha Keralam* project of the Government of Kerala.
- The college has a Nature Club the objective of which is to create environmental awareness in the students and to instill in them love and respect for nature.

Hazardous Waste Management:

- Strict monitoring of waste disposal is made with respect to the waste from the laboratory. The waste from the Chemistry Laboratory is disposed of scientifically. All the chemical wastes generated in the lab are identified and categorized into different groups. They are then collected in separate receptacles. Acid/alkali waste are released into the environment only after making it environment friendly by dilution with plenty of water and neutralization using very dilute alkali/acid.
- Neutralization can be monitored by pH meter/litmus papers. Chemicals having hazardous and toxic effects are identified and micro scale experiments are designed to avoid or to minimize the use of such hazardous chemicals and toxic metal ions. Organic solvents such as petroleum, ether, ethyl acetate and methanol etc. are recovered by distillation and reused for further extraction.
- Paper waste generated in the lab is separated into recyclable and non-recyclable. The recyclable waste is sent to the local traders and the non-recyclable is disposed off.
- The used plastic containers are also sold to local traders. Glass waste generated in the lab is collected separately. Separate receptacles are kept for

soda glass waste and Pyrex glass waste which are sold to local traders/manufacturing units for recycling.

- Storage of strong acids (corrosive and hazardous) is done in a separate room. Other corrosive chemicals, inflammable solids, liquids and organic solvents are also stored separately.
- The chemical waste is identified and categorized into different classes/groups and the information is exhibited on a chart in the lab.
- Students are made aware of the disposal of different categories of waste generated in the lab. They are given clear instructions to dispose the broken glass waste and chemical waste in the respective waste receptacles.

E-waste Management:

- Green computing is encouraged in the following ways:
- Switching off CPU and all peripherals such as printers, modems, routers and projectors during extended periods of inactivity to enhance the life of the devices; use of LCD instead of CRT monitors.
- Use of refill inkjet cartridges and laser toners; use of devices with automatic switch off when they are idle (Project in final shape); purchase of less toxic and recyclable materials and components. The hardware resources are utilized to the optimum extent.
- Systems with longer guarantee period are selected. Some of the older systems that are in working condition are given to outside school children.
- We are associating with 'Clean Kerala Company' (Kerala Suchithwa Mission) for e-waste disposal.

7.2. Innovations introduced during the last four years which have created a positive impact on the functioning of the institution. Give details.

In accordance with the vision-plan of IQAC, the college embarked on a holistic approach to further insights gained from the inputs vis-a-vis Teacher-self Appraisals, Student Assessments and also the general Orientation Programmes conducted both at the UG and PG levels. More specifically, the framework laid down in the Orientation Programme was followed up by a consistent Weekly Tutorial session where teachers met each and every student in their departments and individual records were maintained subsequently. Further, the data collated through the tutorials have been utilised to develop an Incremental Student Academic Growth System, which has made it possible to provide student-centric additional attention for both the brilliant and the wanting segments of the student constituency. There are enhanced and rigorous Peer-learning mechanism is in place. An embedded internalisation of socially relevant Best Practices is

being promoted by updating and streamlining the Value Education apparatus and also the Service Learning framework that are already in place.

7.3. Give two Best Practices of the institution.

1. The *Bhoomi Malayalam* a journal series, a venture of the Department of Malayalam, which has been since 2007. This initiative stands in the league of knowledge generation, consolidation and archiving. Thematically designed seminars are organised annually, and the best academic minds and emergent scholars are brought together. And the collated book which is disseminated on a national level stands on par with similar initiatives from universities. The interdisciplinary aspect of this venture was at its zenith in the last seminar titled 'Keywords' - pertaining to Cultural Studies and Critical Social Theory with scholars coming in from disciplines like History, anthropology, political science, Literature and Gender studies. The book is to be released in January 2017.
2. Quality life through Physical Fitness: Assessment and Empowerment of U. C. College Community through service learning.

Kerala as a society has shied away from physical activity, irrespective of its good climate and water sources. Most of the road junctions in Kerala had two or three cycle shops in the 80's are now replaced by bakeries and motorcycle workshops. So the third shop automatically to open in the vicinity will be a medical store. The advent of Television in 1983 has worsened the scene by taking away the leisure time activity.

The project aims at assessment of Health related Physical fitness of UG students through selected test battery resulting in the creation of a health data profile of the U.C. College students and by providing an exercise module suitable to improve the health status of students. The project proposes a health assessment programme to its community for giving an early awareness to threats of NCDs which is the alarming issue of the health of the Kerala youth.

1. Title of the Practice: *Bhoomi Malayalam*

Goal

In recent times, the idea of the text has expanded from the merely literary to all forms of cultural production. Hence the conceptual and formal aspects of culture need to be studied in order to grasp local, national and global social complexities.

The following are the goals of the programme:

- To provide a space for literary and cultural interactions
- To understand key approaches to the study of literature and culture and their application to understanding social and cultural change

- To appreciate the diversity of ways literary and cultural production, consumption, and meaning shape everyday life
- To be able to identify and describe key theorists, theories, and subject areas in the field of cultural studies
- To disseminate the knowledge generated through this venture by publishing the results/deliberations.

The Context

Literary Theory and Cultural studies are many-splendored areas, without easy definitions. But they certainly have their respective histories and animating currents. They also have a sophisticated tryst with disciplines like Psychology, Sociology, Philosophy and History, evidencing an interdisciplinary ethos. A wide range of subject positions and social and cultural problematics have emerged as a result of this confluence. It is in this context that initiatives like Bhoomi Malayalam become relevant

The Practice

Bhoomi Malayalam is a venture of the Department of Malayalam since 2007. Knowledge generation, consolidation and archiving have been the consistent practice of this programme. Thematically designed seminars are organised at national level annually bringing together academicians and scholars. Various textual practices arising from different cultural and social contexts are examined with new hermeneutic tools. Current trends and discussions in cultural and literary studies are problematized exploring areas like politics, subalternity, sexuality, gender, feminism, ethnicity, violence, and multiculturalism, among others. The proceedings from the seminar are published as journal every year.

Evidence of Success

The participants every year develop a clear grasp of the concepts of literary and cultural studies. They gather the cultural dynamics of society with the help of contemporary theory using analytical tools to study diverse literary and cultural practices. It provides an exposure to various forms of cultural expression, and hands on experience of the same through programmes like *Gaddika* - a cultural fest organised in association with the national seminar. Proper documentation, archiving, curating of cultures and literary/theoretical output is done.

Problems Encountered and Resources Required

The problems encountered are limited to logistics.

Contact details

1	Name of the Principal	Dr. P. Thomas Mathew
2	Name of the Institution	Union Christian College
3	City	Aluva,Ernakulam
4	Pin Code	683102
5	Accredited Status	A
6	Work Phone	04842609194
7	Website	www.uccollege.edu.in
8	Mobile	9446479124
9	Fax	04842607534
10	E-mail	ucc@uccollege.edu.in

2. Title of the Practice: Quality life through Physical Fitness: Assessment and Empowerment of U. C. College Community through service learning

Goal

The young people in the age group of 10-24 year in India constitute one of the precious resources of India characterized by growth and development and is also a phase of vulnerability often influenced by several intrinsic and extrinsic factors that affect their health and safety.

Kerala as a society has shied away from physical activity, irrespective of its good climate and water sources. Most of the road junctions in Kerala had two or three cycle shops in the 80's are now replaced by bakeries and motorcycle workshops. So the third shop automatically to open in the vicinity will be a medical store. The advent of Television in 1983 has worsened the scene by taking away the leisure time activity.

The project aims at assessment of Health related Physical fitness of UG students through selected test battery resulting in the creation of a health data profile of the U.C. College students and by providing an exercise module suitable to improve the health status of students. The project proposes a health assessment programme to its community for giving an early awareness to threats of NCDs which is the alarming issue of the health of the Kerala youth.

The main objectives of the project are:

- To create a health data profile of the U. C. College students.
- To create an exercise module suited to the student's health status.

The context

The health assessment studies in Kerala show a frightening trend as the capital of diabetic and lifestyle diseases. Age adjusted cardiovascular mortality in Kerala is twice that of an American and thrice that of Japanese. With a semirural background, 49 % of the students of U C College are from low socioeconomic status.

The Practice

Activities:

Assessment of health related Physical fitness.

The parameters such as assessed are Height and Weight, Body fat percentage Cardio Respiratory Endurance, Abdominal Muscular Strength and endurance, Flexibility, Blood Pressure (BP), Hemoglobin (Hb), Blood cholesterol, Blood Sugar and Health survey - Questionnaire method.

Health Awareness programme

1. Seminars and workshops -
Life style diseases and First aid classes based on Health and life style, various exercise programmes.
2. Empowering the youth through variety physical activity classes
 - a. Yoga
 - b. Aerobics
 - c. Brisk walking
 - d. Cycling
 - e. Karate
 - f. Judo

Evidence of success

The data collected through the assessment indicated that 40% of the students have lack of Health related Physical fitness according to the standard norms. Through the training programmes offered by the Department of Physical Education, the Health related Physical fitness have improved.

Problem Encounter and resources required

The problem encountered is:

Lack of interest among students

Contact details

1	Name of the Principal	Dr. P.Thomas Mathew
2	Name of the Institution	Union Christian College
3	City	Aluva, Ernakulam
4	Pin Code	683102
5	Accredited Status	A
6	Work Phone	04842609194
7	Website	www.uccollege.edu.in
8	Mobile	9446479124
9	Fax	04842607534
10	E-mail	ucc@uccollege.edu.in

EVALUATION REPORTS OF DEPARTMENTS

DEPARTMENT OF ENGLISH

1. Name of the department : Department of English
2. Year of Establishment : 1921
3. Names of Programmes / Courses offered:
 - B. A. English Language and Literature
 - M. A. English Language and Literature
 - Ph. D
4. Names of Interdisciplinary courses and the departments/units involved
 - Open Course *English for Careers* for fifth semester CBCSS Undergraduate students of the College.
 - TPS-21 Day Training (ASAP Additional Skills Acquisition Programme) sponsored by the Government of Kerala; minimum of one course per year from 2013 onwards; collaborates with the Computer Science Department of the college. So far completed 5 batches with participants from all over Kerala State.
5. Annual/ semester/choice based credit system (programme wise).

Programme	Pattern
B. A. English Language and Literature	Semester - Choice Based Credit System
MA. English Language and Literature	Semester - Choice Based Credit System
Ph. D	<ul style="list-style-type: none"> • Pre-doctoral Course Work is conducted by the department. • Project/thesis guidance given by the research guides of the department.

6. Participation of the department in the courses offered by other departments:
 - Fifth semester CBCSS Undergraduate students of the department take courses offered by the departments of Botany, Zoology, Psychology, Mathematics, Economics, Malayalam, Physical Education, History, etc.
 - Faculty of the Department of English contributes to the courses offered (especially PG level) by the Department of Malayalam by giving lectures on various aspects of language, literature and literary theory.
7. Courses in collaboration with other universities, industries, foreign institutions, etc.
 - TPS-21 Day Training (ASAP Additional Skills Acquisition Programme) is conducted by the Department in collaboration with the Government of Kerala. The screening examination of the course (APTIS) is conducted in collaboration with the British Council.
8. Details of courses/ programmes discontinued (if any) with reasons. Nil
9. Number of teaching posts: 12 posts.

Name of the Post	Sanctioned	Filled
Professors	-	-
Associate Professors	3	3
Asst. Professors	10	10

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil, etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience
Dr. Ancy Eapen	M.A, Ph. D	Associate Professor	Gender Studies, Expatriate Fiction.	32
Dr. Jacob George C.	M.A. MPhil Ph D	Associate Professor	Canadian Literature ELT	30
Suma Mary Scaria	M.A. MPhil M.Ed.	Associate Professor	ELT	19
Rekha Nair	M.A. MPhil	Assistant Professor	Theatre, Drama.	9
Dr. Sonia Chacko	M.A, Ph.D	Assistant Professor	Indian writing in English	9
Cheri Jacob	M.A, M.Phil	Assistant Professor	Film Studies	9
Sheenu Varghese	M.A, B.Ed	Assistant Professor	Film Studies	8
Alwin Alexander	M.A, B.Ed,M.Phil, PGDT	Assistant Professor	Literary Theory	5
Asha Baby Mathews	M.A, B.Ed	Assistant Professor	Linguistics	5
Feneena S Mohamed	M.A, M.A (Linguistics), P.G.C.T.E (E.F.L.U)	Assistant Professor	Linguistics	4
Akhila Narayanan	M.A, M.Phil	Assistant Professor	Literary Theory	2
Anu S	M.A	Assistant Professor	Literature of the Diaspora	2

11. List of senior visiting faculty:

- Dr. David Haines, Queen's University of Belfast (August 4, 2014).
- Ms Mamta G. Sagar. Centre for Kannada Studies, Jnana Bharathi Campus, Bangalore University; Playwright, performance poet, columnist, translator and critic (12 December, 2014).

- Ms. Priya A S., Malayalam writer; August 2014.
- Ms. Summer Dunsmore; University of Berkeley, California (August 11, 2015).
- Dr. Majnu John, Johns Hopkins University, January 2016.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

	Academic Year	% of lectures by temporary faculty	Programme
1.	2011-12	8%	Undergraduate
2.	2011-12	4%	Post Graduate
3.	2012-13	Not applicable	
4.	2012-14	Not applicable	
5.	2014-15	Not applicable	
6.	2015-16	Not applicable	

13. Student -Teacher Ratio Programme wise).

BA English Programme			
Year:	I Year	II Year	III Year
Student-Teacher Ratio	550:12	450:12	42:9

MA English Programme		
Year:	I Year	II Year
Student-Teacher Ratio	16: 12	18: 12

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: **Nil** (The staff meets the salary of a Librarian for the Department Reading Room)

15. Qualifications of teaching faculty with DSc/ D.Litt/ PhD/ MPhil / PG.

Name	Qualification
Dr. Ancy Eapen	M. A, Ph. D
Dr Jacob George C.	M. A.; M. Phil; Ph. D
Suma Mary Scaria	M. A.; M. Phil; M. Ed.
Rekha Nair	M. A.; M. Phil.
Dr. Sonia Chacko	M. A, Ph. D
Cheri Jacob	M. A; M. Phil
Sheenu Varghese	M. A, B. Ed
Alwin Alexander	M. A, B. Ed, M. Phil, PGDT
Asha Baby Mathews	M. A.; B. Ed
Feneena S Mohamed	M. A (English Language & Literature); M. A (Linguistics), P.G.C.T.E (E.F.L.U)
Akhila Narayanan	M. A; M. Phil
Anu S	M. A

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.

4 Minor Research Projects of UGC

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Name of the faculty	Title	Grants Received
Dr. Ancy Eapen	—Creative Works as Quasi-Historical Documents: A Study of the Films and Novels set in the background of the Konkan-Koramandel Coast in the 14 th and Fifteenth Century.” 2012	1,20,000/-
Suma Mary Skaria	—The Role of the Media in Defining the Changing Faces of Womanhood in Kerala.” 2012-15	1,50,000/-
Dr. Sonia Chacko	—The Making of the New Woman: A Psycho-Social Analysis of the Impact of Women’s Magazines in Kerala.” 2012-15	1,20,000/-
Alwin Alexander	—Reconstituting the Self: A Dialogic Study of the Selected Works by Sarah Joseph and their Praxis of a Critical Theology of Liberation.” 2012-2015.	100,000/-
Total		4,90,000/-

18. Research Centre /facility recognized by the University:

Department of English became **an approved Research Centre** affiliated to **Mahatma Gandhi University in August 1990**. The Centre which has had the glory of producing 31 successful doctoral projects currently has 9 research scholars pursuing their doctoral degree.

19. Publications:

a) Publication per faculty: Refer the Annexure

20. Areas of consultancy and income generated:

Name of Faculty	Consultancy	Income
Dr. Jacob George C	ASAP Selection Committee SDE 2014	Rs.6000
	ASAP Selection Committee SDE 2015	Rs.6000
	Final Year BA	
	Question Paper setting 2015, University of Kerala	Rs.1000
Rekha Nair	UG Question paper setting (3 sets) Maharaja’s College	Rs.4500

Feneena S.	Question paper setting Maharaja's College 2015	Rs.2000
	Judging Committee, Baven's Vidya Mandir, Elamakkara 2012	Rs.2000
Akhila Narayanan	Question Paper setting, St. Teresa's 2016	Rs.1500
	CUSAT Elocution Judge	
	University Fest 2014, Judge in Elocution & Extempore competition	Rs.2000
	Baven's Vidya Mandir, Elamakkara 2013	Rs.2000

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards.

Name of faculty	2014-15	2015-16
Dr. Ancy Eapen	Chairperson, Board of Studies for Undergraduate English Programme, Syllabus Restructuring, Curriculum Revision, checking model question papers	Chairperson of M.A 4 th semester theory and Viva- Dissertation Valuation, Chairperson M.A 2 nd semester paper valuation. Member of the panel of subject-experts to select faculty in Affiliated Colleges under M.G University. Subject Expert for sanctioning new P.G courses in Affiliated Colleges under M.G University
Dr. Jacob George	Resource person and Interview Board member for ASAP.	Recognized as a research guide of M.G University. ASAP Interview Panelist.
Mr. Alwin Alexander		Walk with scholar programme, A.S.A.P
Ms. Akhila Narayanan		Walk with scholar programme, A.S.A.P

Membership in Editorial Boards

Name	Journal	Post held
Dr Jacob George C	<i>Journal of Indo-Canadian Studies</i> (ISSN 0972-330)	Editor
	<i>Journal of English Language and Literature</i> (ISSN 1412-3320) Soegijapranata University, Indonesia	Advisory Editor
Cheri Jacob K.	<i>International Film Festival of Kerala Official Daily Bulletin English</i> (for Department of Cultural Affairs)	Editor cum Correspondent
Alwin Alexander	<i>Journal of Indo-Canadian Studies</i> (ISSN 0972-330)	Assistant Editor
Akhila Narayanan	<i>Journal of Indo-Canadian Studies</i> (ISSN 0972-330)	Assistant Editor

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/ programme: 100%
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty.

Name of Faculty	Award	Year
Cheri Jacob K.	Kerala State Film Award for the best article on film.	2012
Dr. Jacob George C	Certificate of Accomplishment: Department of Higher Education, Government of Kerala.	2015
Alwin Alexander	Certificate of Accomplishment: Department of Higher Education, Government of Kerala.	2015
Akhila Narayanan	Certificate of Accomplishment: Department of Higher Education, Government of Kerala.	2015
Department of English	Five Stars Rating in the Additional Skill Acquisition Programme. Department of Higher Education, Government of Kerala.	2015

Awards / Recognitions received by students.

Name of student	Award/ Achievement	Year
Neenu Rajeev, II BA	<i>Kalathilakam</i> , MG University Youth Festival	2012
Shilpa Catherine III BA	Indian base-ball team member --played in south Korea.	2014
Meera Jacob III BA	Attended National Republic Day Parade	2015
Anandhu Suresh II BA	MG University Youth Festival First Prize Short story	2015
English Department Team	First Prize in Street Play Competition organized at St Teresa's College.	2015
II BA team: 1. Malavika V. 2. Agnes Edldho 3. Merin Martin 4. Gayatri M. R. 5. Devi Vandana G. 6. Benris	III Prize MG University Youth Festival Mime	2015
Anugrah Cherian II BA	MG University Net-ball I Prize	2015
Donna Achamma Ninan I BA	National Level Inter-University Western Group song I Prize	2015
Donna Achamma Ninan II BA	National Level Inter-University Western Group song II Prize	2016
Merly Eldhose II BA	National Service Scheme National Camp Youth Festival	2016

Meera Jacob III BA	Visited Bhutan in connection with NCC activities (Youth Exchange Programme)	2016
Aiju P. Andrews III BA	Participated in the National Games as a member of Kerala Senior Hockey Team	2016
Davood Aboobacker III BA	Participated in the National Games as a member of Kerala Senior Hockey Team	2016

24. Seminars/ Conferences/Workshops organized & the source of funding

- a) **UGC Sponsored National Workshop on *The Dynamics of Popular Cinema*** held on 15th and 16th March 2012—Coordinator: Rekha Nair.
- b) **UGC Sponsored Two-Day National Seminar on *Translation: Texts in Context*** on 14 & 15 September 2012—Coordinator: Dr. Ancy Eapen.
- c) **A One Day Regional Workshop on: *Beckett: Back to Back*** --19 December 2012—Coordinator: Cheri Jacob K. Funded by the Department of English, UCC.

25. Student profile programme/course wise:

Name of the Course/programme	Total Students	Students passed	% of pass
2011-'12 --UG	47	45	95.7
2011-'12--PG	20	11	55
2012-'13--UG	38	34	89.47
2012-'13--PG	13	10	76.9
2013-'14--UG	43	39	90.69
2013-'14--PG	14	3	21.4
2014-'15--UG	45	38	84.44
2014-'15--PG	13	8	61.5

26. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Sl. No	NET qualified students	Year
1	Dani Thomas	2014
2	Anjali Abraham	2013
3	Asmin N.	2014
4	Preethi Sarah	2013
5	Linda P. Joseph	2015
6	Anand Krishnamurthy	2015
7	Nazidha Khan S	2015

27. Student progression:

Chart representing student progression PG: 2011-2015

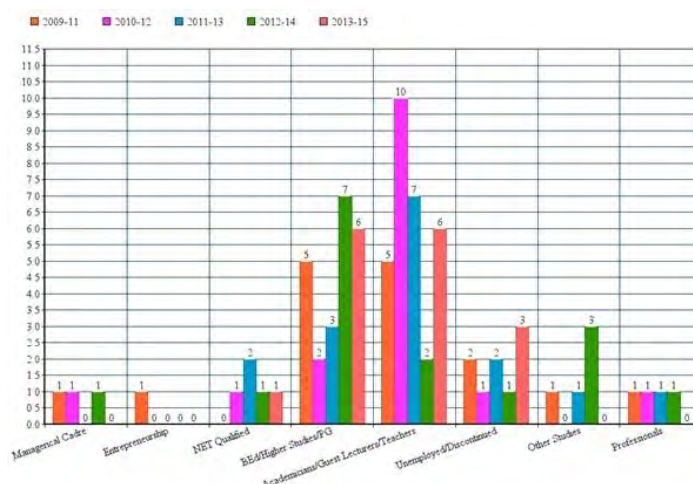
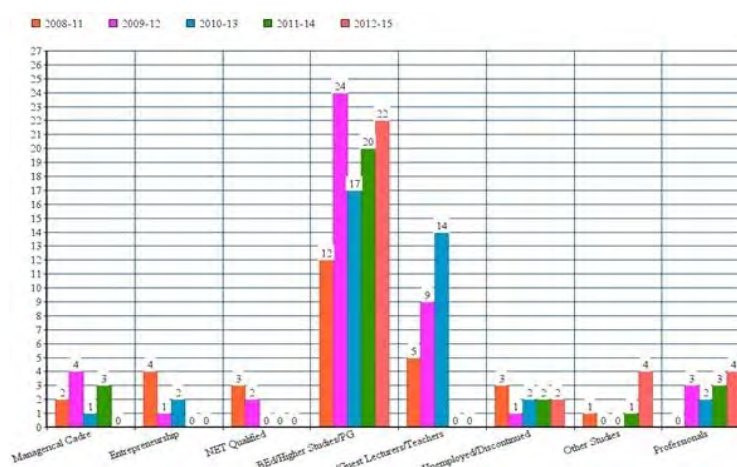


Chart representing student progression UG: 2011-2015



30. Details of Infrastructural facilities

a) Department Reading Room/Library: 875 books (hardcopies)

Reading Café

The current reading room, language lab, and the classroom computers are given access to two databases exclusively devoted to magazines –**Magzter** (Number: 3000) and newspapers—**Press display**--(Number: 4000). These magazines provide the learners: Fresh reading experiences, access to the latest GK, enhance reading skills and vocabulary, and help in the preparation for various entrance as well as competitive examinations.

b) Internet facilities for Staff & Students:

Department has 8 PCs, 1 laptop with internet facilities.

ICT Facilitated Classrooms for PG.

The current teaching scenario makes use of ICT integrated tools available in the department's instructional media centre. The department uses LCD projector, computers, CALL programmes, DVDs, powerful Wi-Fi connectivity, online chat-rooms, access to programmes like Moodle which enhance learner-teacher (facilitator) interaction, and 24x7 learning

experience. Future plans envisage the integration of MALL (mobile assisted language/literature learning), with intra-net and internet connectivity.

c) Digital Library & Research/Reference Resources.

Research requires exposure to the latest developments in the concerned fields. The department currently is connected to databases like EBSCO, PROQUEST and GALE. Being a university research department, it has become essential to regularize the membership in these data-bases so that uninterrupted connectivity to all significant knowledge banks would become an actuality rather than a possibility.

d) Department has Language Lab facility which can intake 5 students at a time.

31. Number of students receiving financial assistance from college, university, government or other agencies

College Scholarship 2010-2011 – 300/-	SC/ST/OBC- Non-creamy Layer and Minorities --UGC Sponsored Scholarship (1000/-)		
Vinitha (MA)	2010-11	2011-12	2012-13
Ashalatha (MA)	Subin Sudhakaran	Arya M P	Mariya Mathew
Arya MP (BA)	Noble B	Divya Dvakaran	Sandhya T V
Anjaly S (BA)	Anu Sivan	Anjali R	Vineetha V V
Divya Unni (BA)	Sruthy Prabhan	Riya Rafeekh	Lakshmi Chithra
Roshni Sree (BA)	Manu K T	Arya M P	Aswathy Balagopal
Reshma (BA)	Meera A A	Rabia K A	Arya J Namboodiry
Roshni Sree (BA)	Gayathri	Mariya Varghese	Shein S Simon
Emil George (BA)	Anu Ashokan	Naseema P J	Marjan A U
Sree Kala	Gireesh K R	Samitha Usman	Reshma K M
	Asmi A A		Chithra P Parthan
	Adeep Hussain		Ram Velayudhan
	Femina Abdulla		

Scholarships offered by the Department of English

- Alexander Mar Thoma Endowment Prize in English Final year BA/Bsc student on the basis of the highest aggregate mark obtained in English (Part I) Paper I & Paper II of the 1st and 2nd years 2013-14
Ajisha Sara Mohan- 350/-
- Smt. C L Saraswathy Amma Scholarship (Merit cum Means) M A English (both 1st & 2nd years) 2013-2014
Asmin N (I MA English); Linda Joseph (II MA English)
- Rev. T V John Memorial Prize (Instituted by Chechama Memorial Trust) For General English and Prose 2013-14
Lakshmy K T P
- A Aravamudham Iyengar Memorial Prize (Instituted by Chechama Memorial Trust) 2013-14- Tony Raju Varghese

English Department Endowment Prizes:

- Prof. C T Benjamin Proficiency Prize- 3 BA English- Sherin S Simon
- Prof. E Narayanan Nambiar Proficiency Prize Proficiency Prize- I BA English- Navami T S
- G D Gabriel Proficiency Prize- I BA English- Keziah Sabu
- Prof. P J Joseph Scholarship – 3 BA English- K A Rabia
- Prof. K R Joseph Scholarship -2 BA English- Shabnam K S
- Prof. Mathew C Abraham Scholarship- I BA English- Devi Vandana

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Remedial Coaching

Remedial Coaching is organized at Undergraduate / Postgraduate level with an aim to improve life & scholastic skills and proficiency in language of the students. The papers/subjects are chosen on the basis of the level of difficulty for students and they are tutored in the evening after regular class hours.

The programme is designed to:

- Elevate students' level of comprehension and strengthen their knowledge.
- Equip students with a strong foundation in the subject.
- Help learners pursue their higher studies purposefully and with confidence.
- Bring the learners to the same level as their successful classmates.

Student mentoring

The student mentoring system works with the help of class teachers and assistant class teachers who observe students over a period of three years in case of UG and two years in case of PG.

Students are given counseling and are encouraged to meet their tutors.

Teachers also get feedback from other teachers/departments.

Class teachers prepare a detailed report based on class room observation and evaluation of each student.

DESCRIPTION OF FUTURE PROJECTS & THEIR LEARNING OUTCOMES

(A) Teaching (UG)

1. Instructional Console(s) for the Visually Challenged.

There is an increase in the number of visually challenged learners who come to the department every year through the General English stream. The proposed project, which will be backed by several faculty members, will provide

guidance and instructional materials beneficial to the learning process taken up by the visually challenged. The programme also focuses on the production of audio-books, interactive materials, directly and indirectly linked to the curriculum. The console will promote self-learning and will help the visually challenged to be more independent and self-reliant.

2. Interactive Testing: Integrating ICT with Classroom Testing Practices.

Integrating information communication technology with classroom testing practices facilitates the creation of a virtual environment that transforms a traditional passive experience to one of discovery, exploration, and excitement in a less stressful setting. A computer-mediated testing environment lowers students' psychological barriers and inhibitions; and dramatically enables them to take tests freely. This could also enhance the student's critical thinking, problem-solving and communication skills. In addition, the project supports the Mahatma Gandhi University's policy to introduce e-learning and paperless assessments formats.

3. TBLI (Task-based Language Instruction) as a Viaduct for the Integration of Skills.

TBLI ensures better learner involvement and would make learning a dynamic exercise. The current instructional material, prescribed in the university curriculum, is often criticized for its lack of provision for TBLI. But the proposed project aims at the production of sharable pedagogical tools that would supplement the existing (conventional) teaching resources and promote a new teaching and learning culture in our part of the world.

4. Vocational Empowerment through Skill Based Training.

The current learner groups have become vocationally under-prepared even after spending 6 semesters on the campus and after working on an extremely challenging curriculum delivered in a short temporal span. The proposed project aims at providing the learner groups, extra-textual vocational skills directly connected with their curricular requirements. These training modules strengthened by opportunity for on-the-job-training are targeted at supplementing and empowering the learners with a strong practical content.

(B) Teaching (PG)

1. Establishment of Self Access Centre

The vision of the Self Access Centre (SAC) is to create a space for students that would provide resources, guidance and an environment to support their individual learning needs and goals. This centre would promote autonomous learning and enhance learner confidence. SAC would encourage learners to become more interactive with teachers and mentors. It would provide the right venue for remedial instruction and help the learners especially the mentally challenged ones (their number is also on the rise on the campus) to raise the level of perception and practical knowledge.

2. Setting up Moodle to Enhance Teaching-Learning Experience.

Higher education across the world is migrating to online platforms to extend and enhance the teaching-learning experience. Moodle is one such avenue, which allows proactive learning, ease of knowledge sharing and offers innovative tools for student-teacher assessment and evaluation. The department of English intends to tap this source to provide our undergraduate and postgraduate students a dynamic learning experience.

The department will deploy Moodle for:

- Sharing and distribution of course syllabus and reading materials prior to each semester and class.
- Extend classroom environment into a virtual medium where students can continue their discussion or raise queries
- Designing innovative tools and techniques for testing and evaluation.
- Timetabling, grading, feedback will be processed through Moodle.
- Online courses like technical writing; content writing will be offered through this platform.

Outcomes:

- Learning experience round the clock.
- Ready access to resources and courseware
- Maintain a track record of student performance thereby enabling systematic qualitative assessment of each student and the entire class over the duration of the course.

3. Professional Empowerment through Skill Based Training

PG students who usually end up negotiating the placement market become gravely disadvantaged in a scenario which demands practical training and work-experience. The proposed project looks at the possibility of integrating the curricular stipulations with possibilities of designing and implementing vocational programmes that would enrich the vocational preparedness of the learner groups. The project depends on the offer of the Government of Kerala to provide authenticity and acceptability for certification using the professional credibility of the British Council.

5. Simulation Centre for PG Students

The simulation centre uses all the existing infrastructural facilities of the department and is designed to give practical training to PG students. Selected students are involved in remedial teaching, abstract preparation, content writing, technical writing, etc. so that they will get a direct exposure to challenges and possibilities of getting into these professions in future. Constant monitoring and provisions for feedback require electronic equipment and the programme would reap rich dividends only with such ICT backing.

(C) Research**1. Digital Library & Research/Reference Resources.**

Research requires exposure to the latest developments in the concerned fields. The department currently is temporarily connected to databases like EBSCO, PROQUEST and GALE. Being a university research department, it has become essential to regularize the membership in these data-bases so that uninterrupted connectivity to all significant knowledge banks would become an actuality rather than a possibility.

2. MLA software for Quality Enhancement.

Along with access to information and research databases the centre feels the necessity to check the authenticity of research output along with its formal and structural accuracy. Purchase of MLA software package is expected to provide a shortcut to the achievement of all these goals.

(D) Extension**1. English Language and Accent Neutralization classes for Primary School Teachers.**

The main objective of the project is to ensure that primary school English teachers acquire/have writing and communication skills with specific focus on appropriate grammar, vocabulary and pronunciation. Among other problems, mother tongue interference is an obstacle in the acquisition of Standard English and the proposed classes would address this issue. Classes will be held twice a week for a 6 month period. The sessions will include interactive exercises, activities, worksheets and practical classes in the language lab. Formal and informal, written and oral evaluation will be conducted on a regular basis for each batch.

Outcomes:

The learner:

- Acquires vocabulary necessary for use in diverse situations.
- Masters sounds and their pronunciation.
- Achieves the potential for grammatically correct communication
- Since the learners function as teacher facilitators in primary classes their learner groups acquire correct/better English so that unlearning would not be required later in their case.

1. Translation Project

Translation Studies has emerged as a prominent field in the study of language with conflation of numerous ideas from linguistics, philosophy, literary/cultural studies, semiotics, anthropology and a host of other fields. In this context numerous translation projects have been initiated and realized mostly by leading publishing houses both within and outside the

state. However there is a serious lack in the area of translations with pure academic, cultural and linguistic interest. The department proposes a translation project to fill this lacuna. The activities envisaged under the project would include the task of identifying gaps, initiating and promoting good quality translation from Malayalam to English and vice versa, publication, training workshops, formation of a translator pool, and co-ordination of work by scholars. The primary area of focus would be fiction and non-fiction written by women writers from Kerala (Saraswathiamma, Rajalakshmi, Prof. Leelavathi, Sarah Joseph etc.). Translation of pedagogic materials (works prescribed in University and School syllabi) would be given priority. The project would promote academic interest in the literary and non-literary works from the regional language.

2. TRAC: Technology and Research Assisted Content Development

This endeavor would ensure the collaborative participation of students of both post-graduate and under-graduate levels with teachers which would give the students an exposure to content development, material production and distribution. Schools in the near vicinity with potential, but poor infrastructure/resources will be identified and the department, in consultation with the faculty there, would produce need-based educational material, which can be run along with the current syllabus, as an aid.

(E) Any Other:

Refurbishing of Instructional Media Centre.

The existing reading room cum instructional media centre of the department urgently requires refurbishing. It has become essential to air-condition the room so that it doesn't become a torture to the learners during the warmer months of the year. The centre also requires fixed power-backup system to ensure uninterrupted academic activity. For aesthetic reasons and for the enhancement of visual appeal it is essential to refurnish the room with new curtains.

DEPARTMENT OF MALAYALAM

1. Name of the Department : Department of Malayalam
2. Year Established : 1969
3. Names of the Programmes/Courses offered : B.A, M.A, Ph.D
4. Names of inter disciplinary courses and the departments /Units involved : Nil
5. Annual/ semester/choice based credit system : The Choice Based Credit and Semester System (CBCSS) of M G University for
UG Malayalam (6 semesters) The Post Graduate Credit and Semester System (PGCSS) of M G University for PG Malayalam (4 semesters).
6. Participation of the department in the courses offered by other departments : Teaches Open course (Journalism) for V semester CBCSS Undergraduate students of the College.
7. Courses in collaboration with other universities, industries, foreign institutions : Short term 'aksharasloka' Training Course is conducting in the Department with financial assistance of the Alumni Association of the College in North America (UCCAANA)
8. Details of courses/ programmes discontinued (if any) with reasons : Nil
9. Number of teaching posts : Nil

Name of Post	Sanctioned	Filled
Associate Professors	4	4
Asst. Professors	6	6

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./Ph.D. / M. Phil. etc.)

	Name	Qualification	Designation	Specialization	Teaching Exp.
1.	Dr. V. P. Markose	M.A, M.A, B. Ed, M. Phil, Ph. D	Associate Professor	Linguistics and Grammar	22 yrs.
2.	Dr. Muse Mary George	M.A, B. Ed, M. Phil, Ph. D	Associate Professor	Novel, Short Story, Women' studies	21 yrs.
3.	Dr. M. I. Punnoose	M.A, B. Ed, M. Phil, Ph. D	Associate Professor	Folklore and Cultural studies	21 yrs.
4.	Dr. Mini Alice	M.A,B. Ed, M. Phil, Ph. D	Assistant Professor	Women' studies	19 yrs.
5.	Capt. K. S. Narayanan	M.A, B. Ed, M. Phil,	Associate Professor	Sanskrit	19 yrs.
6.	Dr. Vidhu Narayan	M.A, B. Ed, M. Phil, Ph. D	Assistant Professor	Linguistics, Grammar, Translation, Ancient Literature & Folklore	10yrs
7.	Dr. Sibum. Eapen	M.A, M.A, B. Ed, Ph. D	Assistant Professor	Poetry, Film studies, Linguistics	10yrs
8.	Dr. Aju K. N.	M.A, Ph. D, P.D.F.	Assistant Professor	Folklore, Cultural studies & Film studies	15yrs
9.	Mr. Saju Mathew	M.A, B. Ed	Assistant Professor	Short Story and Novel	10 yrs
10.	Mrs. Shimi Paul Baby	M.A, B. Ed	Assistant Professor	Grammar, poetry, Ancient Literature	8 yrs

11. List of senior visiting faculty : Nil

12. Percentage of lectures delivered and practical classes handled by temporary faculty(programme wise) : UG - 10%
PG - 10%

13. Student - Teacher Ratio (programme wise) : UG – 14:1
PG – 3:1
Ph. D - 8:1

14. Number of academic support staff (technical) and administrative staff sanctioned and filled : Nil

15. Qualifications of teaching faculty with DSC / DLitt/ PhD / MPhil/ PG.

Sl.No.	Name	Qualification
1.	Dr. V. P. Markose	M.A (Malayalam), M.A(Linguistics), M. Phil, Ph. D
2.	Dr. Muse Mary George	M.A (Malayalam), M. Phil, Ph. D
3.	Dr. M. I. Punnoose	M.A (Malayalam), M. Phil, Ph. D
4.	Dr. Mini Alice	M.A (Malayalam), M. Phil, Ph. D
5.	Capt. K. S. Narayanan	M.A (Malayalam), M. Phil,
6.	Dr. Vidhu Narayan	M.A (Malayalam), M. Phil, Ph. D
7.	Dr. Siby M. Eapen	M.A (Malayalam), M.A (English), Ph. D
8.	Dr. Aju K. N.	M.A (Malayalam), Ph. D
9.	Mr. Saju Mathew	M.A (Malayalam)
10.	Mrs. Shimi Paul Baby	M.A (Malayalam)

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

: One (international);

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sl. No	Name of the Investigator	Title of the Project	Amount	Funding Agency
1.	Dr. Mini Alice	Swathanthryathinte Prathinidhanangal Malayalathile Sthreekavithakalil	Rs.50000/-	UGC

18. Research Centre/ facility recognized by the University : Yes

19. Publications

a) Publications per Faculty : Separate list Attached.

b) Number of papers published in peer reviewed journals (national/ international) by faculty and students : 12

c) Number of publications listed in International Database Monographs Chapter in Books Books Edited Books with ISBN/ISSN numbers with details of publishers Citation Index SNIP SJR Impact factor h-index	:	Separate list Attached.
--	---	-------------------------

20. Areas of consultancy and income generated

Nil

21. Faculty as members in a) National committees b) International Committees
c) Editorial Boards:

1.	Dr. V. P. Markose: Member, Editorial Board, Bhoomi Malayalam Research Journal (ISSN No.2394-9791)
2.	Dr. Muse Mary George: Member, Editorial Board, Bhoomi Malayalam Research Journal (ISSN No.2394-9791)
3.	Dr. M. I. Punnoose: Member, Editorial Board, Bhoomi Malayalam Research Journal (ISSN No.2394-9791)
4.	Dr. Mini Alice: Member, Editorial Board, Bhoomi Malayalam Research Journal (ISSN No.2394-9791)
5.	Capt. K. S. Narayanan: Member, Editorial Board, Bhoomi Malayalam Research Journal (ISSN No.2394-9791)
6.	Dr. Vidhu Narayan: Member, Editorial Board, Bhoomi Malayalam Research Journal (ISSN No.2394-9791) Life Member, Bhandarkar Oriental Research Institute, Pune Life Member, International School of Dravidian Linguists
7.	Dr. Sibu M. Eapen: Member, Editorial Board, Bhoomi Malayalam Research Journal (ISSN No.2394-9791)
8.	Dr. Aju K. N.: Member, Editorial Board, Bhoomi Malayalam Research Journal (ISSN No.2394-9791) Member, Editorial Board, Tapasam Research Journal
9.	Member, Editorial Board, Bhoomi Malayalam Research Journal (ISSN No.2394-9791) Member of senate, M.G.University
10.	Mrs. Shimi Paul Baby: Member, Editorial Board, Bhoomi Malayalam Research Journal (ISSN No.2394-9791)

22. Student projects

a) Percentage of students who have done in-house projects including interdepartmental/programme : 100%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories /Industry/ other agencies : NA

23. Awards/Recognitions received by faculty and students : Two

24. List of eminent academicians and scientists /visitors to the department: List Attached

25. Seminars/ Conferences/ Workshops organized & the source of funding

a) State

- Seminar Conducted jointly with V. T. Smaraka Trust
- One day Seminar Conducted in connection with M.P.Paul Memorial Award function

b) National

- Ponjikkara Rafi CN Sreekantan Nair Seminar organised with the financial assistance of Kendra Sahithya Akademi
- Vidwan P.G.Nair National Seminar Conducted Every Year

c) International

Nil

26. Student profile programme /course wise : Student Profile file Created.

27. Diversity of Students : 6 Advanced Learners in U.G.Courses

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, UGC JRF – 2 Students (2011-2015)
Civil services, Defense services, etc. : UGC NET – 8 Students (2011-2015)

29. Student progression :

30. Details of Infrastructural facilities

a) Library : 800 books in the Dept. library

b) Internet facilities for Staff & Students : Four desktop Computers with internet connection Wi-Fi Enabled

c) Class rooms with ICT facility : N A

d) Laboratories : N A

31. Number of students receiving financial assistance from College, University, Government or other agencies : 15 students

32. Details on student enrichment programmes (special lectures /workshops /seminar) with external experts :

- Special Lectures given to students by eminent scholars
 - Teaching methods adopted to improve student learning
 - Special class for weak students and try to bring them up at least to the average level
 - Remedial Coaching For English Conducted.
 - Recorded Classes for advanced Learners

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Our teachers have actively participated in various extension activities.
- Teachers are in charge of different clubs and organizing programmes for the welfare of society.

DEPARTMENT OF HINDI

1. Name of the Department : Hindi
2. Year of Establishment : 1944
3. Names of Programmes /
Courses offered : Additional Language – Hindi for I, II, III, and IV Semester CBCSS Undergraduate Students
4. Names of Interdisciplinary courses
and the departments / units involved : Nil
5. Annual / semester / choice based credit system (programme wise)
Choice Based Credit and Semester System (CBCSS) of MG University.
6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other universities, industries, foreign institutions, etc. : Nil
8. Details of courses / programmes discontinued (if any) with reasons : Nil
9. Number of Teaching posts

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Asst. Professors	02	02

10. Faculty profile with name, qualification, designation, specialization (D.Sc. / D. Litt. / Ph. D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years Of Experience
R. S. Radhika	M. A., M. Phil.	Asst. Professor	Hindi Language and Literature	05 years
Dr. Ruby Elsa Jacob	M. A. , Ph. D.	Asst. Professor & Head	Hindi Language and Literature	05 years

11. List of senior visiting faculty : Nil
12. Percentage of lectures delivered and practical classes handled (programme wise)
by temporary faculty : Nil
13. Student – Teacher Ratio (programme wise) : NA
14. Number of Academic support staff (technical) and administrative staff ;
sanctioned and filled : Nil

15. Qualifications of teaching faculty with D. Sc / D . Litt / Ph . D. / M. Phil . /PG.

Name	Qualification
R S Radhika	M. A. , M. Phil
Dr. Ruby Elsa Jacob	M. A. , Ph. D.

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : One Minor Research Project of UGC

17. Departmental projects funded by DST – FIST; UGC, DBT, ICSSR etc. and total grants received

Name of the Faculty	Title	Grants Received
Dr. Ruby Elsa Jacob	The Agony of Women during Indian Sub – continent Partition : A Comparative Study in the scenario of Hindi & English Partition Literature	1.65 lakhs (2015 - '16)

18. Research Centre / facility recognized by the University : Nil

19. Publications :

a) Publication per faculty :

Number of papers published in peer reviewed journals (National/ International) by faculty and students : See the annexure

Number of publications listed in International Database (For eg : Web of Science , Scopus , Humanities International Complete , Dare Database – International Social Sciences Directory , EBSCO host , etc.) : Nil

Chapter in Books : 01

Books Edited : 01

R S Radhika : An Article based on the Poetry Collection entitled '*Bhoomikayein Khatam Nahin Hoti*' by Harishchandra Pandey was published in the book entitled '*Kavita Ka Varthaman*' edited by Dr. P. Ravi.

Books with ISBN / ISSN numbers with details of publishers : Nil

20. Areas of consultancy and income generated : Nil

21. Faculty as members in

a) National Committees b) International Committees c) Editorial Boards

Dr. Ruby Elsa Jacob

Member of '*Bharatiya Sahitya Pratishthan*', a registered literary organization (National)

22. Student Projects

- a) Percentage of students who have done in – house projects including inter departmental / programme : Nil
- b) Percentage of students placed for projects in organizations outside the institution i.e. Research laboratories / Industry / other agencies : Nil

23. Awards / Recognitions received by faculty and students

Dr. Ruby Elsa Jacob	<i>Sahitya Puraskar – 2015</i> by Bharatha Patrika Trilingual Monthly for <i>Best Research Work.</i>
---------------------	--

24. List of eminent academicians and scientists / visitors to the department : Nil

25. Seminars / Conferences / Workshops organized & the source of funding

- a) National : Nil
- b) International : Nil

26. Student profile programme / course wise : Nil

27. Diversity of students : Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense services, etc.? : Nil

29. Student Progression : Nil

30. Details of Infrastructural facilities

- a) Library : Departmental Library consisting of 1025 books covering almost all branches of literature.
- b) Internet facilities for Staff & Students : Department has a system and a laptop with Internet facilities.
- c) Class rooms with ICT facility : Nil
- d) Laboratories : Nil

31. Number of students receiving financial assistance from college , university , government or other agencies

Scholar ship	2015	2014	2013	2012	2011	2010
Hindi Scholarship	04	04	-	-	-	-
Prof. P K Narayana Menon Memorial Prize	01	01	01	01	01	01

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts : Nil

33. Teaching methods adopted to improve student learning

- Lecture Method

- Debate & Discussion sessions in order to improve speaking skills in Hindi
- Conducting Test papers
- Inspiring students to frame questions
- Assigning home assignments
- Remedial coaching for slow learners
- Reviewing previous question papers
- Scholar Support Programme

34. Participation in Institutional Social Responsibility (ISR) and Extension activities : Nil

35. SWOC analysis of the department and Future plans

<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> • Committed & competent teaching faculty ensures team spirit & synergy • A very good teacher – student rapport. Subject is popular among students at the general level. • Student's voice is registered through the Manuscript Magazine every year, which assures the development of a constructive and productive atmosphere between students belonging to different departments. 	<p style="text-align: center;">Weakness</p> <ul style="list-style-type: none"> • Subject not taught as a main subject. • Financial constraints in organizing invited talks & seminars. • Limitations imposed by University syllabus.
<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> • Possibility of introducing Hindi Course as Main subject. • Promotion of Hindi language & literature through organizing various literary activities. • Conducting Communicative Hindi classes. 	<p style="text-align: center;">Challenges</p> <ul style="list-style-type: none"> • Surviving as a single, general level subject. • Lack of adequate financial resources.

Future Plans :

- To introduce Hindi as a major subject at B. A. Level.
- Interaction of students with eminent personalities by organizing lectures/ workshops / seminars.
- To conduct inter collegiate Quiz / Debate competitions.
- Multi-disciplinary workshops / talks with other departments.
- Take up more Minor Research Projects.
- Subscribe to more journals & procure more books for the Department Library.
- To release DASTAK , department Manuscript magazine in printed form.

HONOURS & AWARDS

Name	Awarded Honour
Dr. Ruby Elsa Jacob	<i>Sahitya Puraskar – 2015 awarded by Bharatha Patrika Trilingual Research Journal (ISSN 2277 – 5471) for Best Research Work</i>

PARTICIPATION IN INTERNATIONAL / NATIONAL SEMINARS :**R S Radhika*****International Seminars***

1. '*Teaching Hindi in Non – Hindi Speaking Areas*' - Department of Hindi , St. Teresa's College , Ernakulam. (4 &5 February 2013) **National Seminars**
2. '*Stree Vimarsh Aur Samakaleen Hindi Sahitya*' - Department of Hindi , SSUS , Kalady. (28 February - 01 March 2013)
3. '*Samakaleen Hindi Upanyas Ke Vividh Aayaam*'- Department of Hindi , SSUS , Kalady (16-18 December 2013)
4. '*Hindi Sahitya Ko Bhishm Sahni Ki Den*'- Department of Hindi , SSUS , Kalady (28-30 January 2015)
5. '*Sampradayikata Aur Sahitya*'- Department of Hindi,SSUS,Kalady & VIKALP (17 October 2015)
6. Attended a three day UGC DSA National Seminar on *Navajagaran Kaleen Hindi Aur Malayalam Katha Sahitya* Conducted by the Department of Hindi, Cochin University of science & Technology Kochi on 17,18 & 19th March 2016.

Dr. Ruby Elsa Jacob

International Seminars

1. UGC International Seminar on “ ***Hindi Bhasha : Swatv , Vinimay Aur Pratirodh***” –Department of Hindi , CUSAT(15/12/2015 – 17/12/2015)
2. “ ***Zameen Aur Jal Se Judi Samvedana aur Samakaleen Hindi Literture*** ” [*The Dialectics of water and soil in Contemporary Hindi Literature*] - Department of Hindi , St. Teresa’s College , Ernakulam (18 & 19 August 2016)

National Seminars

1. Attended & *presented a research paper* in the Three day UGC - DSA National Seminar on ***Navajagaran Kaleen Hindi Aur Malayalam Katha Sahitya*** conducted by the Department of Hindi, Cochin University of science & Technology , Kochi (17,18 & 19 March 2016.)
2. UGC sponsored Two Day National Seminar on “***Universalisation in Post – Seventy Hindi Literature*** ” - Department of Hindi NSS Hindu College, Changanacherry (5 & 6 September 2013)
3. UGC Two Day National Seminar on “***Literature of Ramvilas Sharma*** ” - Department of Hindi CUSAT (7&8 February 2013)
4. UGC National Seminar on “***Yoga for Health , Cure & Longevity*** ” - Department of Physical Education , St. Joseph’s College for Women , Alappuzha (15&16 November 2011)

DEPARTMENT OF ECONOMICS

1. Name of the Department : ECONOMICS
2. Year of Establishment : B A 1971: MA 1981
3. Names of Programmes / Courses Offered : B. A and M. A. ECONOMICS
Ph. D PROGRAMME

4. Names of Interdisciplinary courses and the departments/units involved

The Department offers open course (Environmental Economics) for fifth semester CBCSS Undergraduate students of the College

5. Annual/ semester/choice based credit system (programme wise)

- a) The Choice Based Credit and Semester System (CBCSS) of M G University for the UG Economics Programme (6 semesters)
- b) The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG Economics (4 semesters).

6. Participation of the department in the courses offered by other departments

The Department offers a Complimentary course for B. A History and Open course (Environmental Economics) for fifth semester CBCSS Undergraduate students of the College.

7. Courses in collaboration with other universities, industries, foreign institutions- Nil

8. Details of courses/ programmes discontinued (if any) with reasons – Nil

9. Number of teaching posts (Permanent)

	Sanctioned	Filled
Professors	0	0
Associate Professors	02	02
Assistant Professors	06	06
Total	08 (7 + 1 Political Science)	08

Name	Qualification	Designation	Specialization	No. of Years of Exp.
Dr Rajan Varughese	M. A., Ph. D.	Assoc.Prof.	Public Economics	32
Ms. Suni George J	M. A., M. Phil.	Assoc. Prof.	Industrial Economics	29
Dr. Sunil Abraham Thomas	M. A., M. A., M. B. A.	Assist. Prof.	Macro Economics	11
Ms. G Geethika	MA	Assist. Prof.	Political Science	8
Ms. Liji Lawrence	MA	Assist. Prof.	Micro Economics	6

Ms. Nino Baby	M. A.	Assist. Prof.	Development Economics	6
Ms. Rajalakshmi. R	M. A., M. Phil.	Assist. Prof.	Development Economics	5.2
Dr Ann George	M. A., M. Phil. Ph. D., P D F	Assist. Prof.	Labour Economics	1

1. Faculty profile with name, qualification, designation, specialization,

11. List of senior visiting faculty

Prof Irudaya Rajan	Centre for Development Studies, Trivandrum
Dr. Surajit Das	JNU, New Delhi
Dr. K..K. George	Director, CSES, Kochi
Prof Rajan Gurukkal	Professor, IISC, Bangalore
Dr. Mathew Kurian	Dr. K N Raj Centre, Kottayam
Dr. P .S. Mohankumar	Former HOD, SS College Kalady
Dr. Harikumar	Professor, CUSAT, Kochi
Dr. Martin Patrick	Director, Rural Academy of Management Studies, Cherai
Dr. Latha Nair	Professor, St Teresa's college, Ernakulam
Dr. K.V. Kunhikrisnan	Former Registrar,
Dr. Visakha Varma	Professor (Retd) Maharajas College, Ernakulam

12. Percentage of lectures delivered and practical classes handled (programme wise)
by temporary faculty : Nil

13. Student -Teacher Ratio (programme wise)

B. A. Economics – 22: 1

M. A. Economics – 5:1

Sanctioned	0
Filled	0

14. Number of academic support staff (technical) and administrative staff sanctioned and filled NA

15. Qualifications of teaching faculty with

Qualification	
D. Sc	0
D. Litt	0
Ph. D.	3
M. Phil.	3

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Name	Agency	Amount
Ms. Liji Lawrence	UGC(minor)	Rs.1,15,000
Ms. Nino Baby	UGC (minor)	Rs.1,00,000
Ms. Rajalakshmi R.	UGC (minor)	Rs.1,30,000

17. Departmental projects funded by DST –FST, UGC, DBT, ICSSR, etc. and total grants received : Nil

18. Research Centre / facility recognized by the University:

The Department has been recognized as the M. G. University Research Centre.

Research Guides - 3

1. Dr. C A Antony -
2. Dr. Rajan Varughese
3. Dr. Rejimon P M

19. Publications

Publications per Faculty

Name of the Faculty	No of Publications
G. Geethika	2
R. Rajalakshmi	1
Dr. Ann George	6

Number of papers published in peer reviewed journals (National/ International) by faculty

Sl No	Author	Name of the Article	National/ International	Journal
1	G. Geethika	Women Labour migrants and Kerala: A human rights approach with special reference to health and sanitation issues	Seminar proceedings/ National	Proceedings of Seminar on Human Rights. Issues of the Migrant Labourers in Kerala.
2	G. Geethika	TRIPS to TRIPS-Plus: An Overview of the Indian Generic Drug Industry & Some Newfound Hurdles	National	<i>Indian Journal of Politics and International Relations.</i>
3	Rajalakshmi R.	Migrant Labour Registration and violation of Human rights in Kerala: Some legal perspective	Seminar proceedings/ National	Proceedings of Seminar on Human Rights. Issues of the Migrant Labourers in Kerala.

4	Dr. Ann George	Explicating the capability approach through the voices of the poor. A case study of waste picking Women in Kerala	International	Journal of Human development and capabilities
6	Dr. Ann George	Changing Cities and Changing Lives: Development Induced Displacement in Kochi, Kerala	International	International Journal on Urban Environment. Vol 1, issue 1. July 2015
7	Dr. Ann George	Being Employed At the Lower End. Going through And Beyond the Narratives of Waste Picking women in Kerala	National	The Indian Journal of Labour Economics vol 57, No 2, 2014
8	Dr. Ann George	Education of Poor in Kerala – Achievements, aspirations and orientations”	National	Journal of Educational Planning and Administration. Vol XXVIII, No 3, July 2014, pp 235-248
9	Dr. Ann George	Being Less Equal: Narratives of Poor waste Picking Women in Kerala on inequality	National	Indian Journal of Human Development. Volume 7 No January – June , 2013
10	Dr. Ann George	Corporate Governance and child Labour	National	Economic and Political Weekly, Vol XLVII No 50, December 2012

➤ Number of Publications listed in international database

Nil

➤ Monographs

1

SI No	Author	Name of the paper	National/ International	Journal
1	Dr. Ann George	After – life of Mobile Phones: Waste or return to production	National	Working Paper No WP 07/2014 Institute for Human development New Delhi.

➤ Chapters in Book

SI No	Name of the Author	Title of the Chapter	Title of the book	Publisher
1	Ms. Nino Baby	Women on Wheels: The <i>She-taxi</i> Initiative in Kerala as a Strategy for Empowerment of Women	Women's Empowerment: A Strategy for Development	Bookwell

➤ Books Edited

SI No	Name of the Author	Title of the book	Publisher
1	Dr. Rajan Varughese (co-authored)	Swayambharana College : Sankalpam Yadharthyam (2015)	SPCSS, National Book Stall (NBS)
2	Dr. Rajan Varughese (edited)	Encounters : A University on Trial (2012)	SPCSS, National Book Stall (NBS)

➤ Books with ISBN/ISSN Numbers

➤ Citation Index Nil

➤ SNIJ Nil

➤ Impact Factor Nil

➤ h-index Nil

20. Areas of consultancy and income generated Nil

21. Faculty as members in a) National b) international c) Editorial boards

Ms. Suni George J

- Member of Curriculum Review committee, M G university
- Member Board of studies, M G University, Kottayam

22. Student Projects

a) Percentage of students who have done in-house projects including inter departmental/programme : 100 %

b) Percentage of students placed for projects in organizations outside the institution

10% in various Panchayat offices

5% in cooperative banks and societies

5% in various Government owned organizations

23. Awards / Recognition received by faculty and students -

Faculty – Nil

Students – for their excellence in sports and arts

24. List of eminent academicians and scientists / visitors to the department

Prof. Irudaya Rajan	Centre for Development Studies, Trivandrum
Dr. Venkatesh Athreya	Professor, Pondicherry University
Prof. Praveen Jha	JNU, New Delhi
Dr. Prabhat Patnaik	Professor, JNU New Delhi
Prof. Amit S Ray	Director, CDS, Trivandrum
Dr. Surajit Das	JNU, New Delhi
Dr. K.K George	Director, CSES, Kochi
Dr. Susan Thomas	Professor, IGIDR, Mumbai
Dr. B Ekbal	Former VC, Kerala University
Mr. C J George	MD, Geojit Securities
Prof. M.A Oommen	Emeritus professor, ISS, New Delhi
Dr. Anuradha Balaram	Member secretary, Kerala State Planning Board
Prof. Rajan Gurukkal	Professor, IISC, Bangalore
Justice K.T Thomas	Retired Judge, Supreme Court of India
Dr. T. M. Thomas Issac, MLA	Former Fellow Centre for Development Studies, Trivandrum & Former Finance Minister, Kerala.
Dr. K.M. Seethi	Professor, School of International Relations & Politics & Director, KN Raj Centre, M. G. University
Dr. Shaji Varkey	Professor, Department of Political Science, Kerala University
Dr. Jose Sebastian	Associate Professor at <i>Gulati Institute</i> of Finance and Taxation, Trivandrum
Dr. D. Prasanth	Chief, Plan co-ordination Division, Kerala State Planning Board, Trivandrum
Dr. D. Narayana	Former Director, Gulati Institute of Finance and Taxation, Trivandrum
Dr. Harikumar S.	Professor, Department of Applied Economics, Cochin University
Dr. Martin Patrick	Director, Rural Academy of Management Studies, Cherai
Rev. Prof K V Paulose	Former HOD, Department of Economics, Baseliious College, Kottayam
Mr. Midhun V.	Assistant Professor, Govt. Law College, Trivandrum
Dr. Tomy Varghese	

Mr. R. Mohan	Additional Commissioner, Income Tax Department, Kochi)
Dr. Mathew Kurien	Joint Director, KN Raj Centre, Mahatma Gandhi University, Kottayam
Dr. C.A. Antony	Director, School of Management Studies, UC College, Aluva
Dr. Sunil P. Ilayidam	Professor, Sree Sankara University of Sanskrit, Kalady
Dr. K.N. Raghavan IRS	Customs Commissioner, Kochi
Dr. P.S. Mohanakumar	DC School of Management, Technopark
Dr. P.A. Mathew	Director, FISAT Business School, Kochi
Dr. N.J. Kurien	Professor, Centre for Social Development, New Delhi
Dr. N. Ajithkumar	Former HOD & Principal, Cochin College, Ernakulam
Dr. K.P. Mani	HOD, Department of Economics, University of Calicut

25. Seminars/ Conferences/Workshops organized & the source of funding National and State

Sl No	Date	National/ State	Topic of the Seminar	Agency
1	5, August 2015	National	Secularism and Religion in the context of Human rights	UGC
2	3, December, 2014	State	Tectonic Shifts in Kerala Society and Economy	
3	23 rd - 24 th October 2014	National	Major Issues in Centre –State Financial Relations In India	UGC
4	8 th March 2014	State	Gold Smuggling in Kerala	
5	19 th December 2013	State	Knowledge Economy and India	
6	19 th January 2013	State	Economic development Vs Social Development	
7	21 st August 2013	State	Workshop on Research Methodology	
8	23 rd March 2013	State	Food Nutrition Security in India	
9	27 th September 2012	State	Workshop on Research Methodology	
10	22 nd February 2012	State	Approaches to Twelfth Five Year Plan	

26. Student profile programme/course wise:

BA Economics: 70 % of the total seats sanctioned are filled through centralized allotment process of Mahatma Gandhi University, another 20 % through management quota, and remaining 10 % through community quota. Total seats sanctioned 60

Year	Applications Received	Selected	Enrolled for Exams		Pass Percentage
			Male	Female	
2010		60	17	40	96 %
2011		60	18	38	79 %
2012		60	15	42	84 %
2013		60	11	40	84 %
2014		60	14	41	81%
2015		60	13	41	81%

MA Economics: 70 percentage of the total seats sanctioned are filled through Centralized Allotment Process of Mahatma Gandhi University, another 20 % through management quota, and remaining 10 % through community quota. Total seats sanctioned 20

Year	Applications received	Selected	Enrolled for Exams		Pass Percentage
			Male	Female	
2010		20	3	10	84%
2011		20	2	17	52%
2012		20	3	17	80%
2013		20	2	14	81%
2014		20	2	10	50%
2015		20	2	15	70%

27. Diversity of Students:

BA Economics

Name of the Course	% of students from the same state	% of students from other states	% of students from abroad
2010	100%	0	0
2011	100 %	0	0
2012	96.7.%	3.3	0
2013	98.4%	1.6%	0
2014	96.7%	3.33	0
2015	98.15%	1.85%	0

MA Economics

Name of the Course	% of students from the same state	% of students from other states	% of students from abroad
2010	100%	0	0
2011	100 %	0	0
2012	95%	5%	0
2013	95%	5%	0
2014	95%	5%	0
2015	95%	55	0

28. How many students have cleared national and state competitive examinations?

8 students cleared UGC - NET Examinations

29. Student progression:

Student progression against enrolled	2008- 11	2009- 12	2010- 13	2011- 14	2012- 15
UG to PG	10 %	15 %	20%	18%	20%
PG to MPhil	2%	0	1%	0	-
PG to PhD	0	5%	0	0	0
PhD to PDF	0	0	0	0	
Employed					
Campus Placement	2%	1%	0	0	-
Other than campus recruitment	10%	5%	10%	10%	-
Entrepreneurship / Self Employment	10%	12%	10%	12%	1

30. Details of Infrastructural facilities

- a) Department Library : 300 titles in department Library
- b) Internet Facility for staff and Students : Fully Wi-Fi enabled Department
- c) Class rooms with ICT facility : Yes
- d) Laboratory : NA

31. Number of students receiving financial assistance from Government – e grants

BA Economics and MA Economics

2011-11	2011-12	2012-13	2013-14	2014-15
60	43	34	43	32

32. Details on student enrichment programmes with external experts

Following enrichment programs are conducted regularly by the Department

- Orientation Sessions for I BA and IMA Students
- Career Guidance classes for final year students
- Research methodology classes for MA Students
- Self-Development classes by experts
- Department Association meets every week.

33. Teaching methods adopted to improve student learning

- Group discussions
- Lecture method
- Remedial Classes
- Seminars
- Peer teaching
- Continuous Evaluation

34. Participation in Institutional Social Responsibility and extension Activities

Department is conducting a Socio-Economic survey to identify the prospects and problems of Karumaloor Grama Panchyat, Aluva

35. SWOC Analysis

STRENGTH

- Faculty – strong research background, publications, undertaken projects
- Merit based Admission of students and Merit based Appointment of teachers
- Strict adherence to government norms of reservation

WEAKNESS

- Poor quality of student intake.
- Limitations of physical infrastructure
- Limitations imposed by university structure

OPPORTUNITIES:

- Changing economic environment – prepare students for higher studies in prestigious institutions – training to students for competitive examinations – training students for national level examinations like NET< JRF, GATE, IES etc
- Increased demand graduates of Economics

CHALLENGES

- Deteriorating quality of students consequence of proliferation of professional college in self-financing stream
- Paucity of funds for research and extension activities -

FUTURE PLANS

- Ensuring Better and improved infrastructural facilities for students and faculties including physical infrastructure
- Starting innovative programs
 - MPhil, Diploma programmes in Government Finance,
 - Equity studies,
 - Environmental studies,
 - Women empowerment,
 - Multidimensional poverty Index)
- Community Outreach programmes (Socio-economic surveys, Preparation of Human Development Index for Local Areas)

Specific Plans of the Department

Teaching and Learning

1. Training in methodology
2. Project Work and Field survey
3. Bridge Courses and Add-On Courses
4. Inter- Disciplinary Approach
5. Project based learning
6. Setting up of Department library and reading room

Research:

1. Socio-economic survey
2. Constructing Human Development Index and multidimensional poverty index
3. Social science e- journals

Extension:

1. Adoption of rural village
2. Preparation of local level plan documents for Local Self Government Institutions

DEPARTMENT OF HISTORY

1. Name of the Department : History
2. Year of Establishment : 1968
3. Courses offered : B.A. History, M.A. History, PhD.
4. Name of interdisciplinary Courses offered : Advanced Diploma in Archaeology and Museology
5. Annual/ semester/choice based credit system: :
 - The Choice Based Credit and Semester System (CBCSS) of M G University for the UG History (6 semesters)
 - The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG History (4 semesters).
6. Participation of the department in the courses offered by other departments: : Open course (Environmental History) for V semester CBCSS Undergraduate students of the College.
7. Courses in collaboration with other universities, industries, foreign institutions: : Nil
8. Details of courses/ programmes discontinued (if any) with reasons : Nil
9. Number of sanctioned teaching posts : 8

Name of Post	Sanctioned	Filled
Associate Professors	2	2
Asst. Professors	6	5

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	Experience
Ms. Suja K. Sam	M.A.	Assoc. Prof.	Keralal History, National Movement	29
Ms. Annie Jose	M.A., M. Ed, M.Phil	Assoc. Prof.		24
Dr. Sebastian Joseph	M.A., M. Phil, Ph.D	Asst. Prof.	Environmental History, Oral history	10
Ms. Juby John	M.A., M.Ed	Asst. Prof.	Gender Studies	9
Ms. Tresa Divya. T.J	M.A., B.Ed	Asst. Prof.	Gender Studies	7
Dr. Jenee Peter	M. A., M. A. (Arch), Ph. D	Asst. Prof.	Archaeology, Ancient Indian History	7
Dr. Twincy Varghese	M.A., B.Ed, Ph. D	Asst. Prof.	Modern Kerala History, National Movement	7

11. List of senior visiting faculty : Nil
12. Percentage of lectures delivered and practical classes handled by temporary faculty (programme wise) : UG - 25%
PG – Nil
13. Student - Teacher Ratio (programme wise) : UG – 14:1
PG – 3:1
Ph. D - 8:1
14. Number of academic support staff (technical) and administrative staff sanctioned and filled : Nil
15. Qualifications of teaching faculty with DSC / DLitt/ PhD / MPhil/ PG.

	Name	Qualification
1	Ms. Suja K. Sam	M.A. History
2	Ms. Annie Jose	M.A. History, M. Ed, M.Phil
3	Dr. Sebastian Joseph	M.A. History, PhD
4	Ms. Juby John	M.A. History, M.Ed
5	Ms. Tresa Divya T.J.	M.A. History, B.Ed
6	Dr. Jenee Peter	M.A. History, M.A. Archaeology, PhD
7	Dr. Twincy Varghese	M.A. History, B.Ed, PhD

16. Number of faculty with on-going projects from a) National b) International funding agencies and grants received:

National: 01: Indira Gandhi National Centre for the Arts, Ministry of Culture.

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Major Research projects during the period -1

Sl. No	Name of the Investigator	Title of the Project	Amount	Funding Agency
1.	Dr. Jenee Peter	Multidisciplinary Documentation of the Rock art of Kerala, 2014-17	Rs.8,50,000/-	Indira Gandhi National Centre for the Arts, Ministry of Culture. Government of India 2014-2017

Minor Research projects during the period -6

Name of the Investigator	Title of the Project	Amount	Funding Agency
Dr. Sebastian Joseph	Expanding the Social Reachability of Higher Education through effective interventions in academic practices: Reflections on best practices for social transformation	100000	KSHEC, Govt. of Kerala
Dr. Jenee Peter	Cultural and Diversity of Western Ghats – A Case Study of Mannan Community in Kerala	1,65,000	U G C M R P
Dr. Jenee Peter 2011-12	Cultural History and eco-feminist perspectives of Lakshadweep Island	Rs.2,10,000	United Board
Dr. Jenee Peter 2013-14	Weaving Lives Local Knowledge Initiatives in Handloom Industry of Kerala	2,10,000	United Board
Dr. Jenee Peter 2014-15	Religious Borrowing and Interfaith Dialogues: A Historic Continuum in Kerala	2,40,000	United Board
Ms. Juby John	Envisioning Female Agency –Tracing the History of the Local Women Co-workers of the CMS Mission-19 th and 20 th century.	1,70,000	U G C M R P
Ms. Tresa Divya. T.J	The Invisible City – Mapping the History of the Urban Poor in Cochin	1,50,000	U G C

18. Research Centre/ facility recognized by the University : Yes

19. Publications :

a) Publications per Faculty

Name	Article	Book
Dr. Sebastian Joseph :	3	1. <i>Cochin forests and the Making of British</i> , Published by PRIMUS, NEW DELHI, 2015. 2. 'The Great Chavarian Revolution' in Dr. P. F. Gopakumar (ed.), <i>Faces of Social Reform in Kerala</i> , 2015.
Dr. Jenee Peter	11	06

b) Number of papers published in peer reviewed journals (national/ international) by faculty and students :

Name	Papers in Refereed Journals	Conference Proceedings
Dr. Jenee Peter	02	03

20 Areas of consultancy and income generated : Nil

21 Faculty as members in a) National committees b) International Committees c) Editorial Boards:

Dr. Sebastian Joseph Member, Editorial Board, Review of Social Sciences (Refereed Journal)

Dr. Jenee Peter Member of Two Editorial Board Refereed Journal in Social Sciences – Ancient Asia (Pune) Historicity (Nashik)

22. Student projects

a) Percentage of students who have done in-house projects including interdepartmental/ programme : 100%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories /Industry/ other agencies : NA

23. Awards/Recognitions received by

Faculty and students :

Name	Award	Agency
Dr. Sebastian Joseph	Grant for Academic Visit to England for studies and lectures in Environmental History of India	Charles Wallace Award, British Council, 2013
Dr. Jenee Peter	Best Research Paper Award	Indian Society of Authors (InSA), New Delhi, 2015
Dr. Jenee Peter	Travel Grant to get trained at Mindanao Peace building Institute, Philippines, 2015	United Board for Christian Higher Education in Asia, 2015
Dr. Jenee Peter	Most interactive participant Award at the International Camp, Unika Soegijapranata University, Indonesia	-do-, 2012
Dr. Jenee Peter	Travel Grant to attend Conference in Indonesia	-do-, 2012

24. List of eminent academicians and scientists /visitors to the department:

Eminent Historians hold Prof. Rajan Gurukkal, IISC, Bangalore-Memorial Lectures of the Department. (Listed below)

Name	Resource Person	Year
A K Baby Memorial Lecture	Dr. Sunil P. Elayidam	2011
A K Baby Memorial Lecture	Dr. Susan Thomas	2012
A K Baby Memorial Lecture	Dr. S. Raju	2013
A K Baby Memorial Lecture	Dr. M. S. S. Pandyan	2014
A K Baby Memorial Lecture	Prof. Mahalakshmi	2015

Name	Resource Person	Year
First Archaeology Lecture Series	Dr. Shinu Anna Abraham	2012
Second Archaeology Lecture Series	Dr. Frederico de Romaniz	2013
Third Archaeology Lecture Series	Prof. K. Krishnan	2014
Fourth Archaeology Lecture Series	Dr. V. T. Padmaja	2015

25. Seminars/Conferences/Workshops organized & the source of funding:

Name	Year	Funding Agency
Workshop on Rock Art and allied disciplines in Kerala	2014	Indira Gandhi National Centre for the Arts, Ministry of Culture. Government of India
Swami Vivekananda and Beyond	2014	UGC

26. Student profile programme /course wise : B.A. History

Year	Entry (Boys)	Entry (Girls)	Exit (Boys)	Exit (Girls)	Dropouts
2011 -14	21	19	20	18	2
2012 -15	14	16	14	15	1
2013 -16	10	21	6	19	6

M.A. History

Year	Entry (Boys)	Entry (Girls)	Exit (Boys)	Exit (Girls)	Dropouts
2011 -14	3	14	3	14	0
2012 -15	3	15	3	15	0
2013 -16	2	16	2	16	0

27. Catering diversity of Students :

- Promotion of interdisciplinary research among PG students, especially for taking problems for their dissertations
- Field Activities for UG students
- Laboratory and practical sessions for Diploma in Archaeology and Museology
- IT enabled learning for PG students
- Association activities to cater the varied talents of the students
- Remedial classes arranged for weak students by the concerned subject teachers
- Students encouraged and facilitated to attend national and international Seminars

- Students admitted to *Walk with a Scholar* programme and Scholar Support Programme for academic mentoring at UG level
 - One student went for Student Exchange Programme to ICU, Japan (Rahul R.)
 - Tutorial sessions are conducted.
28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, UGC JRF – 3 (2011-15)
Civil services, Defense services, etc. UGC NET –3 (2011-15)
Gate – 1 (2011-2015)
29. Student progression :
30. Details of Infrastructural facilities
- a) Library : 730 books in the Dept. library
 - b) Internet facilities for Staff & Students : Two desktop Computers with internet connection
 - c) Class rooms with ICT facility : Nil
 - d) Laboratories : One
31. Number of students receiving financial assistance from College, University, Government or other agencies : 10 students
32. Details on student enrichment programmes (special lectures /workshops/seminar) with external experts :
- Special Lectures given to students by eminent scholars
 - Remedial teaching to improve student quality
 - Orientation for First year UG and PG students.
- Teaching methods adopted to improve student learning
- Peer Teaching, Group
 - Discussions
 - Academic Calendar as per the University norms and schedules are followed for teaching learning process.
 - Conducting book and research paper discussions for M.A students to enhance their research ability.
 - Debates on socially relevant issues and discussion based on that involving teachers, PG and UG students of the department and even other.
 - Periodical evaluation of the teaching learning process and assessment of student progression through internal assessments and seminars.
 - Interactive sessions make the process more students centric. Remedial and tutorial sessions are held to enable students to speak out.

- Open course offered to reach out to different category of students. Student involved in field activities to ensure learning through doing. Interest in the subject increased through direct involvement in conduct of seminars and self-learning.
- Online facilities including e-books and open educational resources are being used. Websites are referred to compliment books.
- General as well as Department library facilities are utilized to enhance the quality of the teaching learning process. Students facilitated to visit historical sites of relevance to enable visual learning. Archival facilities utilized for quality enhancement.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Prof. Suja K Sam

- Coordinator Advanced Diploma In Archaeology and Museology 2011-14
- Staff Council Member 2011 -14

Prof. Annie Jose

- Coordinator Advanced Diploma In Archaeology and Museology 2014-16
- Staff Council Member 2014-16

Dr. Sebastian Joseph

- Walk With the Scholar Program Coordinator 2014-16,
- Staff Advisor for the College Magazine for 2013-14
- Resource person for history research methodology classes at various colleges in Kerala.
- Coordinator, PhD (Social Science) Course Work Programme
- Convener, Research Forum 2015 to present
- Mentor, Higher Secondary Teachers, Kerala Government

Ms. Juby John

- Main Warden, Ladies Hotel 2011-12
- Staff Secretary, Dept. of History
- Member Religious Committee 2013-16

Ms. Tresa Divya T.J. –

- Resource person for 10th students orientation organized by Kerala Sastra Sahitya Parishad 2011
- Resource person of the environment sustainable development training session for Bala Sahitya Sangham conducted for Lower Primary students at Govt. School, Veliyathunadu

- Staff Advisor for *Midippu*, a voluntary organization for the girl students of the college which engages critical mentoring and thought processing on the position of women in the country.
- Staff Advisor of College Magazine 2015-16
- Website Coordinator of the Department 2015-16
- Staff Advisor Sabdham Kala Samskarika Vedhi (cultural Organisation) 2013-14
- Taken class for senior citizens Association in Chacko Homes, Aluva about perspectives on History Narrations.

Dr. Jenee Peter

- Dr. Jenee Peter -2012-14, associated with Ford pathways programme, U. C. College
- Dr. Jenee Peter -In 2013-15, associated with Handloom promotion department, Government of Kerala in the one day awareness seminar held in the college for the NSS students in December 2013
- Handloom promotion activities in association with NSS, U.C College Unit and Khadi unit at Kunnukara, December 2014
- State Coordinator, World of Rock art Exhibition, Indira Gandhi national centre for Arts, Delhi, in Kerala October 2014
- Mentor, International Service Learning Programme of College In 2012-13, 2013-14, 2014-15, 2015-16
- Joint Coordinator, Advanced Diploma in Archaeology & Museology 2011-16
- Staff in charge, U.CC Archaeological Museum, June 2010 onwards
- YMCA Summer Coaching Camp, Aluva Rural : Resource person May 2013,
- YMCA Summer Coaching Camp, Aluva Rural : Resource person, May 2014
- Led a training session for school students as part of the Students Learning and Training on Environment (SLATE) programme organized by Paristhithi Samrakshana Sangham at Islamic Higher Secondary School, Aluva on 11 July 2015.
- Website Committee of College member- 2013onwards,
- College PTA Executive Committee member- 2011-12, 2014-15
- Acquire Scholarship Programme, Government of Kerala- Mentor 2011-13

Dr. Twincy Varghese

- Website Coordinator of the Department for 2014-15
- IQAC Coordinator of the Department for 2015-present
- Main Warden for the Ladies Hostel of the College 2012-16
- College Religious Committee Member. 2012-16

DEPARTMENT OF MATHEMATICS

1. Name of the Department : Department of Mathematics
2. Year Established : 1923
3. Names of the Programmes/Courses offered : B. Sc. Mathematics,
M. Sc. Mathematics,
Ph.D in Mathematics
4. Names of inter disciplinary courses and the departments /Units involved : The Department offers open course Applicable Mathematics for fifth semester CBCSS Undergraduate students of the College
5. Annual/ semester/choice based credit system : The Choice Based Credit and Semester System (CBCSS) of Mahatma Gandhi University for the B. Sc. Mathematics (6 semesters)

The Post Graduate Credit and Semester System (PGCSS) of Mahatma Gandhi University for the M. Sc. Mathematics (4 semesters).
6. Participation of the department in the courses offered by other departments:

The Department offers a Complimentary course for B. Sc. Physics, B. Sc. Chemistry, B. Sc. Computer Science, B.Sc Psychology and BA Economics programmes, and an Open course (Applicable Mathematics) for fifth semester CBCSS Undergraduate students of the College.
7. Courses in collaboration with other universities, industries, foreign institutions: Nil
8. Details of courses/ programmes discontinued (if any) with reasons : Nil

9. Number of teaching posts : 10

Name of Posts	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	2	2
Assistant Professors	8	8

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.)

	Name	Qualification	Designation	Specialization	Teaching Exp.
1.	Ms. Shiny K. Jacob	M. Sc.	Assoc. Prof.	Statistics	28
2.	Dr. E.S. Jeevanand	M. Sc., Ph. D.	Assoc. Prof.	Statistics	20
3	Mr. Prathish Abraham	M. Sc.	Asst. Prof.	Mathematics	10
4	Mr. Eldo Varghese	M. Sc.	Asst. Prof.	Mathematics	10
5	Ms. Anu Nuthan Joshua	M. Sc.	Assist. Prof.	Mathematics	6
6	Ms. Geena Joy (on FIP)	M. Sc.	Asst. Prof.	Mathematics	6
7	Ms. Mily Mary Sreeba K	M. Sc., M. Phil	Asst. Prof.	Mathematics	6
8	Ms. Nisha N.	M. Sc., M. Phil	Asst. Prof.	Mathematics	6
9	Ms. Susmi Skaria	M. Sc., M. Phil	Asst. Prof.	Mathematics	4
10	Mr. Kurian C. Soman	M. Sc., B. Ed, M. Phil	Asst. Prof.	Mathematics	3
11	Ms. Sruthi K	M. Sc.	FIP substitute	Mathematics	6 months
12	Meethu J Thettayil	M. Sc.	Guest Faculty	Mathematics	6 months

11. List of senior visiting faculty : Nil

12. Percentage of lectures delivered and : UG – Theory : 20%
 practical classes handled : UG – Practical : Nil
 by temporary faculty (programme wise) : PG – Theory : 10%
 : PG Practical : Nil

13. Student - Teacher Ratio : B. Sc. : 12:1
(programme wise) M. Sc.: 4:1

14. Number of academic support staff : Nil
(technical) and administrative staff

15. Qualifications of teaching faculty with DSC / DLitt/ PhD / MPhil/ PG.

Sl. No.	Name	Qualification
1	Ms. Shiny K. Jacob	M. Sc.
2	Dr. E.S. Jeevanand	M. Sc., Ph. D.
3	Mr. Prathish Abraham	M. Sc.
4	Mr. Eldo Varghese	M. Sc.
5	Ms. Anu Nuthan Joshua	M. Sc.
6	Ms. Geena Joy (on FIP)	M. Sc.
7	Ms. Mily Mary Sreeba K.	M. Sc., M. Phil,
8	Ms. Nisha N.	M. Sc., M. Phil.
9	Ms. SusmiSkaria	M. Sc., M. Phil.
10	Mr. Kurian C. Soman	M. Sc., M. Phil.
11	Ms. Sruthi K.	M. Sc.
12	Ms. Meethu J. Thettayil	M. Sc.

16. Number of faculty with on-going projects :
from a) National b) International (U.G.C.) funding agencies and grants received

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received : Minor Research Projects – 03

Sl. No	Name of the Investigator	Title of the Project	Amount	Funding Agency
1	Dr. E.S. Jeevanand	Software reliability, data analysis with stress-strength model using the power law distribution	Rs.2,00,000/-	UGC
2	Prathish Abraham	An Analysis of Effectiveness of Student Support Systems in Individual Performances using Fuzzy Relations	Rs.1,70,000	UGC
3	Eldo Varghese	Some Problems in Graph Theory with special reference to Fuzzy Intersection Graphs	Rs.1,70,000	UGC

18. Research Centre/ facility recognized by University :

Approved Research Centre of Mathematics, Mahatma Gandhi University, Kottayam.

19. Publications

- a) Publications per Faculty : Refer annexure
- b) Number of papers published in peer reviewed journals (national/international) by faculty and students :
- c) Number of publications listed in International Database (For Ex: Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc.) Monographs, Chapter in Books, Books Edited Books with ISBN/ISSN numbers with details of publishers Citation Index, SNIP, SJR, Impact factor, h-index

20. Areas of consultancy and income generated: Nil

21. Faculty as members in a) National committees

b) International Committees c) Editorial Boards: Nil

22. Student Projects

- a) Percentage of students who have done B.Sc. Mathematics – 100%in-house projects including M.Sc. Mathematics – 100% Interdepartmental/ programme
- b) Percentage of students placed for projects B.Sc. Mathematics - Nil in organizations outside the institution M.Sc. Mathematics - Nil i.e..in Research laboratories/ Industry/ other agencies

23. Awards/ Recognitions received by faculty and students: Nil

24. List of eminent academicians and scientists /visitors to the department

- Dr. Sunny Kuriakose A., Principal, B.P.C. College, Piravom
- Prof. Unnikrishnan Nair, N, Former Vice-Chancellor and Professor Emeritus of Statistics, Department of Statistics, Cochin University of Science and Technology
- Dr. A.Krishnamoorthy, Emeritus Professor, Department of Mathematics, Cochin University of Science and Technology
- Dr. S.R.Kanan, Associate Professor, Department of Mathematics, Ramanujan School of Mathematical Sciences, Pondicherry University
- Dr. Shalu M.A, Assistant Professor of Mathematics, Indian Institute of Information Technology, Design and Manufacturing, Chennai
- Dr. K.P.Jose, Associate Professor, Department of Mathematics, St Peters College, Kolenchery
- Dr. ApranaLakshmanan S, Assistant Professor, Department of Mathematics, St. Xavier's College Aluva

- Dr. Vishnu Namboothiri, Assistant Professor, Government College, Ambalapuzhza
- Mr. Shinoj K.M., Assistant Professor, St. Joseph's College Devagiri.
- Dr. (Sr.) Benedict Mary A., Associate Professor, Department of Mathematics, St. Xaviers, Aluva.
- Dr. E. Krishnan, former Head of the Department of Mathematics, University College, Trivandrum
- Mr. Dilip Kumar, Senior Research Fellow, Centre for Mathematical Sciences, Pala.
- Dr. Deepesh K.P., Assistant Professor, Government Engineering College, Kozhikode
- Dr. Kirankumar V.B., Assistant Professor, Kerala School of Mathematics, Kozhikode.
- Dr. P.B. Vinod Kumar, Assistant Professor, Rajagiri Institute of Science and Technology, Kalamassery.
- Prof. Oommen Mathew (Retired), Institute of Management in Government.
- Dr. Mary Matilda, former Principal, Maharaja's College Ernakulam
- Dr. Manju.K.Menon, Assistant Professor, Department of Mathematics, St. Paul's College, Kalamassery.
- Dr. Abdul Sathar E.I, Department of Statistics, University of Kerala, Thiruvananthapuram
- Prof. Edwin Thomson, Head of the Department of Mathematics, St. Albert's College, Ernakulam

25. Seminars/ Conferences/ Workshops organized & the source of funding:

- U.G.C. sponsored National Seminar on „Mathematical Modelling and its Applications“ was organized by the Department on 14 & 15 January 2016
- A Workshop on Research Methodology with Special Emphasis on Data Analysis was conducted on 19 - 23 May 2015 by the Department (sponsored by research forum UC College)

26. Student profile: programme / course-wise:

BSc Mathematics

Year	No. of students	A+	A	B	C	D	Pass percentage
2011	41	6	13	11	5	Nil	85.37
2012	27	Nil	4	15	2	Nil	77.77
2013	25	1	3	14	4	Nil	86
2014	29	1	6	13	5	Nil	86
2015	40	Nil	2	17	11	1	77.5
2016	46	4	10	11	1	Nil	56.5

MSc Mathematics						
Year	No. of students	A+	A	B	C	Pass percentage
2011	17	4	8	Nil	Nil	70.5
2012	15	6	5	Nil	Nil	68.75
2013	16	Nil	5	7	Nil	75
2014	14	1	2	7	Nil	71.42
2015	13	1	4	6	Nil	84.6
2016	16	1	0	6	2	56.25

27. Diversity of Students: 99% of the students from Kerala &
1% from Lakshadweep

Percentage of SC/ST students:

Name of the Course	2015	2014	2013	2012	2011
B. Sc.	19%	18%	17%	16%	18%
M. Sc.	18%	20%	23%	21%	23%

28. Number of students have cleared :National and state competitive examination
such as NET, SLET, GATE, Civil services, Defence services, etc.

NET – 03 JRF - 01

29. Student progression

Student progression	Against % enrolled
UG to PG	70%
PG to M. Phil	2%
PG to Ph. D	1%
Ph. D to Post-Doctoral	1%
Employed	
•Campus selection	10%
•Other than campus recruitment	15%
Entrepreneurship/Self-employment	5%

30. Details of Infrastructural facilities

- Department has 1 computer lab with smart class room, 1 library, 1 research room, 2 P.G. Classrooms
- Department of Mathematics has a reference library having 1445 books and journals
- Computing facilities include 16 multimedia computers, 3 laptops with broad band internet connection-Operating systems, Windows 2000 and 2007 professional and Windows XP professional

31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2015-'16	2014-'15	2013-'14	2012-'13	2011-'12
1	INSPIRE scholarship.	2				4
2	Alexander Mar Thoma Endowment Prize in Mathematics	1	1	1	1	1
3	Venkitaraman Memorial Prize for B.sc(Instituted by Chechamma Memorial Trust)	1	1	1	1	1
4	T.S. Venkitaraman Memorial Prize for M.Sc.	1	1	1	1	1
5	Prof. C. P. Achuthan Pillai Memorial Scholarship(merit cum means)	1	1	1	1	1
6	Shri. A. V. Kakkunni Memorial Prize	1	1	1	1	1
7	Prof. K. P. Mathew Endowment Award	1	1	1	1	1
8	Prof. M. G. Koshy Endowment Award	1	1	1	1	1
9	Smt. C. Lakshmikutty Amma Memorial Scholarship	1	1	1	1	1
10	C. M. Kuruvilla Endowment	14	14	14	14	14
11	Thasnim H Memorial Prize	1				
12	Trinity Scholarships	5	5	5	5	5

32. Details on student enrichment programmes (special lectures /workshops /seminar) with external experts (Details attached in **Annexure I**)

	Seminars		Workshops	Invited Talks
	National	Regional		
2011-2012		1		1
2012-2013			1	1
2013-2014		1		1
2014-2015		1	2	2
2015-2016	1		1	1

III) Seminars/ workshops attended by the faculties

Name of the Faculty	Seminars/Conferences			Workshop	Orientation/ Refresher
	International	National	Regional		
Prof. Shiny K. Jacob			1	1	
Mr. Prathish Abraham		5	1	1	1
Mr. Eldo Varghese	1	2	2	3	1
Ms. Anu Nuthan Joshua	1	2	2	2	2
Ms. Geena Joy	1	2	2	2	2
Ms. Mily Mary Sreeba K.	1	1	2	1	2
Ms. Nisha N.		4	2	1	2
Ms. Susmi Skaria	2	1	1		
Mr. Kurian C. Soman	2	2	1	2	2

33. Teaching methods adopted to improve student learning:

- A smart class room is available in the department and the students given the facility to present their academic seminars there.
- Workshops on Statistical Packages are often conducted by which students are familiarized to data analysis through packages like SPSS, R-Stat etc.
- Students are given assignments/projects on the frontier areas of mathematics which help them to familiarize such topics.
- Regional seminars are conducted every year by eminent teachers/ academicians, which enables the students to listen to eminent personalities in respective areas.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Every year an Inter School Mathematics Quiz Competition “*CIPHER*” in honour of former Head of the Department Prof. K.P. Mathew is being conducted for Higher Secondary School students.
- Every year an Inter collegiate seminar presentation competition in memory of Ms. Thasnim, an alumnus for college students
- Regularly organise workshop on Statistical packages for college teachers and Research scholars.
- The students of the department participate in the social responsibility programmes conducted in connection with UBCHEA projects run by the Department of Psychology & Botany

35. Students achievements:**Ranks & Other Academic Achievements**

- Geethanjali A G secured 2nd rank in MSc Mathematics in 2012
- Ancy Varghese secured 5th rank in MSc Mathematics in 2012
- Mariya Paulose secured 2nd rank in MSc Mathematics in 2013

- Meethu J. Thettayil secured 5th rank in MSc Mathematics in 2013
- Indu P S secured A⁺ in BSc Mathematics in 2013
- Aparna Pradeep secured A⁺ in BSc Mathematics in 2014
- Gayathri R secured A⁺ in MSc Mathematics in 2014
- Indu P S secured A⁺ in MSc Mathematics in 2015
- Gopikrishna S Nair secured A⁺ in MSc Mathematics in 2016
- Siji Elsa Paul of III BSc participated in RD camp held at New Delhi in 2016
- A Aparnna and Jisna Paul of II BSc Mathematics visited IIM Banglore and IISC Banglore as part of the motivational visit of WWS programe in 2015

Placements

- Ancy Jose, Ashitha V.S, Ashna Roy, Dev Anand K. and Shaison Thomas of B.Sc. Mathematics got placed in Wipro in 2014.
- Maria Yohannan of M.Sc. Mathematics got placed in South Indian Bank as clerical staff
- Dev Anand K. of B.Sc. Mathematics got placed in Federal Bank Ltd. as clerical staff in 2014
- Bindya Paul & Nayana Vijayan of M.Sc. Mathematics got placed in Federal Bank Ltd. as probationary officers in 2014
- Vibitha Varghese and Jintu Gigi of B.Sc. Mathematics got placed in Tech Mahindra in 2015.
- Sreeja P.S. of B.Sc. Mathematics got placed in Wipro Technologies as S/W engineer and Federal Bank Ltd. as clerical staff

36. SWOT analysis of the department and future plans:

Strength

- ✓ Well equipped computer lab
- ✓ Well equipped smart class room
- ✓ Well equipped library
- ✓ The largest research community in mathematical sciences under M.G. University
- ✓ Highest output on research, producing over 100 publications and 20 Ph.D. awarded

Challenges

- ✓ Small class rooms with insufficient furniture.
- ✓ Lack of smart class rooms for P.G. classes and final year U.G. class
- ✓ Lack of proper funding for maintenance of existing facilities.

Future plans

- ✓ Facilities are available for starting M.Phil courses
- ✓ Add on course on computational statistics and Mathematics can be introduced using existing lab and resources without any extra investment
- ✓ College/ Department can arrive an agreement with Government Agencies like Routronics, C-dit, Keltron etc to conduct vocational courses.
- ✓ The facilities available in the department can be utilized to train high school /higher secondary teachers in modern and trendy areas in mathematical science.
- ✓ The computer lab can be used to give training in statistical packages for the project analysis of the students of various P.G. courses in science & social sciences.

Annexure I**2011-2012**

1. Invited Talk on „General Mathematics“ was held on 5th August 2011. The resource person was Dr. Sunny Kuriakose A., Principal, B.P.C. College, Piravom and former faculty of the Department of Mathematics, U.C. College, Aluva.
2. One day Regional Seminar on „Algebra and Combinatorics“ was organized by the department on 24th February 2012. The resource persons were Dr. Vishnu Namboothiri, Assistant Professor, Government College, Ambalapuzhza and Prof. Shinoj K.M., Assistant Professor, St. Joseph's College Devagiri.

2012-2013

3. Invited Lecture on „Graph Theory and Applications“ was conducted on 20th July 2012. The resource person Dr.(Sr.) Benedict Mary A., Associate Professor, Department of Mathematics, St. Xaviers, Aluva.
4. The department organized a two day Workshop on „Analysis to Topology“ on 26-27 February 2013. Dr. E. Krishnan, former Head of the Department of Mathematics, University College, Trivandrum was the resource person.

2013-2014

5. Invited lecture on „Mathematics and nature“ was held on 3rd August 2013. The resource person was Mr. Dilip Kumar, Senior Research Fellow, Centre for Mathematical Sciences, Pala.
6. One day Regional Seminar on „Compact Operators on Banach Spaces“ was organized by the department on 3rd March 2014. The resource persons were Dr. Deepesh K.P., Assistant Professor, Government Engineering College, Kozhikode and Dr. Kirankumar V.B., Assistant Professor, Kerala School of Mathematics, Kozhikode.

2014-2015

7. Invited Talk on „Some Conjectures“ was held on 26th August 2014. The resource person was Dr. P.B. Vinod Kumar, Assistant Professor, Rajagiri Institute of Science and Technology, Kalamassery.
8. A Workshop on „Introduction to Galois Theory“ was conducted on 24th July 2014 and 1st August 2014. Dr. Vishnu Namboothiri K., Assistant Professor, 'B.J.M. College, Chavara was the resource person.
9. A Talk on „Career Development“ by Prof. Oommen Mathew (Retired), Institute of Management in Government.

10. A Regional Seminar on „Topology and Hyper Real Analysis“ was organized by the department on 19 and 20 March 2015. The resource person was Dr. P.B. Vinod Kumar, Assistant Professor, Rajagiri Institute of Science and Technology, Kalamassery.
11. A Workshop on Research Methodology with Special Emphasis on Data Analysis was conducted on 19-23 May 2015 by the Department.

2015-2016

12. Invited Lecture on „Life Skills in Mathematics“ was held on 13th August 2015. The resource person was Dr. Mary Matilda, former Principal, Maharaja's College Ernakulam.
13. U.G.C. sponsored National Seminar on „Mathematical Modelling and its Applications“ was organized by the Department on 14 & 15 January 2016. The resource persons were Prof. Unnikrishnan Nair, N, Former Vice-Chancellor and Professor Emeritus of Statistics, Department of Statistics, Cochin University of Science and Technology, Dr. A. Krishnamoorthy, Emeritus Professor, Department of Mathematics, Cochin University of Science and Technology, Dr. S. R. Kanan, Associate Professor, Department of Mathematics, Ramanujan School of Mathematical Sciences, Pondicherry University, Dr. Shalu M.A, Assistant Professor of Mathematics, Indian Institute of Information Technology, Design and Manufacturing, Chennai, Dr. A. Sunny Kuriakose, Dean, FISAT, Angamaly, Dr. K. P. Jose, Associate Professor, Department of Mathematics, St. Peter's College, Kolenchery, Dr. Aprana Lakshmanan S, Assistant Professor, Department of Mathematics, St. Xavier's College Aluva and Dr. Manju. K. Menon, Assistant Professor, Department of Mathematics, St. Paul's College, Kalamassery.
14. The department organized a workshop on Basic and Advanced Data Analysis using SPSS on 14 & 15 January 2016. The resource person was Dr. Abdul Sathar E.I, Department of Statistics, University of Kerala, Thiruvananthapuram

Anexure I

Mr. Prathish Abraham

- Refresher Course in Mathematics conducted by UGC Academic Staff College, University of Kerala from 21 June 2011 to 12 July 2011
- National Seminar on “Some recent developments in Mathematics and their applications to Image processing and Medical Diagnosis” conducted by St. Albert’s College, Ernakulam on 11 - 12, April 2013
- National Seminar on “Applications of Graph Theory” at St. Dominic’s College, Kanjirappally on 21st and 22nd, November 2013.
- National seminar on “Functional Analysis” at Govt. College, Kasaragod on 16th and 17th December 2015.
- National Seminar on “Mathematical Modelling with Special Emphasis on Graph Theory, Fuzzy Mathematics and Stochastic Modelling” at U.C. College, Aluva on 14th and 15th January 2016.
- National Seminar on “The Role of Geometry in Mathematics” at Sree Vidyadhi Raja N.S.S. College, Vazhoor on 14th and 15th March 2016.
- Workshop on From Analysis to Topology 26-27 January 2013 Union Christian College, Aluva.
- Regional Seminar on Compact Operators on Banach Spaces 3rd March 2014 Union Christian College, Aluva.

Mr. Eldo Varghese

- Refresher Course in Mathematics conducted by UGC Academic Staff College, University of Kerala from 21 June 2011 to 12 July 2011
- Seminar on „Introduction to Cryptography and Graph Theory“ at The Cochin College, Cochin on 8th December 2011
- 6th Asian Christian Faculty Fellowship Conference on 27th October 2012
- Discussion Forum chaired by Hon’ble Chief Minister of Kerala, Sri. Oommen Chandy on engaging ICT Academy of Kerala in Employability Skills Development Programme on 19th January 2015.
- National Seminar on „Functional Analysis“ organized by the Department of Mathematics, Government College, Kasargod on 16th and 17th December 2015
- Workshop on „U.G. Curriculum Restructuring in Mathematics“ held on 29th February 2016 at Nirmala College, Muvattupuzha
- Workshop on PG Syllabus Revision 2016-17 at NSS Hindu College, Changanacherry 9th and 10th March 2016
- Workshop on From Analysis to Topology 26-27 January 2013 Union Christian College, Aluva.
- Regional Seminar on Compact Operators on Banach Spaces 3rd March 2014 Union Christian College, Aluva
- National Seminar on Mathematical Modelling and its Applications 14 - 15 January 2016 Union Christian College, Aluva.

Ms. Anu Nuthan Joshua

- Workshop for college teachers on under graduate syllabus revision 28-29 July 2011 C.M.S College, Kottayam
- National Seminar on Complex Analysis and Applications 15- 17 July 2012 B.J.M College, Chavara
- Orientation Programme conducted by UGC Academic Staff College, University of Kerala from 6 June 2013 to 3 July 2013
- Refresher Course in Mathematics from 17 September 2014 to 7 October 2014 conducted by UGC Academic Staff College, University of Kerala
- International Seminar on Analysis and Applications and Dr. T. Thrivikraman endowment lecture 9 February 2015 Department of Mathematics, St Theresa's College, Ernakulam
- Workshop on From Analysis to Topology 26-27 January 2013 Union Christian College, Aluva
- Regional Seminar on Compact Operators on Banach Spaces 3rd March 2014 Union Christian College, Aluva
- National Seminar on Mathematical Modelling and its Applications 14 - 15 January 2016 Union Christian College, Aluva.

Ms. Geena Joy

- National Seminar on „Recent Trends in Fuzzy Mathematics and its Applications“ from 22 Sept. 2011 to 23 Sept. 2011 at Newman College, Thodupuzha.
- Orientation Course at UGC Academic Staff College, University of Calicut from 17th November to 14th December 2011.
- Regional Seminar on “Statistical Inference and Mathematical Analysis” at Newman College, Thodupuzha on 10 - 11, January 2013.
- International Seminar on „Queues and Graphs“ on 7 January 2015 at St. Peter's College, Kolenchery.
- Workshop on Research Methodology with special emphasis on Data Analysis from 19 May to 23 May 2015 at Union Christian College, Aluva.
- Refresher Course in Mathematics from 4th August to 24th August 2015 at UGC Academic Staff College, University of Kerala.
- Workshop on From Analysis to Topology 26-27 January 2013 Union Christian College, Aluva
- Regional Seminar on Compact Operators on Banach Spaces 3rd March 2014 Union Christian College, Aluva
- National Seminar on Mathematical Modelling and its Applications 14 - 15 January 2016 Union Christian College, Aluva.

Ms. Mily Mary Sleeba K.

- International Seminar on “Stochastic Modeling and Neural Fuzzy Systems” at St Peter’s College, Kolenchery on 7th January 2013.
- Refresher Course in Mathematics from 20th August to 9th September 2013 at UGC Academic Staff College, University of Kerala.
- Orientation Course at UGC Academic Staff College, University of Kerala from 22nd April 2015 to 19th May 2015.
- Workshop on From Analysis to Topology 26-27 January 2013 Union Christian College, Aluva
- Regional Seminar on Compact Operators on Banach Spaces 03 March 2014 Union Christian College, Aluva
- National Seminar on Mathematical Modeling and its Applications 14 - 15 January 2016 Union Christian College, Aluva

Ms. Nisha N.

- Orientation Course at UGC Academic Staff College, University of Calicut from 17th November to 14th December 2011.
- National Seminar on „Topology and Geometry“ at Thunchan Memorial College Tirurangadi.
- National Seminar on „Advances in Discrete Mathematics“ at P.S.M.O. College on 25th and 26th February 2014.
- Winter School conducted by UGC Academic Staff College, University of Calicut from 28th November to 18th December 2014.
- National Seminar on „Mathematical Analysis and Application“ at Thunchan Memorial College, Tirurangadi during 25th February to 27th February 2015.
- National Seminar on Analysis at Govt. College, Madappilly on 7th and 8th January 2015.
- Workshop on From Analysis to Topology 26-27 January 2013 Union Christian College, Aluva
- Regional Seminar on Compact Operators on Banach Spaces 03 March 2014 Union Christian College, Aluva
- National Seminar on Mathematical Modelling and its Applications 14 - 15 January 2016 Union Christian College, Aluva.

Ms. Susmi Skaria

- International Seminar on “Stochastic Modeling and Neural Fuzzy Systems” conducted by St Peter’s College, Kolencherry on 7th January 2013.
- International seminar on “Analysis and Applications” at St. Theresa’s College, Ernakulam on 9th February 2015.
- Regional Seminar on Compact Operators on Banach Spaces 03 March 2014 Union Christian College, Aluva
- National Seminar on Mathematical Modelling and its Applications 14 - 15 January 2016 Union Christian College, Aluva.

Mr. Kurian C. Soman

- Orientation course for College Teachers in Kerala State held at Kerala School of Mathematics, Kozhikode during November 08-11, 2013.
- Instructional workshop on “Semigroups and Applications” at Cochin University of Science and Technology during February 22-24, 2014.
- International conference on “Semigroups, Algebras and Operator Theory” at Cochin University of Science and Technology during February 26-28, 2014.
- International conference on “Algebra and Discrete Mathematics” at Government College, Kattappana during 04-06 March 2014.
- Regional Seminar on Compact Operators on Banach Spaces 3rd March 2014 Union Christian College, Aluva
- National Seminar on Mathematical Modelling and its Applications 14 - 15 January 2016 Union Christian College, Aluva.

LIST OF RESEARCH SCHOLARS:

Name of the Research Scholars	Name of the Guides
Neethu Jacob	Dr. E.S. Jeevanand
Gilfin Francis	Dr. E.S. Jeevanand
Mily Mary Sreeba K	Dr. Sunny Kuriakose
Murali T K	Dr. Sunny Kuriakose
Manjusha R.	Dr. Sunny Kuriakose
Sheeja T.K.	Dr. Sunny Kuriakose
Manju Raju	Dr. S Arumugham
Benno Mathew	Dr. K.K. Thampi
Joseph Justin Rebello	Dr. K.K. Thampi
Ambily M.P.	Dr. Mary M.
Deepa V G	Dr. AparnaLaxmanan S
Jeena K M	Dr. AparnaLaxmanan S
Ninu S Lal	Dr. AparnaLaxmanan S
Anu V.	Dr. AparnaLaxmanan S.
Jismy Varghese	Dr. AparnaLaxmanan S.
Seena Varghese	Dr. AparnaLaxmanan S.
Jeepamol J Palathingal	Dr. AparnaLaxmanan S.

LIST OF SCHOLARS COMPLETED PH.D:

Sl.No	Name of the Scholar	Title of the thesis	Supervising Guide	Year
1	Bibin K. Jose	Domination in Hypergraphs	Dr. S. Arumugham	2012
2	Varughese Mathew	Studies in Graph Theory – Rational Approach	Dr. S. Arumugham	2012
3	Cyriac Antony	Financial Market Analysis and Investment Decisions-A Statistical Approach	Dr. E. S. Jeevanand	2012
4	Tutu M. John	A Study of certain Economic Problems Using Fuzzy Mathematics	Dr. A. Sunny Kuriakose	2013
5	Thavamoni J.P.	Edge Product Graphs	Dr. A. Sunny Kuriakose	2014
6	Annie Varghese	A Study of Economic Equilibria Using Fuzzy and Intuitionistic Fuzzy Mathematical Tools	Dr. A. Sunny Kuriakose	2014
7	Shiney Jose	Some Problems in Intuitionistic Fuzzy Optimization and Decision Making	Dr. A. Sunny Kuriakose	2015
8	Philomena C.F.	Study of Frames in Fuzzy Context	Dr. A. Sunny Kuriakose	2015
9	Bijamma Thomas	Software Reliability Growth Models	Dr. RajanVarughese	2015
10	Rogi Jacob	A Study on Fuzzy Image Processing and Related Areas	Dr. A. Sunny Kuriakose	2016
11	Dhanya M.	Estimation of Reliability Measures of Some Commonly Used Heavy Tailed Life Time Distribution	Dr. E. S. Jeevanand	2016

DEPARTMENT OF CHEMISTRY

1. Name of the Department : Department of Chemistry
2. Year Established : 1926
3. Names of the Programmes/
Courses offered : B. Sc. Chemistry. M. Sc. Chemistry,
Ph. D.; and Diploma Course in
material science
4. Names of inter disciplinary courses
and the departments /Units involved : Diploma in Environmental Studies
(Certificate Course jointly offered by
Department of Chemistry, Botany and
Zoology) The Department offers open
course (Food Science for fifth
semester CBCSS Undergraduate
students of the College
5. Annual/ semester/choice
based credit system : The Choice Based Credit and
Semester System (CBCSS) of
Mahatma Gandhi University for the
B. Sc. Chemistry (6 semesters)

The Post Graduate Credit and
Semester System (PGCSS) of
Mahatma Gandhi University for the
M. Sc. Chemistry (4 semesters).
6. Participation of the department in the
courses offered by other departments : The Department offers a
Complimentary course for B. Sc.
Physics, B. Sc. Zoology and B. Sc.
Botany programmes, and an Open
course (Food Science) for fifth
semester CBCSS Undergraduate
students of the College.

7. Courses in collaboration with other universities, industries, foreign institutions :
Certificate course in Environmental studies sponsored by UBCHEA

(United Board of Christian Higher Education Asia)

8. Details of courses/ programmes discontinued (if any) with reasons : Nil

9. Number of teaching posts

Name of Post	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	3	3
Asst. Professors	6	4

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.)

	Name	Qualification	Designation	Specialization	Teaching Exp.
1.	Dr. Mary Kurien	Ph. D, M. Sc.	Assoc. Prof.	Polymer Chemistry	33
2.	Dr. Sheelakumari Isacc	Ph. D, M. Phil., M. Sc	Assoc. Prof.	Polymer Chemistry	33
3.	Dr. P.V Sreenivasan	Ph. D, M. Phil., M. Sc	Assoc. Prof.	Polymer Chemistry	32
4.	Dr. Jenish Paul	M. Sc, B. Ed, Ph. D	Assist. Prof.	Polymer Chemistry	5
5.	Ms. Smitha Roy	M. Sc, B. Ed.	Assist. Prof.	--	4
6.	Ms. Minu Joys	M. Sc.	Assist. Prof.	--	4
7.	Dr. Simi Pushpan	P. D. F, Ph. D, M. Sc.	Assist. Prof.	Bio-Inorganic Chemistry	3
8.	Saritha Gopal	M. Sc.	Guest Lecturer	--	
9	Parvathy T S	M. Sc.	Guest Lecturer	--	

- 11 List of senior visiting faculty : Dr. C. G. Ramankutty
- 12 Percentage of lectures delivered and practical classes handled by temporary faculty (programme wise) : UG – Theory : 56%
UG – Practical : 33%
PG – Theory : 0%
PG Practical : 0%
- 13 Student - Teacher Ratio : B. Sc. : 18:1
(programme wise) M. Sc. : 3:1
- 14 Number of academic support staff (technical) and administrative staff sanctioned and filled : Technical Staff (Lab. Assts.) Administrative Staff (store keeper)
Sanctioned Filled Sanctioned Filled
05 04 01 01

15. Qualifications of teaching faculty with DSC / DLitt/ PhD / MPhil/ PG.

	Name	Qualification
1.	Dr. Mary Kurien	Ph. D, M. Sc
2.	Dr. Sheelakumari Isacc	Ph. D, M. Phil, M. Sc
3.	Dr. P.V Sreenivasan	Ph. D, M. Phil, M. Sc
4.	Mr. Jenish Paul	M. Sc, B. Ed, Ph. D

5.	Ms. Smitha Roy	M. Sc, B. Ed, (doing Ph. D)
6.	Ms. Minu Joys	M. Sc, (doing Ph. D)
7.	Dr. Simi Pushpan	P. D. F, Ph. D, M. Sc.

16. Number of faculty with ongoing projects from a) National b) International : Major Research Project: 0
Minor Research Project: 3
funding agencies and grants received

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sl. No	Name of the Investigator	Title of the Project	Amount	Funding Agency
1.	Dr. A. Benny Cherian	Synthesis of toughened unsaturated polyester resin	Rs.1,30,000	Completed
2	Dr. K. P. Unnikrishnan	Development of particulate filled epoxy resin	Rs.1,40,000	Completed
3	Dr. P. V. Sreenivasan	Preparation of super tough thermoplastic from polystyrene and powdered nitrile rubber	Rs.1,45,000	Completed
4	Mr. Jenish Paul	Glass fibre reinforced epoxidized siloxane modified epoxy system for high strength applications	Rs.1,45,000	Ongoing
5	Ms. Smitha Roy	Isolation of chitin and its interaction studies with organic dyes (Computational and Experimental)	Rs.1,90,000	Ongoing
6	Dr. Simi Pushpan K.	Synthesis and characterization of selected privileged structure bearing Dipyrrromethanes.	Rs.5,00,000	Ongoing

18. Research Centre/ facility recognized by the University -Mahatma Gandhi University

19. Publications :

a) Publications per Faculty : Kindly refer annexure

b) Number of papers published in peer reviewed journals (national/ international) by faculty and students : 20

c)Number of publications listed in International Database	
Monographs	
Chapter in Books	
Books Edited	List attached as annexure

Books with ISBN/ISSN numbers with details of publishers		
Citation Index		
SNIP		
SJR		
Impact factor	:	
h-index		

20. Areas of consultancy and income generated : Provides UV& IR facilities for research; Generated an income of Rs.3,000/-

21. Faculty as members in a) National committees b) International Committees
c) Editorial Boards : Nil

22. Student projects

a. Percentage of students who have done in-house projects including interdepartmental/ programme
B. Sc. Chemistry : 100%
M. Sc. Chemistry: 100%

b. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/ Industry/ other agencies
B. Sc. Chemistry : 0%
M. Sc. Chemistry: 0%

23 Awards/ Recognitions received by faculty and students List attached as annexure I

24 List of eminent academicians and scientists /visitors to the department Refer page no.

25 Seminars/ Conferences/ Workshops organized & the source of funding
a) National
Organized a UGC Sponsored national conference NCAMS 2012 on advances in materials science: Macro to Nano scale on 16th and 17th March 2012. It was inaugurated by Dr. Ramachandran Thekkedath . Hon'ble Vise Chancellor, Cochin University of Science and technology. Organising Prof .Anatharaman memorial and Dr. A.M. Chacko endowment seminars annually.

26 Student profile: programme / course-wise

Name of the Course/ programme	Enrolled	Pass percentage
B. Sc. Chemistry		
2015	42	84
2014	37	76
2013	41	81
2012	40	93
2011	42	82
M. Sc. Chemistry		
2015	13	Result Awaiting
2014	13	50
2013	13	75
2012	12	64
2011	12	73

27. Diversity of Students 100% students from the home state

% of SC/ ST students:					
Name of the Course	2015	2014	2013	2012	2011
B. Sc.	19%	17%	17%	6%	18%
M. Sc.	30%	30%	23%	23%	23%

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE Civil services, Defence services, etc.

JRF: 4

NET: 3

29. Student progression

Student progression	Against % enrolled
UG to PG	47.8%
PG to M. Phil	
PG to Ph. D	10.5%
Ph. D to Post-Doctoral	

30. Details of Infrastructural facilities

1. Library	Department of Chemistry has a reference library having 250 books and 700 journals. In addition to this 800 books has been purchased with the grants received from UGC Minor Research Projects, DST-FIST
2. Internet facilities for Staff & Students	Computing facilities include 16 multimedia computers, 3 laptops with broad band internet connection-Operating systems, Windows 2000 and 2007 professional and Windows Xp professional
3. Class rooms with ICT facility	01
4. Laboratories	<p>The Department has five laboratories; two for postgraduates, one for Research, and two for undergraduates. The postgraduate and undergraduate laboratories have all the needed facilities like electronic balances (with accuracy 0.1 mg and 1 mg), fume hoods, digital potentiometer, digital conductometer, digital colorimeter, refractometer, polarimeter, pH meter, melting point apparatus, vacuum pump, centrifuge, air oven etc. The research lab has various equipments like Digital Potentiometer, Digital Conductometer, Digital</p> <p>Colorimeter, Refractometer, Thermostat, Muffle Furnace, Electronic balances (with accuracy 0.1 mg and 1 mg), Microwave Oven, Rotary Shaker, Rotary</p> <p>Evaporator, UTM, FT- IR Spectrophotometer, UV Spectrophotometer, Flame Photometer, Sonicator, Water analyser etc.</p>

31. Number of students receiving financial assistance from College, University, Government or other agencies

SI No.	Scholarship	2015	2014	2013	2012	2011
1	INSPIRE scholarship.	3	0	2		
2	Prof . T.R Anatharaman and Mrs Sebhambal Anatharaman scholarship of excellence	8	8	8	8	8
3	Dr. A.M Chacko Endowment prize	2	2	2	2	2
4	Trinity Scholarship	1	3	2		
5	UCCAANA (Alumni Association North America)	2	3	2		
6	Kuwait Alumni	2	1			
7	Abraham Kulangara			4		
8	Scranton	1	2			

32 Details on student enrichment programmes (special lectures /workshops /seminar) with external experts

- A talk on topic Science Research Flexibility and Adaptability by Dr. T.J Thomas professor, medicine was given on august 9 2012
- A talk on motivation by Joshi Paul (HDFC area zonal manager for B. Sc chemistry students on July 17 ,2012
- A talk on methodology of science by Dr. K.P. Unnikrishnan on 22-8-2012
- Pro. T. Anatharaman memorial & Dr. A. M. Chacko endowment seminars conducted on 15/2/2013.
- Dr. T. A. Ramanaayanan on carbon corrosion – corrosion process at high temperature
- Dr. K. PIUS , Professor , M. G. University on introduction to computational chemistry .
- Vijil .P. Wilson of VI sem. B.A English and Hema K.H of IV Sem B. Sc physics were the winners
- Chemistry association conducted a departmental chemistry Quiz on 24-1-2012. Amrutha .B and Shahana V.S of III. B. Sc Chemistry is elected for participating in intercollegiate quiz competition
- Inter-collegiate and inter-School Chemistry Quiz competition were conducted on 28-01-2012.
- Amrutha. B and Shahana V.S of U. C. College won first prize in inter-collegiate competition

- Raida Davis & Anjaly G. Menon of Holy Ghost C.G.H.S.S Thottakkattukara won first prize in inter school completion
- Chemistry day and concluding ceremony of chemistry association was conducted on 10-3 -2012
- Organized a UGC. Sponsored national conference NCAMS 2012 on advances in materials science: Macro to Nano scale on 16th and 17th March 2012 . I was inaugurated by Dr. Ramachandran Thekkedath . Hon'ble vice chancellor Cochin University of Science and technology
- The resource persons were
 - Dr. Eby Thomas Thachil Professor & Head , Polymer Science & Rubber Technology, CUSAT Cochin
 - Dr. C. Gouri Scientist SG LFCD-ESG VSSC, Trivandrum
 - Dr. C. P. Reghunathan Nair Scientist G, Group Director, Polymers & Special Chemicals Division VSSC, Trivandrum
 - Dr. K. R. Dayas Director, Centre for Materials for Electronics Technology (C-MET), Trichur
 - Dr. Rani Joseph Professor, Polymer Science & Rubber Technology, CUSAT, Kochi
 - Dr. Deepthy Menon Associate Professor, Amrita Centre for Nanosciences and Molecular Medicine, Kochi
 - Dr. Sabu Thomas Director of School of Chemical Sciences MG University, Kottayam

Several research scholars from various institution participated in oral and poster research paper presentation competition

33. Teaching methods adopted to improve student learning

- Assignments and Seminars were given to students in topics related to Chemistry in everyday life (eg: NMR in Medical Diagnosis, elements in human body, pesticides and insecticides in fruits and vegetables etc.
- Computer aided programs like Chems sketch, Gamess etc. were used for M.Sc. Organic and physical chemistry practical.
- Spreadsheet was used for B.Sc. chemistry practical
- Special career oriented classes were given to B.Sc. students
- Remedial coaching was given to B.Sc. students in Zoology and Physics

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Nil

35. SWOC Analysis of the department and future plans

Strength of the Department:

- Excellent faculty with four PhD holders who are actively involved in institutional and social responsibilities
- Recognized research centre of M. G. University
- Well equipped B.Sc. and M.Sc. labs
- Well equipped instrumentation lab with IR and UV spectrum analysis facility
- A Computational Chemistry lab with internet facilities
- Excellent library facilities

Weakness:

- Underutilization of library facilities
- Inadequate fund for extracurricular activities
- Shortage of Lab assistants.

Opportunity:

- Extensive research in fields like Polymer and Nano chemistry.
- Add on courses
- Collaboration with National and International Organizations
- Imparting value education
- Utilization of alumni resources
- Minor research projects
- Organize national level seminars annually

Challenges:

- Falling standards of students due to entry level constraints
- Compelled to use hazardous chemicals as per curriculum.
- Value erosion of student community

Future Plans:

- To elevate the Department as the centre of excellence
- Collaboration with industries and research institutes

Annexure I

FACULTY

- Dr. Sheela Kumari Isaac has been selected as the member of the 2014 Under Graduate Chemistry board of studies of MG University Kottayam
- Dr. P. V. Sreenivasan has been selected as the subject expert of P.S.C

STUDENTS

- Josemon P. P. of III B.Sc chemistry won bronze medal in net ball in national games 2014
- K. Narayana Menon Memorial Award for best outgoing B.Sc final year chemistry students of 2011 were won by Nagaraj.K and Midhun Mohan .
- Prof. T. R. Anatharaman & Mrs. Seshambal Anatharaman scholarship of excellence were secured by Renjith C ,Aparna. S. Nair,(I B.Sc Chemistry) Venna Gopal , Deepthi Ramesh(II B.Sc Chemistry) Kiran A.G , Basil U(III B.Sc. Chemistry)
- Amrutha. B and Shahana V.S of U.C College won first prize in intercollegiate competition Conducted on 28-01-2012 by U.C .College Aluva
- Rahul K. R. of VI semester B.Sc Chemistry won first prize in clay modeling competition in M. G. University youth festival
- Jithesh .P VI semester B. Sc Chemistry was member in hockey team which won first prize in intercollegiate competition
- Chitra Raj IV semester B. Sc Chemistry was Cricket team captain, member in baseball team south zone, which won III prize, member in baseball team who won II prize in intercollegiate, member in softball which won I prize in intercollegiate.
- Sanu Varghese of IV semester B. Sc Chemistry member in judo team Which won first prize in M.G. University championship
- Amrutha.B and Shahana V.S of U.C College won first prize in intercollegiate competition conducted on 28-01-2012 by U. C. College Aluva
- Shiyana Rahim, Bony P. Joy and Elsa Susan Kurien (III B.Sc. Chemistry) secured Campus Placement as Project Trainee from Tech Mahindra.
- Anjaly Jose and Ashly George (III B.Sc. Chemistry) secured Campus Placement as Project Trainee from Wipro.
- Josemon P. P (I M.Sc. Chemistry) won Bronze Medal in Net Ball Competition in National Games 2015
- Athira Nair of II B.Sc. Chemistry participated in the Republic Day Parade of 2015 at New Delhi.
- Sanu Varghese (II M.Sc. Chemistry) is selected as Liaison officer in National Games 2015.
- Sanu Varghese (II M.Sc. Chemistry) has won II prize in Judo Championship conducted by M.G. University (2014)
- Sanu Varghese (II M.Sc. Chemistry) has won III prize in Judo Championship conducted by M.G. University (2015)

- Josemon P. P (I M.Sc. Chemistry) won I Prize in Net Ball Competition in M.G. University in 2015
- Nasrin Kabir & Anjaly Jose (III B.Sc. Chemistry) won third prize in All Kerala Intercollegiate Quiz competition conducted by Dev Matha College, Kuruvilangad.
- Shiyana Rahim & Reshma Bose (III B.Sc. Chemistry) won First prize in Intercollegiate Chemistry Quiz competition conducted by U. C. College, Aluva.
- Prof. T. R. Anatharaman & Mrs. Seshambal Anatharaman scholarship of excellences awarded to the best student of III B.Sc. Chemistry was secured by Anna Jose
- Prof. T. R. Anatharaman & Mrs. Seshambal Anatharaman scholarship of excellences awarded to the second best student of III B.Sc. Chemistry was secured by Bony P. Joy
- Prof. T. R. Anatharaman & Mrs. Seshambal Anatharaman scholarship of excellences awarded to the students of II B.Sc. Chemistry is secured by Devika T. N and Sruthi Jyothi
- Prof. T. R. Anatharaman & Mrs. Seshambal Anatharaman scholarship of excellences awarded to the students of I B.Sc. Chemistry is secured by Parvathy P. A. and Gopika S. Madhu
- Keerthana G. Menon (I B.Sc. Chemistry), Ragi Raj (I M.Sc. Chemistry) was placed first and second respectively in the Prof. A.M.Chacko Endowment light music competition
- Nasrin Kabir & Anna Jose (III B.Sc. Chemistry) received Inspire Scholarship worth Rs.4 lakhs
- Gopika S Madhu, Amritha P. Sandra, Parvathy P.A., Rineesha N Basheer (I B.Sc. Chemistry) were the recipients of KSCTE Pratibha Scholarship
- Athira P.V (I B.Sc. Chemistry) won 3rd Prize for Long Jump in Annual Sports day held on 27.02.2015
- Basil (I B.Sc. Chemistry) won 1st Prize for 1500m race in Annual Sports day held during the Sports day of UCC
- Keerthana G. Menon (I B.Sc. Chemistry) was selected as a participant of Voice of UCC
- Smrithy, Sadiya C.A, Shabana, Shifana, Amrutha, Anna, Merin, Naeema, Juviya and Keerthana Kaladharan (I B.Sc. Chemistry) secured 1st prize in Oppana Competition held during the Arts Festival of UCC
- Veena Gopal, Anjumol P. Thomas, Soumya K.R., Mariya Kurien, Jisna Varghese, Reshma Prakashan, (I M.Sc. Chemistry) were placed 2nd in the Group dance competition in Gaddhika.
- Chemistry Team comprising of II M.Sc. and IIB.Sc. Students' secured 2nd prize for group dance in Keraleeyam held on Nov. 1, 2014.
- Mr.K.Nagaraj of III B.Sc Chemistry attended a project-oriented program at JNCASR, Bangalore.
- Ms.Shahana and Ms.Sreelakshmi of II B.Sc Chemistry were awarded the Scranton Scholarship by the Scranton Women's Leadership Center, Seoul,S.Korea

DEPARTMENT OF PHYSICS

1. Name of the Department : Department of Physics
2. Year of Established : 1926
3. Names of the Programmes/
Courses offered : B. Sc. Physics, M. Sc. Physics, and Ph. D.
4. Names of inter disciplinary courses and the departments /Units involved : The Department offers open course (Amateur Astronomy) for fifth semester CBCSS Undergraduate students of the College
5. Annual/ semester/choice based
Credit system : The Choice Based Credit and Semester System (CBCSS) of Mahatma Gandhi University for the B. Sc. Physics (6 semesters)

The Post Graduate Credit and Semester System (PGCSS) of Mahatma Gandhi University for the M. Sc. Physics (4 semesters).
6. Participation of the department in the courses offered by other departments: : The Department offers a Complimentary course for B. Sc. Chemistry and B. Sc. Maths an Open course (Amateur Astronomy) for fifth semester CBCSS Undergraduate students of the College. The students in the fifth semester are encouraged to participate in the various open courses offered by different departments of the college
7. Courses in collaboration with other universities, industries, foreign institutions: Nil
8. Details of courses/ programmes discontinued (if any) with reasons : Nil
9. Number of teaching posts :

Name of Post	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	1	1
Asst. Professors	8	8

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.)

	Name	Qualification	Designation	Specialization	Teaching Experience	No. of Ph. D students- past 4 years
1.	Dr. E I. Anila	M. Sc., M. Phil, PhD	Associate Professor	Material Science	28	8
2.	Dr. Rachel Reena Philip	M. Sc., PhD	Assistant Professor	Material Science	17	8
3.	Dr. Rakhi Raphael	M. Sc.	Assistant Professor	Material Science	4.5	
4.	Dr. Alex Mathew	M. Sc., Ph. D.	Assistant Professor	Material Science	4	
5.	Dr. Manu Punnen John	M. Sc., Ph. D.	Assistant Professor	Nonlinear dynamics	4	
6.	Dr. Reshmi Raman	M. Sc., M. Phil., Ph. D.	Assistant Professor	Material Science	3.5	
7.	Dr. Pramod Dominic	M. Sc., Ph. D.	Assistant Professor	String Theory	2.5	
8.	Dr. K Madhu	M. Sc., Ph. D.	Assistant Professor	String Theory	1.5	
9	Dr.Shinoj V K	MSc. PhD	Assistant Professor	Optics	1	

11. List of senior visiting faculty : Nil
12. Percentage of lectures delivered and practical classes handled by temporary faculty (programme wise) : UG – Theory: 0%
UG – Practical : 0%
PG – Theory : 0%
PG Practical : 0%
13. Student - Teacher Ratio (programme wise) : B. Sc. : 56:3
M. Sc. : 15:1
14. Number of academic support staff (technical) and administrative staffs sanctioned and filled : Technical Staff (Lab Assts.) Administrative Staff (store keeper)
Sanctioned Filled Sanctioned Filled
05 03 01 01
15. Qualifications of teaching faculty with DSC / DLitt/ PhD / MPhil/ PG.

	Name	Qualification
1.	Dr. E I. Anila	M. Sc., M. Phil, PhD
2.	Dr. Rachel Reena Philip	M. Sc., PhD
3.	Dr. Rakhi Raphael	M. Sc.
4.	Dr. Alex Mathew	M. Sc., Ph. D.
5.	Dr. Manu Punnen John	M. Sc., Ph. D.
6.	Dr. Reshmi Raman	M. Sc., M. Phil., Ph. D.
7.	Dr. Pramod Dominic	M. Sc., Ph. D.
8.	Dr. K Madhu	M. Sc., Ph. D.
9.	Dr. Shinoj V K	MSc., PhD

16. Number of faculty with ongoing projects from

a) National: Five as PI and two as Scientist Mentors for research students

b) International: One as PI and One as Co-PI

17. Departmental Projects Funded by DST-FIST, UGC,DBT,ICSSR,etc. and total grants received

National collaborative (UGC-DAE)	National (DST, UGC and BRNS)	State (KSCSTE)
1	10	3
Name of faculty	Funding Agency	Title
Rachel Reena Philip	UGC (collaborative)	TiO ₂ nanotubes as electrodes in supercapacitors and junctions in photovoltaics running in collaboration with UGC-DAE consortium for Scientific research, Indore. (2014-17)2014-2017.
Manu Punnen	UGC minor	An Electro-mechanical piecewise linear system for Structural Health Monitoring Ref. 1845-MRP/14-15/KLMG012/UGC-SWRO(2015-17)
RakhyRaphal	UGC Minor	Organic-Inorganic Metal Halide Perovskites for Solar Cell Applications, Ref no 1846-MRP/14-15/KLMG012/UGC-SWRO(15-17)
E.I Anila	UGC Minor	Studies on effect of flux on the structural and optical properties of SrS:Cuphosphorperiod 3-7-2009 to 2-7-2011
Resmi R	UGC Minor	Sensing Properties of CNT TiO ₂ Nano structures, Year: 2016-2018
Rachel Reena Philip	UGC Minor	Band gap engineering of nanostructured leadsulphidethin films by doping and fabrication of solar cell device, (Ref. no: MRP(S)-1193/11-12/KLMG012/UGC-SWRO KLMG012, 2012-2014.
E.I.Anila	UGC Minor	UGC Minor project entitled “Synthesis and characterisation of nanostructured PbS thin films for photovoltaic applications” 2013-2015
Anila E I and Resmi R,	BRNS (Major)	Fabrication and characterisation of transparent conducting oxide thin films for optoelectronic applications, Year: 2015-2018, BRNS Project
Anila E.I	DST(Major)	Preparation and characterization of nanophosphors for display and biomedical applications 2012-15.
Rachel Reena Philip	DST(Major)	Fabrication And Characterization of Hybrid Solar Cells Of a Novel Configuration with I-III-VI OVC and II-VI or IV – VI nanostructured thin films, (Ref no:

SreejaSangeeth (Research Student), Supervisor: Anila E I	DST Women Scientists	SR/S2/CMP-0036/2012), DST major project (3 years project) 2013-2016. Electrical and nonlinear optical characterization of optoelectronic materials, 2014-17
Reshmi R and Alex Mathew	KSCSTE (Major)	Synthesis and characterization of MoO ₃ for nanoscale device application, Year: 2016-2019,
Rachel Reena Philip	KSCSTE (Major)	Thin film preparation and valence band splitting studies of I-III-VI compounds and solar cell device fabrication, (Ref.no:012/SRSPS/2007/CSTE), 2009-2012.
Rajani Jacob (Research Student) Rachel Reena Philip (Scientist Mentor)	KSCSTE (Back to Lab)	Fabrication and characterization of hetero junction solar cells 2014-17
(Msc Students Anuja and Raina) Reshmi R	KSCSTE student Project	Growth and characterization of TiO ₂ nanostructures for sensing applications, Year: 2014, (Completed)
MSc Student Akash and Merian) Reshmi R	KSCSTE student Project	Growth of rGo for optoelectronic applications Year:2015 Resmi R KSCSTE Project (Completed)
Reshmi R	UBCHEA International	Treatment of sewage water using oxide based catalytic beds, , 2014-15
	UBCHEA International	A simple and efficient portable set up for water purification using Nano metal oxides and sunlight,Year:2015-16

18. Research Centre/ facility recognized by the University Yes.

Affiliated to Mahatma Gandhi University

19. Publications

- a) Publications per Faculty : Annexure
- b) Number of papers published in peer reviewed journals (national/ international) by faculty and students

Faculty Name	Number of papers published in peer reviewed International journals by faculty and students with I.F between~ 1.5 and 7.4	publications listed in International Database (For eg: Web of Science, Scopus, Humanities International ,Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	Monographs/ Books
Dr. E. I. Anila	3(2016) 4 (2015) 1(2014) 1(2013)	4(2016) 6((2015) 3(2014) 2(2013)	1(2011)

	3(2012) 2(2011)	3(2012) 3(2011)	
Dr. Rachel Reena Philip	7 (2016) 4 (2015) 5(2014) 1(2013) 3(2012) 1(2011)	8(2016) 4 (2015) 10(2014) 3(2013) 3(2012) 3(2011)	
Ms. Rakhy Raphael	Nil in the accreditation period	NA	NA
Dr. Alex Mathew	Nil in the accreditation period	NA	NA
Dr. Manu Punnen John	1(2012)		
Dr. Reshmi R	1(2016) 3 (2015) 2(2014) 1(2012) 3(2011)	1(2016) 5 (2015) 2(2014) 4(2012) 3(2011)	0
Dr. Pramod Dominic	1 (2015) 1(2012) 2(2011)	1(2015) 1(2012) 2(2011)	0
Dr. K. Madhu	Nil in the accreditation period	NA	NA
Dr.Shinoj V K	1(2016) 3(2015) 2(2014) 2(2012) 3(2011)	6(2015) 2(2014) 2(2012) 4(2011)	1 Book chapter (2013)

20. Areas of consultancy and income generated By Outsourcing the facilities like PL and spray research facility: Rs.50,000/-
- 21 Faculty as members in a) National committees
b) International Committees c) Editorial Boards:
a. National Committees:
International Committees
Faculty serve as referees for various international journals
1) Materials Research Bulletin, Elsevier journal published from U.S

- 2) Optical Materials, Elsevier journal published from U.S.
 - 3) Journal of Electro Chemical Society.
 - 4) Powder Technology, Elsevier journal
 - 5) Chemical Physics Letters, Elsevier journal
22. Student projects
- a. Percentage of students who have done in-house projects including interdepartmental/ programme

B. Sc. Physics : 100%
M. Sc. Physics : 100%
 - b. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/ Industry/ other agencies

B. Sc. Physics : 0%
M. Sc. Physics : 0%
- 23 Awards/ Recognitions received by faculty and students
1. Dr. Reshmi R- FLAIR international fellowship to
 2. Dr. Rachel Reena Philip United Board Fellow, 2012-14
 3. Dr. Anila E .I International travel grant
24. List of eminent academicians and scientists /visitors to the department
- Prof H S Mani, Dept of Physics, Chennai Mathematical Institute. Association of Physics Teachers lecture series on Special Theory of Relativity on 13 and 14th February 2016.
 - Dr. MK Jayaraj. Dept of Physics CUSAT. Talk on “Up conversion Phosphors for solar cells application “ 6/6/2015
 - Prof. VPN Nampoori, Dept. of Photonics, CUSAT. Lecture on “Cosmology”
 - Dr. K P Unnikrishnan (2012), Department of Chemistry, UCC Talk on “Chemistry in daily life and environmental issues”
 - Dr.C S Unnikrishnan, Professor, Tata Institute of Fundamental Research (TIFR), Mumbai (2014) Lecture on “Gravitational Waves: Physics, Technology, and New Astronomy’
 - Prof JoaquimPuigdollers, Micro and Nanotechnologies Research Group Department of Electronic Engineering UniversitatPolitecnica de Catalunya, Spain. Talk on “Organic Solar cells” on 9/2/2016
 - Prof. Sunilkumar P B IIT,Madras and Director in charge, IIT, Palakkad. “Physics of soft and Biological matters “ 29/10/2015

- Ex additional district judge Sri. Somasundaran Nair (2014) Talk during the Alumni get together
- Dr. S.V.M Satyanarayana, Dept. of Physics, Pondicherry Central University(2015) Talk on “Tensor analysis”
- Dr. V. C. Kuriakose, Professor Emeritus, Cochin University of Science and Technology. Talk on “Solar System”

25. Seminars/ Conferences/ Workshops organized & the source of funding

- Two day workshop in association with APT on Special theory of Relativity funded by APT
- Two day workshop in association with APT on Tensor Analysis funded by APT
- Seminar on Physics of soft and biological matter, Prof. Sunil Kumar P B IIT, Madras funded by UBCHEA

26. Student Profile programme/ course-wise

	Name of the Course/ programme	Enrolled	Pass Percentage
B. Sc. Physics			
	2015	56	55
	2014	47	61
	2013	57	97
	2012	58	95
	2011	38	100
M. Sc Physics			
	2015	15	Result is Awaiting
	2014	14	80
	2013	15	79
	2012	15	51
	2011	15	69

27	Diversity of Students	Students from the home state and Lakshadweep.					
		% of SC/ ST students:					
		Name of the Course	2015	2014	2013	2012	2011
		B. Sc.	19%	17%	17%	6%	18%
		M. Sc.	30%	30%	23%	23%	23%

28	Year	Total no. of students		Civil services	Defense services
		NET/JRF	GATE		
	2011	3	2	Nil	Nil
	2012	2	2	Nil	Nil
	2013	1	Nil	Nil	Nil
	2014	3	1	Nil	Nil
	2015	1	2	Nil	5

29.	Student Progression	
	UG to PG	53%
	PG to PhD	40%
	BSc Students who excelled in IAPT,JAM	15 nos.
	MSc students who presented papers in international/national conferences	18
		5
	BSc students who presented papers in National Conferences	2
	Ph. D students who got DST, KSCTE women Scientist fellowships	1
	Ph. D awards	

30. Details of Infrastructural facilities

Library	Department library with more than 600 books and journals.
Internet facilities for Staff & Students	Computing facilities include 21 multimedia computers,4 laptops with broad band internet connection-Operating systems, Windows 2000 and 2007 professional and Windows Xp professional
Class rooms with ICT facility	01
Laboratories	The Department has seven laboratories; two for postgraduates, two for undergraduates.2 well furnished Material Science research labs with vacuum coating units, spray pyrolysis systems, furnaces, spin coating unit etc for materials fabrication and PL, conductivity unit, spectral response unit etc for characterization and with good national and international collaborations (with CUSAT, Cochin; IIT Bombay; UGC-DAE, Indore; HOPE College, MI, USA etc.) .One more research lab under construction.

31. Number of students receiving financial assistance from College, University, Government or other agencies

Scholarships	2015	2014	2013	2012
Scholarship from College	27	27	27	27
Scholarship from Government(Inspire/ Prathibha)	8	1	4	2
Scholarship from Other agencies(DST, students KSCSTE and UGC-DAE)		6		
Financial Assistance/ Scholarship from the Department	13(UG) 5 (PG)	13 (UG) 5 (PG)	13(UG) 5 (PG)	13(UG) 5 (PG)

32. Details on student enrichment programmes (special lectures /workshops /seminar) with external experts

Special lectures

- Lecture on Cosmology by Prof. VPN Nampoori (2011)
- Students interaction with Dr. E.C George Sudharshan (2011-12), Renowned physicist and Scientist.
- Lecture on Chemistry of cosmetics by Dr. K P UnniKrishnan (2012), Department of Chemistry, U.C.C.
- Talk on “Handling future” by Dr.Simon Thomas, Former Vice President of Semi-Conductor Division, Motorola.
- Gravitational Waves: Physics, Technology, and New Astronomy’byDr.C S Unnikrishnan, Professor, Tata Institute of Fundamental Research (TIFR), Mumbai (2014).
- Talk by Ex additional district judge, Sri. Somasundaran Nair (2014)
- Talk by Dr. Jeevan Job Thomas on Searching Reality Through Physics
- Physics stage show-Dr.Ananthakrishnan(2013)
- Physics stage show – Dr,James(2014)

Workshops

- Sky Watching workshop in amateur astronomy by Dr. Sobhan, Associate prof. Maharajas college (2011)
- Workshop on Innovative experiment and projects in Physics by department of Physics and IAPT (2012)
- Night sky watching programme lead Dr. V. C. Kuriakose, Professor Emeritus, Cochin University of Science and Technology
- The department of physics in association with ISRO, TVM, conducted a three-day exhibition in science and technology “Bhauthika 2k14” from January 16-18, 2014.
- Two day workshop in association with IAPT on Tensor Analysis by Dr.S.V.M Satyanarayana, Dept. of Physics, Pondicherry Central University (2015)

Seminars

- Seminar on “Upconversion phosphors for solar cell applications” Prof. Jayaraj, Professor, Cochin University of Science and Technology(2015)
- Seminar by Prof. P B Sunilkumar, Director in charge, IIT, Palakkad, on the inter disciplinary topic Physics of soft and biological matter (2015)

33. Teaching methods adopted to improve student learning

- Demonstrations through models and experiments
- Black-board teaching
- Hands-on experience with molecular-modeling and graphics
- Case-studies on related topics

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Bhauthika Exhibition open to college students, school students and faculty and to community around. Participation from school students alone was over 1500
- Service learning projects. Around 60 students participated.

35. SWOC Analysis of the department and future plans

Strengths: Qualified Faculty, Faculty trained from Reputed Institutions with willingness to spend extra time on teaching and evaluation, moderately good Infrastructure facility with one smart classroom and ICT facilities, well equipped materials Science research labs with 16 PhD students under two research guides. National and international research collaborations. More than one crore Funding generated through various research projects.

Five Opportunities: Bright Students, Good Library, Eminent Faculty with great possibilities for expanding the research to theory and photonics.

Five Challenges: High teacher student ratio that often hinders face-to-face interactions in the class along with a great variation in the student’s IQ level that requires more one-by -one interaction.

36. Any Other points to be noted

- Alumni contribution for Library cum Seminar room: 9lakhs
- From platinum jubilee exhibition~ 1.5 lakhs (~RS.50,000 to endowment fund)

DEPARTMENT OF BOTANY

1. Name of the Department : Botany
2. Year of Establishment : 1926
3. Names of Programmes /Courses offered : B. Sc. Botany, M. Sc. Botany and Ph.D. in Botany
4. Names of Interdisciplinary courses and the Departments/units involved : The Department offers open course (Horticulture and Nursery Management) for fifth semester CBCSS undergraduate students of the College.
5. Annual/ semester/choice based credit system : The Choice Based Credit and Semester System (CBCSS) of Mahatma Gandhi University for UG Botany programme (6 semesters)

The Post Graduate Credit and Semester System (PGCSS) of Mahatma Gandhi University for PG Botany programme (4 semesters).
6. Participation of the department in the courses offered by other Departments : Nil
7. Courses in collaboration with other universities industries, foreign institutions, etc. : Nil
8. Details of courses/programmes discontinued (if any) with reasons : Nil
9. Number of teaching posts : 8

Post	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	Nil	Nil
Assistant Professors	8	7

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience
Dr. Thara K. Simon	M.Sc. Ph.D.	Assoc. Prof.	Plant Taxonomy	22
Dr. David Saj Mathew	M.Sc. Ph.D.	Assoc. Prof. and Head	Plant Pathology	22
Dr. P. Thomas Mathew	M.Sc. Ph.D.	Assoc. Prof., and Principal	Plant Systematics	20
Dr. Manju M. George	M.Sc. Ph.D.	Assist. Prof.	Plant Biotechnology	11
Dr. Anil Kumar M.	M.Sc. Ph.D.	Assist. Prof.	Biotechnology	10
Mrs. Anumol Jose	M.Sc. NET	Assist. Prof.	Biotechnology	7
Dr. Justin R. Nayakam	M.Sc. Ph.D.	Assist. Prof.	Plant Propagation	4

11. List of senior visiting faculty :

Dr. V.K. Sathish, Director TBGRI Palode	Seminar
Dr. Mohan Kumar Director	Orientation seminar 29/7/2015
Mr. M.R.K Menon	Orientation seminar and soft skill development 30/07/2015

12. Percentage of lectures delivered and practical

Classes handled (Programme wise) by temporary faculty : NA

13. Student -Teacher Ratio (Programme wise)

B. Sc. Botany : 30:1

M. Sc. Botany : 3:1

14. Number of academic support staff (technical) and administrative staff :

Sanctioned	4
Filled	3

15. Qualifications of teaching faculty with D. Sc/ D. Litt / Ph. D/ M. Phil / PG.

Name	Qualification
Dr. Thara K. Simon	M.Sc. Ph.D.
Dr. David Saj Mathew	M.Sc. Ph.D.
Dr. P. Thomas Mathew	M.Sc. Ph.D.
Dr. Manju M. George	M.Sc. Ph.D.
Dr. Anil Kumar M.	M.Sc. Ph.D.
Mrs. Anumol Jose	M.Sc. NET
Dr. Justin R. Nayakam	M.Sc. Ph.D.

16. Number of faculty with ongoing projects from National and International funding agencies and grants received

- a) National : Five faculties finished Minor Research Projects funded by UGC
- b) International : One faculty member has two projects funded by United Board of Christian Higher Education in Asia (UBCHEA)

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received (2011-16)

Name	Topic	Funding Agency	Amount granted in INR
Dr. P M Kuriechen	Histopathological Studies in Some Common Fruity Vegetables	UGC	1,20,000.00
Dr. Thara K Simon	Phytochemical analysis and DNA sequencing of 2 species of Podostemeaceae of Kerala rivers	UGC	1,20,000.00
Dr. David Saj Mathew	Selection of root rot resistant <i>Coleus forskohlii</i> plants	UGC	1,30,000.00
Dr. Manju M George	Transformation studies in <i>Coleus forskohlii</i> - an important medicinal plant.	UGC	1,45,000.00
Dr. Manju M George	In vitro studies in <i>Barlaria lupulina</i>	UGC	1,40,000.00
Dr .M Anil Kumar	Phytochemical screening and antimicrobial studies of <i>Simarouba glauca</i> DC	UGC	1,25,000.00
Dr. M Anil Kumar	Antiinflammatory studies in the leaf extract of <i>Litsea quinqueflora</i> Denns. Suresh	KBC-KSCSTE	19,11,500.00
Dr. Justin R Nayagam	Shaping riverbanks of healthy water and healthy lives	UBCHEA	4,05,000.00
Dr. Justin R Nayagam	Planning indigenous tree species to re create riverbank beauty	UBCHEA	4,64,000.00
Dr. Justin R Nayagam	Battering Waves: Local Knowledge Initiative for gathering coastal knowledge – Phase I	UBCHEA	2,60,000.00
Dr. Justin R Nayagam	Battering Waves: Local Knowledge Initiative for gathering coastal knowledge – Phase II	UBCHEA	3,25,000.00
Dr. Justin R Nayagam	Eye Openers: Service Learning Initiative with the Blind – Phase I	UBCHEA	5,20,000.00
Dr. Justin R Nayagam	Eye Openers: Service Learning Initiative with the Blind – Phase II	UBCHEA	5,85,000.00
Dr. Justin R Nayagam	Orchestrating Lives	UBCHEA	2,60,000.00
Department Infrastructure Development-DST-FIST (2009) 2012-17		DST	47,00,000.00
	Total		1,02,10,500.00

18. Research Centre /facility recognized by the University:

The Department has been recognized as a Research Centre under Mahatma Gandhi University, Kottayam in 1985 onwards, sanction No. Ac/AII/1/504/85dtd 29/10/85.

19. Publications : List attached as annexure I

20. Areas of consultancy and income generated:

Pathological and Taxonomical Flora Identification Service to Public, Farmers and Government Organization are done by the department.

Income Generated - Nil

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards.

a) Nil

b) Nil

c) Dr. Manju M George, Reviewer of the Journal -Plant Cell Tissue and Organ Culture.

d) Dr. M Anilkumar, Reviewer of the Journal -Plant Cell Tissue and Organ Culture.

e) Dr. Justin R. Nayagam: Reviewer International Journal of Agricultural Research, Sustainability and Food Sufficiency (IJARSFS)

22. Student projects Nil

a) Percentage of students who have done in-house projects including inter departmental /programme:

- UG - in house project 100%
- PG - in house project 100%

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: nil

23. Awards / Recognitions received by students:

Academic

International Recognition: Ms. Kalyani Krishna (2013-15) Received DAAD scholarship and is presently pursuing PhD in Plant Sciences at Free University, Berlin, Germany

University: Nil

Awards received by Teachers

IFABL (International Forum for Agriculture, Biology and Life Sciences) 2016, Kurume, Japan: Outstanding Paper Award – Dr. Justin R. Nayagam

24. List of eminent academicians and scientists / visitors to the Department

International Nil

National

25. Seminars/ Conferences/Workshops organized and, the source of funding: List attached as annexure II

26. Student profile programme/course wise:

B. Sc. Botany

Name of the Course/programme	Applications received (in Management quota alone)	Selected (in Management quota alone)	Enrolled (Total)		Pass percentage
			Male	Female	
2011	24	6		6	88.5
2012	21	6		6	96
2013	26	6		6	79
2014	19	6		6	93
2015	35	6		6	88.5

M. Sc. Botany

Name of the Course/programme	Applications received (in Management quota alone)	Selected (in Management quota alone)	Enrolled (Total)		Pass percentage
			Male	Female	
2011	9	2		2	75
2012	9	2		2	92
2013	10	2		2	92
2014	7	2		2	53
2015	11	2		2	83

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other states	% of students from abroad
B.Sc.	99	1	nil
M.Sc.	99	1	nil

Number of SC/ST and OBC students:

Name of the Course	2016		2015		2014		2013		2012	
	SC/ST	OBC	SC/ST	OBC	SC/ST	OBC	SC/ST	OBC	SC/ST	OBC
B. Sc.	8	19	6	19	7	18	7	13	6	20
M. Sc.	2	6	3	4	2	8	2	7	2	8

28. No. of students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc

UGC – JRF : 02

UGC – NET : 04

29. Student progression

Student Progression	Against % enrolled
UG to PG	30%
PG to M. Phil	8.3%
PG to PhD	3%
Ph.D. to PDF	-
Employed	
Campus Selection	ASAP - 1.5% CIAL - 2%
Other than campus recruitment	45%
Entrepreneurship / Self-employment	10%

30. Details of infrastructural facilities

- Department library with computerized lending system –500 books & journals- (one online Journal)
- Computer & Internet facility – 17 desktops and 03 laptops with Wi-Fi facility.
- Class rooms with ICT facility – One
- Laboratories – One for Under-graduate and two for Post-graduate students.
- Instrumentation room (DTS- FIST) 01
- Tissue Culture Lab 01
- Cell culture Lab 01
- Research Lab 01

31. Number of students receiving financial assistance from college, university, government and other agencies

1) E grants

Year	No. of Students
2010-2011	13
2011-2012	19
2012-2013	15
2013-2014	21
2014-2015	20

- Kuwait Alumni - 1
- UCCANA – 8
- Kano Yamomoto – 8
- Liberty & Trinity – 4
- Scranton - 1
- Mrs. Sosamma Philipose endowment scholarship (One Lakh Year for 5 student in each year and for study tour)

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts

International : Nil

National : Walk with Scholar and student support program

33. Teaching methods adopted to improve student learning

Field visits

Organizing seminars by eminent persons

ICT enabled class room Teaching

34. Participation in Institutional Social Responsibility (ISR) and Extension activities.

: Nil

35. SWOC analysis of the department and future plans.

Strengths:

- Faculty with diverse area of specialization in Plant Science
- Well-equipped laboratory for molecular science research
- Well maintained Botanical garden , Arboretum and field study area
- Herbarium Collection

Weaknesses:

-Inadequate space for expansion

Opportunities:

- Facilities available for Industrial floriculture.
- Facilities available for the consultancy services.
- Referral Herbarium.
- Faculty and facilities available for training programmes for Research scholars of life sciences.
- Faculty and Facilities available for training programmes for High School and Higher Secondary teachers in new innovations in Plant Science.

Challenges:

- First generation learning student in UG Level.
- Socially and financial backward student in UG Level

Future Plans:

- Departmental project with an interdisciplinary approach
- Workshop/ training for college/ Higher secondary teachers and research scholars
- Enabling ICT facility to all class rooms
- Start a journal club for students and faculty and Research scholars

- Undertaking major projects in frontier areas of plant science research and produce scientific papers in peer reviewed journals.
- Make the department as an advance research facility center for molecular biology research with DST- FIST support.
- Training center for students and faculty of schools and colleges, in advanced biological techniques.
- Expands existing and new collaborations with Biotechnology and Ayurveda medicine industries.
- Exist as a consultancy center for plant Systematics.

Mission:

“To preserve and disseminate the seeds of excellence and to train the next generation plant scientists”.

Annexure I

LIST OF SEMINARS, CONFERENCES, AND WORKSHOPS

National Seminar :

UGC National Seminar on “Recent trends and Advances in Plant Sciences research”
march 9-10, 2016.

Workshop:

Hands-on–training for High Schooll teacher on Microscopes and „Microbila world“ conducted by the department in collaboration with Kerala Sasthra Sahithya Parishith.

DEPARTMENT OF ZOOLOGY

1. Name of the Department : Department of Zoology
2. Year Established : 1965
3. Names of the Programmes/Courses offered : 1. B.Sc. Zoology
2. M. Sc. Zoology
4. Names of inter disciplinary courses and the departments /Units involved:
Department offers subsidiary papers for B. Sc. Botany and B. Sc. Psychology
5. Annual/ semester/choice based credit system : The Choice Based Credit and Semester System (CBCSS) of Mahatma Gandhi University for the B. Sc. Zoology (6 semesters)

The Post Graduate Credit and Semester System (PGCSS) of Mahatma Gandhi University for the M. Sc. Zoology (4 semesters).
6. Participation of the department in the courses offered by other departments:
 - Teaches Open Courses
 - CES
7. Courses in collaboration with other universities, industries, foreign institutions
: Nil
8. Details of courses/programmes discontinued (if any) with reasons
: Nil
9. Number of teaching posts : 8
10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./Ph.D. / M. Phil. etc.)

	Name	Qualification	Designation	Specialization	Teaching Experience
i.	Dr. Shirley Thomas	M. Sc. PhD.	Assistant Professor	Physiology (Marine Science)	10 years
ii.	Mrs. Rima Joseph	M. Sc.	Assistant Professor	Environmental Sciences	4 years
iii.	Ms. Elizabeth. V. Mathew	M. Sc.	Assistant Professor	Environmental Sciences	2 year
iv	Dr. Niladevi.K.N	M. Sc., Ph.D	Guest Faculty	Microbiology & Biochemistry	6 years
v.	Mrs. Sheena Jose	M.Sc	Guest Faculty	Entomology	6years
vi	Ms. Aswathy Sivaraman	M.Sc	Guest Faculty	Environmental Sciences	-
vii	Ms. Meenu Kurien	M. Sc	Guest Faculty	Fisheries Science	-
viii	Mrs. Sherin Ann Abraham	M. Sc	Guest Faculty	Fisheries Science	-
ix.	Ms. Merin P. Johny	M. Sc	Guest Faculty	Environmental Sciences	-

11. List of senior visiting faculty : Prof. N.C. Chacko, Dr. T. Thomas Philip & Prof. Jacob Kurian
12. Percentage of lectures delivered and practical classes handled by temporary faculty (programme wise) : UG - Total by Temporary faculty PG - 1/4th by Temporary faculty
13. Student - Teacher Ratio (programme wise) : B. Sc. : 30:1
M. Sc. : 14:1
14. Number of academic support staff (technical) and administrative staff sanctioned and filled

Technical Staff		Administrative Staff	
Sanctioned	Filled	Sanctioned	Filled
Nil	Nil	03	02 (Lab Asst.)

15. Qualifications of teaching faculty with DSC / DLitt/PhD /MPhil/PG

	Name	Qualification
1.	Dr. Shirley Thomas	M. Sc. PhD.
2.	Mrs. Rima Joseph	M. Sc.
3.	Ms. Elizabeth. V. Mathew	M. Sc.
4.	Dr. Niladevi K.N	M. Sc., Ph.D
5.	Mrs. Sheena Jose	M.Sc
6.	Ms. Aswathy Sivaraman	M.Sc
7.	Ms. Meenu Kurien	M. Sc
8.	Mrs. Sherin Ann Abraham	M. Sc
9.	Ms. Merin P. Johny	M. Sc

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : Two UGC Minor project grants

1. Dr. Shirley Thomas, Ph.D - Rs. 1.5 Lakh.

2. Mrs Rima Joseph, MSc - Rs 2.5 lakh.

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sl. No	Name of the Investigator	Title of the Project	Amount	Funding Agency
1.	Dr. Shirley Thomas	Analysis of Biorhythm in man	Rs. 1.5 Lakh	UGC
2.	Rima Joseph	"A study on the effectiveness of solitary bees as pollinators when compared to honey bees in a vegetable cropland"	Rs 2.5 lakh	UGC

18. Research Centre/ facility recognized by the University : NA

19. Publications :

a) Publications per Faculty : Separate list Attached.

b) Number of papers published in peer reviewed journals (national/ international) by faculty and students :

20. Areas of consultancy and income generated

- a. Sale of Vermicompost and seed species for Vermiculture.
- b. Consultancy in Arachnology (Taxonomy of Spiders)
- c. Consultancy in Vermicomposting.
- d. Consultancy in Ornamental fish rearing and breeding.
- e. Sale of ornamental fishes and aquarium plants (aquaponics).

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:

a. *International Committees* -

1. Dr. Shirley Thomas is the Life Member of International – Marine Biological Association.
2. Elizabeth V. Mathew is a member of American Arachnology Society.

b. *National committees* –

3. Dr. Shirley Thomas is the executive committee member of Zoological Society of Kerala.
4. Elizabeth V. Mathew is a member of Malabar Natural History Society.
5. Dr. Niladevi K. N. is a member of Biotech Research Society of India

c. *Educational Boards.*

6. Dr. Shirley Thomas is the Member, Zoology Board of Studies, M.G. University, Kottayam.
7. Dr. Shirley Thomas is the Zoology Subject Expert Committee Member, M.G.University, Kottayam.

22. Student Projects

- a. Percentage of students who have done in-house projects including interdepartmental/ programme **90%**
- b. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/ Industry/ other agencies **10%**

23. Awards/Recognitions received by faculty and students

Dr. Shirley Thomas was awarded the Best NSS programme officers award by M.G. University, Kottayam

Achievements of III year B.Sc zoology students

- **Abdul Razaque M A** and **Reshma P S** won first prize and **Akhila Parvathy** and **Anju V S** won third prize in „Naksh“ intercollegiate collage making competition on 7 Feb 2017 organized by M C A Department, U.C.College
- **Mohammed Shaheed K** won third prize in University level water polo event held in M.A College, Kothamangalam on 17 October 2016.
- **Dilsha Davis** participated in NIC camp held at Malappuram from December 20 to 31, 2015 and she secured Surgeant rank.

- **Jeeva Dev** participated in interuniversity hockey tournament held at Chennai from 25th to 30th December 2016. She also participated in intercollegiate hockey tournament held at U C College, Aluva conducted on 10th and 11th December 2016.
- **Adithya Muraleedharan** secured First Prize in Photography Competition in “Genysis” – Intercollegiate competition held at S.H. College, Thevara
- He secured second Prize in Skit competition in “University Kalolsavam” held at Catholicate college, Pathanamthitta
- He secured second Prize in Skit competition in -Interuniversity south zone competition held at Bangalore University on 19th December 2016.
- He also secured Fourth prize in skit Competition in Inter university Nationals held at Shivaji University Maharashtra on 13 February 2017

Achievements of II year B.Sc zoology students

- **Paul Thomas, Bibiya Varghese, Diana Denzil Rozario** has been selected to summer research fellowship conducted by the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)
- **Paul Thomas, Rubeena P.N** has got third prize in inter –collegiate debate competition held at Bharath Mata college Thrikkakara on 9-12-2016 and also won first prize in inter-collegiate elocution competition held at Morning Star Home Science college, Angamaly on 14-6-2016
- **Paul Thomas, Arunlal, Jaihari** got third prize in quiz competition held at U.C College Aluva.
- **Bibiya Varghese** got first prize in Spell check competition conducted by the Zoological Society of Kerala, at St. Xaviers college, Aluva
- **Bibiya Varghese** got first prize in Radio talk competition conducted by the Zoological Society of Kerala, at St. Xaviers college, Aluva

24. List of eminent academicians and scientists /visitors to the department

1. Prof. S. Sitharaman Former HOD Chemistry, S.S.Kalady , President All Kerala River Protection Council)
2. Dr. Sreejith, K.A. Scientist, KFRI, Peechi.
3. Dr. Jacob Baby, MD, DTCD, MRCP(U.K). Pulmonologist, Aster Medicity, Kochi.
4. Dr T. Thomas Philip, PDF (Guelph), PDF (British Columbia) former Principal and HOD Zoology, U.C.College, Aluva.
5. Dr Mohan Kumar C, Director SCMS Kochi
6. Dr. Sajan Joseph, Research Director, Eli Lilly, USA in Microbiology Hall, Department of Biotechnology.USA

7. Dr. P.V. Joseph, Associate Professor, Dept of Chemistry, Maharajas College, Kochi.
8. Prof. Oommen Mathew, Founder Regional Director, Institute of Management in Government (IMG), Cochin.

25. Seminars/ Conferences/ Workshops organized & the source of funding

1. UGC sponsored National Seminar on “ The Immune System in Health and Disease” conducted on 22nd September 2016
2. KSCSTE sponsored one day seminar on “Wetlands for Disaster Risk Reduction” conducted on 2nd February 2017.
3. A special in house Departmental workshop: A 2 day inter departmental workshop on Biotechnology, Biochemistry and Microbiology Techniques was conducted for BSc Zoology, Bsc BTSP and Msc students on 5 and 6TH Feb 2015.

26. Student profile programme /coursewise

Name of the Course/Program	Applications received	Selected	Enrolled		Pass – Percentage
			*M	*F	
BSc ZOOLOGY 2010-2011		27	10	17	93
BSc 2011-2012		26	7	19	96
BSc 2012-2013		23	3	20	85
BSc 2013-2014		28	6	22	96
BSc 2014-2015		28	3	25	82
B.Sc2015-2016		28	2	26	71
B.Sc 2016-2017		29	3	26	–
M.Sc ZOOLOGY 2014-2015		12	0	12	58

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other states	% of students from abroad
BSc 2010-11	100%	-	-
BSc 2011-12	100%	-	-
BSc 2012-13	100%	-	-
BSc 2013-14	97%		4%
BSc 2014-15	100%	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE Civil services, Defence services, etc.

One student - Parvathy Surendran - 2011 batch

29. Student progression

Student progression	Against % enrolled
UG to PG	2011(14) 2012 (17) 2013(15), 2014(26), 2015 (20)
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post – Doctoral	-
Employed	
- Campus selection	
- Other than campus recruitment	
Entrepreneurship / self - employment	-

30. Details of Infrastructural facilities

Library	A reference library for textbooks.
Internet facilities for Staff & Students	Computers with internet
Class rooms with ICT facility	I – UG and I – PG
Laboratories -	4
UG and PG wetlabs and UG and PG computer labs	1

31. Number of students receiving financial assistance from college, university, government or other agencies

1. International Scholarship- Total -12 students benefitted for 5 years 2013-14 (7), 2014-15 (2), 2015-16 (3)
2. National govt grants e-grants: 115 students benefitted for 5 years
3. E-Grants-- 2010-11 (21), 2011-12 (25), 2012-13 (14), 2013-14 (24), 2014-15 (31)
4. Departmental Scholarships: 20 students benefitted in the last 5 years

32. Details on student enrichment programmes (special lectures /workshops /seminar) with external experts

- 1) M Sc students attended KSCSTE sponsored seminar on “Micropropagation” on 17th February 2017 by Life Science Forum.
- 2) B Sc students attended KSCSTE sponsored one day seminar on “ Wetlands for Disaster Risk Reduction” on 2nd February 2017 by the dept.
- 3) M Sc students attended a one day UGC sponsored National seminar on “The Immune System in Health and Disease” on 22nd September 2016 organized by the dept.
- 4) Msc students attended an orientation programme for life science research by Dr Mohan Kumar C, Director SCMS Kochi organized by Life Science Forum of the College.
- 5) MSc students attended a 2 day UGC sponsored national seminar on „Molecular Taxonomy” organized by St Thomas College, Thrissur, on Sep 10 and 11, 2015.

- 6) M Sc. Zoology students attended UGC sponsored National Seminar “Trends in Biodiversity” on 2nd and 3rd Dec 2014 at St. Teresa’s College, Ernakulam.
 - 7) M.Sc. Zoology students attended a inspirational talk series-1, on “Designing of New Drugs” by Dr. Sajan Joseph, Research Director, Eli Lilly, USA in Microbiology Hall, Department of Biotechnology in June, 2014.
 - 8) The B Sc students attended the State Seminar on “Biodiversity –Perspectives and Challenges” in Maharaja’s College, Ernakulam on 26th and 27th November 2014.
 - 9) They also participated in the 2 day National Seminar on “Urban Environment issues with special focus on Cochin” in Sacred Heart College, Thevara.
 - 10) Five students of III B.Sc Zoology has attended a three day in house hands on training and workshop on Biotechnology held at M.A College, 2013 Kothamangalam.
33. Teaching methods adopted to improve student learning
- Internet aided videos and animations.
 - Internet aided charts and figures.
 - Debates
 - Role play
 - Virtual labs
 - Jigsaw puzzle
 - Mobile education
 - Curriculum based competitions

19. Participation in Institutional Social Responsibility (ISR) and Extension activities

35. SWOC analysis of the department Future plans.

Strengths

- Young, talented, dedicated and hardworking teachers
- Close knit group of teachers
- Support of former faculty
- Museum with a large collection of museum specimens
- Good Lab facility for UG
- Extensive field trips to study animal diversity
- Participation of students and staff in seminars and conferences
- Expert consultancy in animal diversity

Weaknesses

- Temporary faculty
- Funds and infrastructure for P.G.
- Research projects
- Department library
- Museum expansion

Opportunities

1. Add on courses in
 - Spider biology
 - Rearing and breeding of animals like pet birds, rabbits, guinea pigs.
 - Ornamental fish breeding and culture.
 - Vermiculture, organic farming and waste management.
2. Extension activities –
 - Health awareness campaigns,
 - Vaccination programmes,
 - Medical camps in campus
3. Animal diversity register.
4. Museum expansion.
5. Exhibition for schools and colleges.

Challenges

- Funds.
- Infrastructure.
- Permanent appointments
- Quality of students.
- Lack of motivation to excel in academics/to pursue research.
- Lack of motivation to pursue research.

Goal

- To generate awareness of animal conservation among the young generation to protect, preserve and propagate forest, wildlife and environment.
- To study the Biodiversity of animals in the state and local fauna and to encourage the love for animals.
- To make the students familiar with the habits and habitats of wild animals and to observe them in the wild.
- To experience the various ecosystems they study as part of their curriculum.
- To make the students familiar with instruments used and methods followed in modern scientific laboratories and research institutes.
- To give hands on training to the students on the instruments with the help of experts in the field.
- To give hands on training to the students in animal rearing and breeding techniques by experts in the respective field.

DEPARTMENT OF PSYCHOLOGY

1. Name of the Department : Psychology
2. Year of Establishment : 1965
3. Names of Programmes /Courses offered : B.Sc. Psychology,
M.Sc. Psychology
Ph.D. in Psychology
4. Names of Interdisciplinary courses and the Departments/units involved : The Department offers open course (Life Skills Assessment) for fifth semester CBCSS undergraduate students of the College.
5. Annual/ semester/choice based credit system : The Choice Based Credit and Semester System (CBCSS) of Mahatma Gandhi University for UG Psychology programme (6 semesters)

The Post Graduate Credit and Semester System (PGCSS) of Mahatma Gandhi University for PG Psychology programme (4 semesters).
6. Participation of the department in the courses offered by other Departments : Nil
7. Courses in collaboration with other universities industries, foreign institutions, etc. : Nil
8. Details of courses/programmes discontinued (if any) with reasons : Nil
9. Number of teaching posts : 7

Post	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	Nil	Nil
Assistant Professors	7	7

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience
Ms. Malini R.	M.A	Asst. Professor	Child Psychology	12
Dr. Seena M. Mathai	M. Phil, Ph.D.	Asst. Professor	Sports Psychology	15
Dr. Neelima Ranjith	Ph.D., PDF	Asst. Professor & Head	Neuro Psychology	6
Ms. Syna Soosan Abraham	M.A.	Asst. Professor	Cognitive Psychology	8
Dr. Vidhya Ravindranadan	M. Phil, Ph.D.	Asst. Professor	Special Education Child Development	13
Dr. Marikutty P. J.	M. Phil, Ph.D.	Asst. Professor	Clinical Psychology	9
Ms. Shema Elizabeth Kovoov	M. Phil	Asst. Professor	Special Education & Counseling	8

11. List of senior visiting faculty :

1. Dr. Kiran Rao, Former Head, Department of Clinical Psychology, NIMHANS. Bangalore.
2. Dr. T. Thomas Philip, Former Principal and Head, Department of Zoology, Union Christian College, Aluva.
3. Sri. Rajan Mathai, Clinical Psychologist, Kusumagiri Mental Health Center, Ernakulam.
4. Mr. Shiju Joseph, Assistant Professor and Clinical Psychologist, Govt. College for Women, Thiruvananthapuram.
5. Rev. Thomas John, Former Head, Department of Psychology, Union Christian College, Aluva.
6. Dr. K. E. Leelamma, Former Head, Department of Psychology, Union Christian College, Aluva.

12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty : NA

13. Student -Teacher Ratio (Programme wise)

B. Sc. Psychology : 30:1

M. Sc. Psychology : 7:1

14. Number of academic support staff (technical) and administrative staff : Nil

15. Qualifications of teaching faculty with D. Sc. / D. Litt. / Ph. D/ M. Phil / PG.

Name	Qualification
Ms. Malini R.	M.A
Dr. Seena M. Mathai	M. Phil, Ph.D.
Dr. Neelima Ranjith	Ph.D., PDF
Ms. Syna Soosan Abraham	M.A.
Dr. Vidhya Ravindranadan	M. Phil, Ph.D.
Dr. Marikutty P. J.	M. Phil, Ph.D.
Ms. Shema Elizabeth Kovoov	M. Phil

16. Number of faculty with ongoing projects from National and International funding agencies and grants received

a) National : Three faculties with Minor Research Projects funded by UGC

b) International : One faculty member has two projects funded by United Board of Christian Higher Education in Asia (UBCHEA)

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Name	Topic	Funding Agency	Amount granted in INR
Dr. Seena M. Mathai	Enhancing Menopausal Adjustment among Rural Women using Effective Training Interventions	UGC	1,30,000
Dr. Neelima Ranjith	Enhancing Assertiveness in High School Students of Rural Areas	UGC	70,000
Ms. Syna Soosan Abraham	Promoting Mental, Physical, Sexual and Environmental Hygiene among Rural BPL Women through Life Skills Training.	UGC	70,000
	1. Mission Milieu: Religious Pluralism through Interfaith Dialogue. 2. Integrated Project for Sustaining Nature and Enriching Life	UBCHEA	3,00,000 60,000
Dr. Vidhya Ravindranadan	Problem Behaviour and Parental Mental Health: A Survey among Primary School Students.	UGC	65,000
Dr. Marikutty P. J.	Effectiveness of Life Skills Education in Enhancing Peace and Social Harmony among College Students	UGC	85,000
	Total amount		Rs.7,80,000/-

18. Research Centre /facility recognized by the University:

The Department has been recognized as a Research Centre under Mahatma Gandhi University, Kottayam in 2013. Three faculty members are research guides.

19. Publications : List attached as annexure I

20. Areas of consultancy and income generated:

- Counseling - Rs.2500/-
- Psychological assessment – Rs.2500/-
- Faculty members as resource person to training programs and public lectures – Rs.2000/-

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards.

a) National committees

Ms. Malini R.

- Member, Board of Studies (Psychology), Mahatma Gandhi University, Kottayam.
- Member, Board of Studies (Clinical Psychology, PG), under the Faculty of Science, University of Calicut.
- Member, Board of Studies (Psychology-Pass), University of Kerala.
- Chairperson, Board of Question Paper Setters, University of Kerala and Kannur University.
- Member, Board of Question Paper Setters, University of Calicut and Farook College Kozhikode (autonomous).
- Member, Inspection committee for sanctioning new courses, Mahatma Gandhi University, Kottayam.
- Resource person to seminars, workshops, training programs and public lectures

Dr. Seena M. Mathai

National Service Scheme, Programme Officer 2010-2013.

- Research guide, Mahatma Gandhi University, Kottayam.
- Research guide, Bharathiar University, Coimbatore.
- Member, Board of Studies, Mahatma Gandhi University, Kottayam.
- Member, Board of Question Paper Setters, University of Kerala, University of Calicut & Farook College, Kozhikode (autonomous).
- Member, Inspection committee for sanctioning new courses, Mahatma Gandhi University, Kottayam.

Resource person to

- Institute of Management in Government.
- Rural Police Training Camp Kalamassery, Govt. of Kerala.
- Fisheries training Institute, Kadungalore, Govt. of Kerala.
- Technical Higher Education department, Govt. of Kerala.
- Survey Dept., Government of Kerala.
- Directorate of Collegiate Education, Govt. of Kerala.
- Kudumbashree entrepreneurship training programme.
- Seminars and workshops.

Dr. Neelima Ranjith

- Research guide, Mahatma Gandhi University, Kottayam.
- Research guide, Bharathiar University, Coimbatore.
- Member, Board of Studies, Mahatma Gandhi University, Kottayam.
- Member, Board of Studies, Rajagiri College of Social Sciences (Autonomous).
- Member, Board of Question Paper Setters, University of Kerala, Farook College, Kozhikode (Autonomous).

Resource person to

- Walk With a Scholar, Govt. of Kerala, Training for Mentors.
- Faculty Development Program, Union Christian College.
- Rajagiri Public School, Kalamassery.
- Seminars, workshops, training programs and public lectures.

Ms. Syna Soosan Abraham

- Member, Board of studies, Psychology, Mahatma Gandhi University, Kottayam
- Member, Inspection committee for sanctioning new courses, Mahatma Gandhi University, Kottayam
- Member, Panel of Experts- Aviation Security. CIAL, Cochin.
- Member, Board of Question Paper Setters, University of Kerala & University of Kannur.
- Staff coordinator, Service Learning Center and Pain and Palliative Care unit of Union Christian College.
- Resource person to seminars, workshops, training programs and public lectures.

Dr. Vidhya Ravindranadan

- Research Guide, Mahatma Gandhi University, Kottayam
- Research Guide, Bharathiar University, Coimbatore.
- Member, Inspection committee for sanctioning new courses, Mahatma Gandhi University.
- Member, Board of Studies, Mahatma Gandhi University, Kottayam
- Resource person to seminars, workshops, training programs and public lectures

Dr. Marikutty P. J.

- Chairperson, Women Commission, Student Christian Movement, Kerala.
- Staff Advisor, Student Christian Fellowship, Union Christian college , Aluva
- Resource person to conduct psychological assessment in Blind school, Keezhmadu.
- Resource person to seminars, workshops, training programs and public lectures.

Ms. Shema Elizabeth Kovoov

- Mentor, Walk With a Scholar Program, Govt. of Kerala
- Resource person to seminars, workshops, training programs and public lectures

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental /programme:
 - UG - in house project 100%
 - PG - in house project 100%
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies:
 - One week compulsory clinical placement for final year undergraduate students in mental health centers
 - Skills training programs for second year undergraduate students
 - Three months internship for postgraduate students in clinical or educational settings

23. Awards / Recognitions received by students

Academic

International Recognition

1. Amal T. Anoop - selected for the student exchange program with International Christian University, Mitaka, Japan (2015) for a period of three months (a semester) in the College of Liberal Arts.
2. Haritha P. R. - Scranton Scholarship for Women Leaders and was also selected for Scranton Scholar's Leadership Program in Korea (2015).

University

1. Nisbin A. Khader - University topper in B. Sc. Psychology (2014) with A plus in all subjects

Co-Curricular

Best Paper Award

- Vidya N. Comparative analysis of personality, leadership styles and emotional intelligence among today's most preferred professionals. 47th National and 16th International Conference of the Indian Academy of Applied Psychology, Toc H Institute of Science and Technology, Ernakulam, 15 – 17th June 2012.
- Christina Mariam Chacko - Third Prize in the Young Scientist Competition held at Christ University Bangalore (2015).

Inter University

- Amala Paul & Jincy George - First Prize in *Psychic Quiz* conducted at Sahrudaya College, Irinjalakuda, Kerala (2016)
- Christina Mariam Chacko & Shahina H. - Third Prize in *Psychic Quiz* conducted at Sahrudaya College, Irinjalakuda, Kerala (2016)

Extra - curricular

- Binu Susan Paul (UG, Psychology)
 - University Champion for three consecutive years in Judo (2013-15)
 - Intercollegiate champion in fencing (2013-14)
 - Fencing - Second prize in (2014-15).
 - Wrestling - Second prize (2014-15)
 - Fencing - Second prize (2014-15)
- Sherin Jose (PG/UG, Psychology)
 - Fencing – Second prize (2015)
 - Soft Ball - First prize (2014)

- Judo – First Prize (2013)
- Judo – Third Prize (2014)
- Jiya Joseph (UG Psychology)- Mahatma Gandhi University Record holder for three consecutive years (2013- 2015), Five Gold & 3 Silver medalist in swimming
 - Jithin Jaise (UG Psychology) – Net Ball, Mahatma Gandhi University Champions (2013)
 - Jinson Alias (PG Psychology) - Second prize & „A“ grade in Collage making in Mahatma Gandhi University Youth festival
 - Amal. T. Anoop (UG. Psychology)- „A“ grade in light music in University Youth Festival (2014-15)
 - Jinson Alias (I M. Sc. Psychology) - Kalaprathibha in the college arts festival (2014-15)

Awards received by Teachers

Best paper Award

- Seena M. Mathai. *Coping Skills as a Correlate of Athletic Performance*. 47th National and 16th International Conference of the Indian Academy of Applied Psychology, Toc H Institute of Science and Technology, Ernakulam, 15 – 17th June 2012.
- Neelima Ranjith. *Gender Equality – A Myth or Reality? : A Psychological Perspective*. 47th National and 16th International Conference of the Indian Academy of Applied Psychology, Toc H Institute of Science and Technology, Ernakulam, 15 – 17th June 2012.

24. List of eminent academicians and scientists / visitors to the Department

International

- Ms. Elizabeth Janet Laury, New York. - 20th August 2013.
- Rev. Joseph Mitchell. Director of Passionist Earth Spirit Center. New York.
- Leorna Jarvis, Professor and Head, Dept. of Psychology, HOPE College, USA.
- Dr. Thomas Mathew. Former Psychologist to Rehabilitation of Delinquents. New Jersey. USA.

National

- Dr. S. Ananthanarayanan, Former Director, Defense Research and Development Organization, India.
- Hon. Justice Kemal Pasha, High court of Kerala.
- Dr. V.C. George, President, Indian Association of Clinical Psychologists.

- Dr. Kiran Rao. Former Head, Clinical Psychology, NIMHANS. Bangalore.
- Dr. George Mathew, Former Head, Department of Psychology, University Campus, Kariavattom.
- Dr. S. Raju, Head, Department of Psychology, University Campus, Kariavattom, Thiruvananthapuram.
- Dr. Razeena Padmam, Former Director, School of Behaviour Sciences. M. G. University, Kottayam.
- Dr. T. Thomas Philip. Former Principal and Head, Department of Zoology, Union Christian College, Aluva.
- Dr. M. K. Mathew, Former Head, Department of Psychology, K. E. College, Mannanam.
- Dr. Sani Varghese, Clinical Psychologist, District Hospital, Kottayam.
- Mr. Rajan Mathai. Clinical Psychologist, Kusumagiri Mental Health Center. Ernakulam.
- Dr. Wilson P. C., Former Head, Department of Psychology. S. N. College Kollam.
- Dr. Geethanjali Natarajan. Clinical Psychologist, AIMS, Kochi.
- Mr. Anoop K. V. Clinical Psychologist, Kozhikode Mental Health Center.
- Mr. S. Sreejith IPS. (DIG of Police). Chief Investigations officer (CIO) of the Kerala State Human Rights Commission.
- Dr. Zacharia K. A., Former Director, Aligarh Muslim University, Kozhikode, Associate Professor, School of Management studies, Cochin University of Science and Technology.
- Rev. Thomas John, Former Head, Department of Psychology, Union Christian College, Aluva.
- Dr. K. E. Leelamma, Former Head, Department of Psychology, Union Christian College, Aluva
- Adv. Jayasankar, Senior Advocate, High Court of Kerala and Popular Political Critic.
- Dr. Jeevan Job Thomas. Writer and Researcher in Physics.
- Ms. Reena Cherian, Reader, Department of Social Work, Delhi University.
- Mr. Manoj Menon, Associate Professor, Rajagiri School of Management, Ernakulam
- Mr. Shiju Joseph, Assistant Professor and clinical Psychologist. Govt. Women's College, Thiruvananthapuram.
- Ms. Ajitha. Social activist and founder of „Anweshi“.

- Dr. Asha Rao. Associate Professor of Social Work. Vimala College, Trissur.
- Mr. Manoj M. B. Trainer, Additional Skill Acquisition Program (ASAP), Govt. of Kerala
- Dr. Prasad Sundhararajan, Alumnus, Union Christian College, Aluva.
- Ms. Glarmina P., Counsellor, Mukthi Sadan, De-addiction Center.

25. Seminars/ Conferences/Workshops organized and, the source of funding: List attached as annexure

26. Student profile programme/course wise:

B. Sc. Psychology

Name of the Course/programme	Applications received (in Management quota alone)	Selected (in Management quota alone)	Enrolled (Total)		Pass percentage
			Male	Female	
2011	30	7	8	20	86.00
2012	50	7	4	26	97.00
2013	61	7	8	20	ongoing
2014	82	7	10	24	ongoing
2015	120	8	4	32	ongoing

M. Sc. Psychology

Name of the Course/programme	Applications received (in Management quota alone)	Selected (in Management quota alone)	Enrolled (Total)		Pass percentage
			Male	Female	
2011	7	3	2	7	75
2012	8	4	2	15	33
2013	10	3	3	6	58
2014	12	3	3	12	ongoing
2015	25	4	1	15	ongoing

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other states	% of students from abroad
B.Sc.	97%	3%	-
M.Sc.	94%	6%	-

28. No. of students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.,

UGC – JRF	: 1
UGC – NET	: 6
ICMR – JRF	: 2

29. Student progression

Student Progression	Against % enrolled
UG to PG	70%
PG to M. Phil	30%
PG to PhD	20%
Ph.D. to PDF	-
Employed	
Campus Selection	NA
Other than campus recruitment	90%
Entrepreneurship / Self-employment	30%

30. Details of infrastructural facilities

- Department library with computerized lending system –954 books & journals- (12 online and 2 hard copy)
- Computer & Internet facility - Three desktops and three laptops with Wi-Fi facility.
- Class rooms with ICT facility – One
- Laboratories – One for under graduate and one for post graduate students.

31. Number of students receiving financial assistance from college, university, government and other agencies

1) E grants

Year	No. of Students
2010-2011	13
2011-2012	19
2012-2013	15
2013-2014	21
2014-2015	20

- Kuwait Alumni - 1
- UCCANA – 8
- Kano Yamomoto – 8
- Liberty & Trinity – 4
- Scranton - 1

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts

International

- A talk on „*Society, development of self and geriatric care*” by Ms. Elizabeth Janet Laury, New York, 20 August 2013.
- A session on *New Cosmology* by Rev. Fr. Joseph Mitchell, USA
- Seminar on ‘*Psycholinguistics: Cognitive aspect of Bilingualism*’ by Dr. Leorna Jarvis, Professor and Head, Department of Psychology, HOPE college, USA, 13 January 2015

National

- A talk on “*History and possibilities of clinical psychology*” by Dr. V. C. George, President, Indian Association of Clinical Psychologists.
- A talk on „*Paranormal Experiences and related Issues*’ By Dr. George Mathew, Former Head, Department of Psychology, University Campus, Kariavattom.- 26 July 2012
- A talk on „*Adoption- Practices & Issues*’ by Ms. Reena Cherian, Reader, Department of Social Work, Delhi University.
- Conducted Exhibition on „*Life Span Development*’ on 25 - 26 July, 2013
- A talk on „*gender issues* by Rev. Thomas John, former Head, Department of Psychology, Union Christian College, Aluva.
- A talk on ‘*Research in the field of Creative Psychology*’ by Dr. Prasad Sundhararajan, Alumnus, Union Christian College, Aluva.
- A talk on „*Alcoholism and Rehabilitation*’ by Ms. Glarmina, Counsellor, Mukthi Sadan,
- ‘*Soft skills training workshop*’ conducted by Mr. Manoj M. B., trainer of ASAP.

33. Teaching methods adopted to improve student learning

- Power point presentations, videos, group discussions, debates, quizzes, chart preparation, extempore activities, student seminars, remedial coaching, peer tutoring, field visits, preparation of skills training and awareness program modules and applying it, exhibitions, seminars, workshops etc were some of the teaching methods adopted.
- Weekly association meeting where students lead discussions, debates, quizzes, presentations of seminars attended service learning activities etc.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities.

A) Initiated the Pain & Palliative Care Unit

1. Organized get together of 20 Hemi paraplegia patients.
2. Volunteered at outreach programmes organized by different agencies.
3. Conducted awareness campaigns for Pain & palliative care and other disability services.
4. Day out and recreational programmes were organized for physically challenged.
5. Conducted surveys in the locality to identify people in need of palliative care, 5 such cases were linked with assistance.
6. Conducted fund raising programmes for treatment, equipments and other needs.
7. An outlet of *pallium* products in the campus for financial self-reliance of Hemi paraplegia patients was started.
8. Donated wheel chairs.
9. Identified and provided emotional, physical and financial support for patients in nearby areas.

B) Organized Service learning activities in the following areas.

1. Alzheimer's Day care center:
 - Play therapy & music therapy for brain stimulation for inmates was conducted.
 - Assessment of cognitive abilities.
 - Provided social & emotional support to inmates and family.
2. „We Care“ special School:
 - Assessment of IQ and other cognitive functions were done.
 - Organized training classes for care takers and families of special children.
 - Volunteered at the programmes organized by the school.
 - Counselling was provided for family members.
3. Soft skills enhancement of students: to improve knowledge acquisition, communication and leadership skills.
 - Training and awareness classes for school students were conducted by graduate students on memory & learning techniques, sexual hygiene and substance abuse.
 - For BPL sections awareness classes on menopausal adjustment, health & hygiene practices were given.

4. Peer counseling : Students becoming helpers:

- Training given to provide mutual assistance in academic & social skills deficits, emotional and adjustment problems.

5. Experiential learning programs: UBCHEA sponsored project

- Visits to tribal community, migrant workers & BPL settlements, mental health centers were conducted to sensitize students to ground realities.

C) Counseling centre; Counselor is made available once in a week

- Life skills training for students.
- Counseling for needy students and their parents.
- Study skills training.
- Counseling for teachers/ non-teaching
- Helping teachers to deal with problem children
- Conducting Psychological assessment
- Providing counseling for community

D) Surveys

- On attitude and awareness about mental illness and educating public in order to reduce stigma and enhance appropriate intervention for mental health problems.

35. SWOC analysis of the department and future plans.

Strengths

- Young dynamic faculty members with varied areas of interest and specialization enabling the department to meet diverse academic needs of the students.
- Syllabus with strong theoretical orientation and practical training- the effectiveness of which is proven by the number of NET/ JRF qualifications and 100% placement of PG students.
- Various skill development and community extension activities like service learning and pain and palliative care.
- High demand for the course as seen on higher number of applications and active, enthusiastic students.
- Rich collection of books, equipment and measures of Psychological assessment.
- Among the seven teachers, four have Ph. D, one awaiting syndicate approval after open defense and two are pursuing research.

- Recent up gradation of the department to research centre with three research guides and seven research students.
- Team work in the Department ensures smooth transactions in the department thus setting standards for students to emulate.
- Faculty members of the department are active in revamping the syllabi of many universities in and out of the state and three of them are research guides in other Universities.
- The services of the Counseling Centre.

Weaknesses

- There are no senior faculty members in the department with long years of service and expertise who can contribute to policy changes in government and university Inappropriate selection criteria set by the University prevent bright students with good language skills from getting admission to undergraduate course.
- Improper execution of academic calendar by the university makes it difficult to plan a proper schedule of courses provide and feedback of performance.

Opportunities

- Establish tie up with various institutions so that practical exposure and campus placement of students can be enhanced.
- Provide training for competitive exams.
- Collaboration with alumni and mobilization of financial and intellectual resources.
- Life skills training for students who are marginalized due to various reasons.
- Develop and standardize psychological measures.

Challenges

- Large number of students with poor language comprehension skills.
- Inadequate infrastructure.
- Inadequate funding.

Future Plans

- Establish a neuro-cognitive lab.
- Conduct counseling camps and skills training workshops in collaboration with Panchayath for adults and children.
- Signing Memorandum of Understanding with various institutions.
- Begin M. Phil. Course.

Mission

Equip students with adequate skills, to live in harmony with self, others and nature, to instill in them a passion for academics and applying psychology for the service of humanity.

DEPARTMENT OF COMPUTER SCIENCE

1. Name of the department : Computer Science
2. Year of Establishment : 2010
3. Names of Programmes / Courses offered : BSc Computer Science
4. Names of Interdisciplinary courses and the departments/units involved

Following are the courses:

- UGC Sponsored Add on Career oriented program-

“Structured Information processing and Network Applications”

The syllabus is designed in such a way that the student can divert to data processing operator, webpage designer, album designer or a network administrator. Completion of first year makes him a Certificate holder, second year a Diploma holder and third year an Advanced Diploma holder.

- **Additional Skill Acquisition Program (Train the Trainers) – ASAP** is a program sponsored by Government of Kerala in which students are equipped to be industry ready, or to make them self sufficient to start their professional career. The department functions as Master Trainers who train the Skill Development Executives (SDE's) to equip them with technical skills for handling the IT Sessions.

Further the SDE's handle classes in English, IT and other specialized areas in Higher Secondary Schools.

- **Me and My Computer** – This is a short term course conducted by the department to Arts background students to make them comfortable with using computers.

5. Annual/ semester/choice based credit system (programme wise)

The Choice Based Credit and Semester System (CBCSS) of Mahatma Gandhi University for the B. Sc. Computer Science (6 semesters)

6. Participation of the department in the courses offered by other departments

Students of our department attend open courses of other aided departments.

The Department of Computer Science offers the Open course titled **„Internet, Web designing and Cyber Laws“**.

7. Courses in collaboration with other universities, industries, foreign institutions, etc. : NIL

8. Details of courses/programmes discontinued (if any) with reasons: NIL

9. Number of Teaching posts

	Sanctioned	Filled
Professors		
Associate Professors		
Asst. Professors	05	05

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	No of years Experience
Mr. Cijin K Paul	MCA , NET	Assistant Professor, HOD	6
Ms. Gincy Abraham	ME, NET	Assistant Professor	4
Ms. Asha Das	MTech , NET	Assistant Professor	4
Ms. Elizabeth Thomas	MSc , NET	Assistant Professor	4
Ms. Greeshma K	MSc , NET	Assistant Professor	4

11. List of senior visiting faculty : NIL

12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty : UG – Theory : 15%

UG – Practical : 10%

13. Student -Teacher Ratio (programme wise) : 18 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled : Sanctioned: 1 Filled: 1

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Sl. No.	Name	Qualification
1	Mr. Cijin K Paul	MCA , NET
2	Ms. Gincy Abraham	ME, NET
3	Ms. Asha Das	MTech , NET
4	Ms. Elizabeth Thomas	MSc , NET
5	Ms. Greeshma K	MSc , NET

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : Minor Research Project : 1

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received UGC –Minor Research Project – 2015-'16 - 4.2 lakhs initiated by Mr. Cijin K Paul

Nature of the Project	Duration Year From To	Title of the project	Name of the funding agency	Total Grant		Total grant received till date
				Sanctioned	Received	
Minor projects	1.5 yrs	Creation of an ambient picture from	UGC	Rs.4,60,000/-	Rs.4,20,000/-	Rs.4,20,000/-

18. Research Centre /facility recognized by the University : NO

19. Publications:

a) Publication per faculty

Author	Title	Journal/Conference	Impact Factor
Mintu Philip and Asha Das	Survey: Image Encryption using Chaotic Cryptography Schemes	<i>IJCA Special Issue on Computational Science - New Dimensions & Perspectives</i> (1):1-4, 2011. Published by Foundation of Computer Science	0.814
Asha Das and Teena George	Secure Wireless Video Streaming Using Network Coding	International Conference on Information Security 2011	
Mintu Philip and Asha Das	A New Bluetooth Security Architecture	CCEIT, 2011, Springer CCIS 204, pp 507-515, 2011	
Greeshma K	Social Development through Technical Education	ISTE Convention, 2014	
Gincy Abraham	Information Communication technology in tourism and hospitality industry	Conference proceedings, 2016	

Number of papers published in peer reviewed journals (national /international) by faculty and students : One

20. Areas of consultancy and income generated :

KPSC is a body which recruits employees to state government services. They conduct test for different posts and the department offered a course for detailed understanding of the concepts of Computer Science(for HSST Computer Science exam) so that the applicants become capable of answering questions in the test by the Kerala Public Service Commission. Out of 40 participants 15 of them are short listed by the commission.

Income generated : Rs 40000/-

The department offered **NET coaching** to aspiring students from outside the college, even though the Department is a UG department.

Income generated : Rs 15000/-

21. Faculty as members in

a)National committees b) International Committees c) Editorial Boards: NIL

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme

All the students are encouraged to work and complete the projects in the department. The students are provided all the facilities in the computer lab (internet, necessary software and hardware).

Some Projects are implemented by the students for automating some department related tasks (Library Management, Attendance and Feedback System etc).

- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

Around 55% of the students are placed every year for projects after the course and they get absorbed by the industry.

The students are placed in the following reputed IT companies like Infosys, Wipro, IBM, TCS, CTS etc and in various private banks.

23. Awards / Recognitions received by faculty and students

- Mr. Cijin K Paul has served as
 - Member, Board of Studies, Calicut University (2012-16)
 - Member, Question Paper Setter's Panel of Kerala University.
 - Member, Inspection Committee for allocation of new courses in MG University
 - Member, Question Paper Setter's Panel of Calicut University.

24. List of eminent academicians and scientists / visitors to the department :

1. Mr. Sandeep K, Soft Skills Trainer, Bangalore
2. Professor Oommen Mathew , IMG Regional Centre Kakkanad
3. Dr T Thomas Philip, Former Principal, U C College, Aluva

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National/ State : One ,

- Digital India – Facts and Practices - Mr Bruce Mathew , Asst. Professor, MCA , U C College, Aluva
- Workshop on LaTeX - Mr. Hari S, Asst. Prof, Rajagiri School of Engineering and Technology

b) International : Nil

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage	Year
			M	F		
BSc Computer Science	CAP	30	14	16	96	2012
BSc Computer Science	CAP	30	13	17	84	2013
BSc Computer Science	CAP	31	16	15	89	2014
BSc Computer Science	CAP	31	17	14	75	2015
Add-on Course	50	30	16	14	80	

27. Diversity of Students

Year	Total Strength	General	SC/ST	Other State	Female	Male
2015	31	26	4	1	15	16
2014	30	26	4	0	17	13
2013	30	25	4	1	16	14
2012	30	25	4	1	15	15
2011	19	17	2	0	10	9

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? : NIL

29. Student progression

Student progression	Against % enrolled
UG to PG	40%
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed	
Campus selection	
Entrepreneurship/Self-employment	2%

30. Details of Infrastructural facilities

a) Library

The Department Library has a collection of around 350 books which consists of books from main library, department purchased books and complimented books.

The students get exclusive access to the library resources.

b) Internet facilities for Staff & Students

Internet facility is available in the staff room as well as in the computer lab.

c) Class rooms with ICT facility

Department have sufficient number of laptops (4) and projectors(3) to engage classes for students and thus the audio visual media makes teaching effective.

d) Laboratories

- The Computer Lab is fully air conditioned with internet facility.
- There are twenty desktop machines which have fifth generation processors with LED monitors and interconnected as Local Area Network.
- The students can access the lab facilities whenever required.

31. Number of students receiving financial assistance from college, university, government or other agencies : 35 students

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts.

- An Orientation session was conducted for the first year students.
Resource person: Mr. Sandeep K, Soft Skills Trainer, Bangalore
- Career oriented guidance class was arranged for the final year students.
Resource person: Professor Oommen Mathew, IMG Regional Centre Kakkanad
- Good Learning Practices.
Resource Person: Dr T Thomas Philip, former Principal, U C College, Aluva
- Digital India – Facts and Practices
Resource Person : Mr Bruce Mathew , Asst. Professor, MCA , U C College, Aluva
- Digital India Week 2015, a one day event was conducted by the department which included various events like seminars, quiz, poster and photography Competition.
- Students from various departments of the college participated in the events. The Department also assisted Akshaya Center for making provisions for students and teachers for creating Digital Locker.
- Project development – Mr Biju Francis, NIIT Aluva
- Android Systems - Mr Saneesh L , Aptech Aluva
- PHP –Advantages – Mr Biju Dominic , GTec Perumbavoor
- Interview Skills and Techniques – Mr. Alby, Senior Manager, Zion Consultancy

33. Teaching methods adopted to improve student learning

The teachers in the department are using different methods of teaching and evaluation which includes group discussions, power point presentations, including expert lectures along with the syllabus, access to e-learning resources, peer study environment, Remedial Classes and Bridge Courses etc.

The new methods adopted in teaching increase the student involvement and learning in the class.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Students are actively involved in extracurricular activities such as sports, games and other personality development clubs. Also one of our students represented the Republic Day Parade in 2013 representing NCC of the college. Also the department actively participates in “Haritha Varsham”, the project of tree planting by the college.

NCC cadets : 18

NSS Volunteers : 20

35. SWOC analysis of the department and Future plans

Strengths

- Since the student teacher ratio is 18:1 , personal attention can be given to the students which helps learning.
- Due to availability of ICT, we have good subject delivering capability.
- Young and sincere faculty members, who upgrades their knowledge regularly.

Weakness

- Time constraint to deliver full topic to students.
- Since the department is UG only, lack of research is evident.
- Inadequate fund for extracurricular activities

Opportunities

- Collaboration with National and International Organizations
- Imparting value education
- Utilization of alumni resources
- Minor research projects
- Organize national level seminars annually

Challenges

- Dedicated smart rooms has to be implemented to make Teaching learning excellent.
- Falling standards of students due to entry level constraints
- Value erosion of student community

Future plans:

1. To organize seminars which are UGC sponsored.
2. To start MSc Computer Science in aided/self financing stream.
3. To enhance learning facilities through website notes and interactive quizzes.
4. Implementing e-Learning for student.
5. Digital Library access.
6. Automating the Library System.
7. To start a Mobile Application Development Center.
8. Collaboration with National and International Organizations
9. Utilization of alumni resources
10. Apply for more Minor research projects
11. Organize national level seminars annually

DEPARTMENT OF PHYSICAL EDUCATION

1. Name of the department : Physical Education
2. Year of Establishment : 1931
3. Names of Programmes / Courses offered : Nil
4. Names of Interdisciplinary courses and the departments/units involved

The department offers open course (Physical Education – Physical, Health and Life Skill Education) for fifth semester CBCSS Undergraduate students of the college.

5. Annual/ semester/choice based credit system (programme wise): NA
6. Participation of the department in the courses offered by other departments

The department offers open course(Physical Education – Physical, Health and Life Skill Education) for fifth semester CBCSS Undergraduate students of the college.

7. Courses in collaboration with other universities, industries, foreign institutions: Nil
8. Details of courses/programmes discontinued (if any) with reasons: Nil
9. Number of teaching posts (PERMENENT)

Sanctioned	2
Filled	2

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification Designation	Specialization	No. of Years of Experience
Dr. Anil Thomas Koshy	M.P.Ed, M.Phil, PhD	Physical Education	21
Dr. Bindu.M	M.P.E ,PhD	Physical Education	9

11. List of senior visiting faculty- Faculty Visits from Eminent Institutions: Nil
12. Student -Teacher Ratio (programme wise)

UG	N/A
PG	N/A

13. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sanctioned	Nil
Nil	Nil

14. Qualifications of teaching faculty

Name	DSc	D.Litt	Ph.D	MPhil
Dr. Anil Thomas koshy			Physical Education 2016	1992
Dr.Bindu.M			Physical Education 2005	

Faculty development Programme

Name	Details
Dr. Bindu.M	Refresher Course in interdisciplinary offered by Calicut University –UGC sponsored special summer school programme from 06.05.2015 to 26.05.2015.
Anil Thomas koshy	FDP- PhD (2012-2014)

15. Number of faculty with ongoing projects from (funding) agencies and grants received

	National	International
Dr. Bindu.M	UGC-Minor Project – 1.5lakh	

16. Departmental projects funded by; etc. and total grants received

DST - FIST	UGC	DBT	SAP	ICSSR	OTHER
	Minor Project – 1.5lakh				

17. Research Centre /facility recognized by the University: Nil

18. Name of research scholars: Nil

19. Citation index and impact factor Nil

20. Honors and awards to the faculty and students:

Faculty

Anil Thomas Koshy	<ol style="list-style-type: none"> 1. Convener Hockey - 35th National Games 2. Vice President, Kerala Netball Association 3. Executive Officer, Kerala Hockey
Dr. Bindu.M	<ol style="list-style-type: none"> 1. Recipient of JRF-1999-2000 2. Technical Official – 2010 Common Wealth Games 3. Athletics-Technical Official 35th National Games 4. Treasurer Ernakulam District Netball Association

Students

Sl.No	Name	Year	Level of Sports participation	Position
1	Vineetha George	2010-11	Senior National Softball championship – Chandigarh	Gold
2	Revathy Rethesh	2010-11	Senior National Softball championship – Chandigarh	Gold
3	Athira Anil	2010-11	South West Zone All India Inter Varsity Football championship held at Gwalior	Silver
4	Vineetha George	2011-12	Represented India in the Senior Asian Softball Championship	
5	Revathy Rethesh	2011-12	Represented India in the Senior Asian Softball Championship	
6	Arun.C.D	2012-13	Senior National Softball championship – Pondicherry	Silver

7	Vineetha George	2012-13	Senior National Softball championship – Pondhicherry	Gold
8	Revathy Rethesh	2012-13	Senior National Softball championship – Pondhicherry	Gold
9	Harikrishnan,	2012-13	Senior South-Zone Netball Championship	Bronze
10	Josemon.P.P	2012-13	Senior South-Zone Netball Championship	Bronze
11	Ithisham Quarashi	2012-13	Senior South-Zone Netball Championship	Bronze
12	Unni P.R	2012-13	8 th Invitation National super Eleven Cricket championship held at Uthrakand	Silver
13	Vishnu.M.S	2012-13	8 th Invitation National super Eleven Cricket championship held at Uthrakand	Silver
14	Alina.V.Kumar	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
15	Reshma.K.V	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
16	Shylajababu.E	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
17	Sinisha.T	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
18	Bijina.V	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
19	Saranya.M.V	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
20	Arathy J Prakash	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
21	Rimisha.M.P	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
22	Smruthiprabhakaran.M.K	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
23	Princyraj.P	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
24	Sirajunnisa.T.K	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
25	Saikrishna.T	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
26	Jincy.C.F	2012-13	South Zone All India Inter University Women Hockey Championship	Bronze
27	Vishnu.T.C	2013-14	senior south Zone Softball championship	Silver
28	Aswathy.M.R	2013-14	senior south Zone Softball championship senior national softball championship	Gold Silver
29	Amrutha Santhosh	2013-14	Junior National Hockey championship	Silver
30	Sindhu.M.R,	2013-14	Junior National Hockey championship	Silver
31	Mridhularaj,	2013-14	Junior National Hockey championship	Silver
32	Pratheesha.K	2013-14	Junior National Hockey championship	Silver
33	Vysnavi Radhakrishnan	2013-14	Junior National Hockey championship	Silver
34	Shilpa catherine	2014-15	Senior Asian Baseball championship at Tokyo	

35	Josemon.P.P	2014-15	35 th National Games Netball Championship	Bronze
36	Sam Mathew	2014-15	35 th National Games Netball Championship	Bronze
37	Maryn P. Jose	2014-15	35 th National Games Netball Championship	Bronze

21. Internal resources Generated

Sponsorship	60000.00
-------------	----------

22. Publications: Kindly refer the annexure

Faculty Name	Number of papers published in peer reviewed journals (national /international) by faculty and students	publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International ,Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)	Monographs/Books
Anil Thomas Koshy	1		Peer refereed quarterly Inter disciplinary research journal Vol.4 No.1 (ISSN 2249-6696)
Dr. Bindu.M	1		Peer refereed quarterly Inter disciplinary research journal Vol.5No.1 (ISSN 2249-6696)

23. List of eminent academicians and scientists / visitors to the department

Name	Purpose and date
1.Dr.Jayashree Acharaya Head- Dept. of Sports Psychology Lakshmibai National Institute of Physical Education, Government of India Shaktinagar,Gwalior – 474002 Madhya Pradesh	Resource Person for UGC sponsored National Conference on “Health and Lifestyle” -5 th to 7 th March 2015.
2.Dr.S.Sivasankaran Professor Sree Chitra Tirunal Institute Medical Sciences and Technology, Trivandrum	Resource Person for UGC sponsored National Conference on “Health and Lifestyle” -5 th to 7 th March 2015.
3.Dr.Shailaja Mohan Head – Department of Sports Psychology Lakshmibai National College of Physical Education, Trivandrum	Resource Person for UGC sponsored National Conference on “Health and Lifestyle” -5 th to 7 th March 2015.

4.Prof.Usha Sujith Nair Head – Department of Exercise Physiology Lakshmbai National College of Physical Education Government of India, Trivandrum	Resource Person for UGC sponsored National Conference on “Health and Lifestyle” -5 th to 7 th March 2015.
5.Dr.Binu Areeckal Assistant Professor in Community Medicine Medical College, Kottayam	Resource Person for UGC sponsored National Conference on “Health and Lifestyle” -5 th to 7 th March 2015.
6.Dr.K.Chandrasekaran Chairperson School of Education Professor & Head Department of Physical Education Madurai Kamaraj University, Madurai	Resource Person for UGC sponsored National Conference on “Health and Lifestyle” -5 th to 7 th March 2015.
7.Dr.Jaideep Menon Consultant Cardiologist Amritha Institute of Medical Sciences, Edappally & Sree Narayana Institute of Medical Sciences, Chalackal, Paravur	Resource Person for UGC sponsored National Conference on “Health and Lifestyle” -5 th to 7 th March 2015.
8.Mr.Brahma NayakamMahadevan Special Educator, Motivational Speaker Sahajeevan, Kaniyapuram, Trivandrum	Resource person for the Career Guidance and Counseling classes for Physical Education Department students on 25.07.2015.
9..Dr.George Mathews M.B.B.S, DPMR, Dip..N.B (PMR) Assistant Professor L.N.C.P.E, Trivandrum	UGC Sponsored National Workshop on Sports Injuries – 21st March 2011
10.Dr.Arshad.A.A BAMS,PG.DIP SPSN CSM –International Olympic Committee TPDC(Asian Federation of Sports Medicine) Integrated Sports Medicine Specialist Daisman Ayurkendra Kuruppath, Kondotty	UGC Sponsored National Workshop on Sports Injuries – 21st March 2011
11.Dr.Binu George Varghese Assistant Director and Head School of Physical Education and Sports,M.G.U - Kottayam	UGC Sponsored National Workshop on Sports Injuries – 21st March 2011
12. Dr.Tony Daniel Lecturer International Association of Athletic Federation	Well Wisher

13. Shri.P.J.Sunny Chairman Selection Committee -BFI	Well wisher
---	-------------

24. Seminars/ Conferences/Workshops organized & the source of funding

National -Conference /Seminars	International -Conference /Seminars
UGC sponsored National Conference on Health and Lifestyle -5 th to 7 th March 2015.	Nil
UGC Sponsored National Workshop on Sports Injuries – 21st March 2011	Nil

25. Student profile programme/course wise: Nil

26. Diversity of Students: Nil

27. How many students have cleared national and state competitive examinations?

Year	NET,	SLET	GATE	Civil services	Defense services	Any other
	Not applicable					

28. Results

Year	Inter National Participation	National Participation	AIU Participation	State Participation	MGU Positions	University Rankings
2011-12	2	18	43	32	Winners Hockey(M&W), Softball(W), Baseball(W) Runners Up Cricket (W),Net Ball (M),Judo (W) Third Baseball (M),Football (W), Tennis (W)	3 rd
2012-13		15	49	38	Winners Hockey (M/W),Softball (W),Cricket (M) ,Baseball (W) Runners Up Judo (W), Net Ball (M)	4 th
2013-14		27	55	50	Winners Hockey (M/W),Softball(M) Baseball (M) ,Netball (M),Judo (W) ,Waterpolo (M) Fencing (W) Runners – up Softball & Baseball(W) Aquatics(W),Judo (W) Third Aquatics(M)	5 th
2014-15	1	12	53	64	Winners Baseball(M) ,Hockey (M/W) Netball (M),Softball(M),Water polo(M) Runners-up Judo (W),Fencing(W) Third Judo(W) ,Softball(W)	

29. Student progression:

	2012-13	2013-14	2014-15	2015-16
UG to B.P.Ed/B.P.E.S (Number Of Students)	3	2	4	3

30. Details of Infrastructural facilities

Sl:No	Sports Infrastructure	No
1	Football Field 110×75M	1
2	Volleyball Court	1
3	Hockey Field	1
4	Basketball Court	1
5	Tennis Mud court	1
6	200M Track	1
7	Cricket Field	1
8	Cricket practicing net	1
9	Hills for training	1
10	Gymnasium Yoga mat—6 Judo mats-27	
11	Multipurpose indoor stadium	1
12	Sports Pavilion	1

31. Number of students receiving financial assistance from

Year	Government	College Management
2010-11	11	19
2011-12	16	27
2012-13	15	19
2013-14	13	22
2014-15	22	24

32. Details on student enrichment programmes with external experts: Nil

To prepare the college team to various championships the following experts are supporting us:

Name	Discipline	Qualification
Mr. Ravi Varma	Hockey	Kerala State Sports Council Coach
Mr. Soly Xavier	Football	Asian Football Federation – B License
Mr. Arshad.A.A	Softball/Baseball	Senior National Player and our former student
Mr. Devassy Kutty	Volleyball	National Champion and retired premier tyres employee
Mr. Sanu Varghese	Judo	Senior National Player and our former student and National referee in Judo

33. Teaching methods adopted to improve student learning**Theory sessions:**

The rules of the games and sports are taught through lecture method using audio visual aids and power point presentations.

For the open course students the lecture method accompanied by group discussions, seminar, audio visual aids and by test papers are used.

Practical sessions:

The sports specific skills of the students are improved through observation, demonstration and trial and error methods. The skills in the games are again improved through practice matches with experienced teams and also by video analysis of the game.

34. Teacher's appraisal:

Name of faculty	2010-11	2011-12	2012-13	2013-14	2014-15
Anil Thomas Koshy	√	√	√	√	√
Dr. Bindu. M	√	√	√	√	√

35. Community service

Programme	Date/participants
Cricket coaching camp for school students	On all Saturdays
Karate coaching camp for community	On Tuesdays and Thursdays
Roller-skating Camp	On all Fridays
Summer coaching camps in Hockey	April

36. Feedback from students: are collected**37. Feedback from Parents: Nil****38. Future plans****FIVE STRENGTHS**

1. Play fields
2. Support from the students
3. Best coaches and trainers are appointed on contract basis
4. Support from the management

WEAKNESSES

1. Shortage of supporting staff
2. Deficiency in adequate funding
3. Sports hostel for boys
4. Tapping the various agencies of sports funding

FIVE OPPORTUNITIES

1. Utilization of alumnae
2. Tapping the various agencies of sports funding

FIVE CHALLENGES

1. To construct multipurpose indoor stadium.
2. Men's Sports Hostel.
3. To make our hockey field to Astroturf.
4. To raise the fund for Physical Education department.
5. To make health profile of the college students.

DEPARTMENT OF ELECTRONICS AND COMPUTER MAINTENANCE

- 1 Name of the department : Electronics and Computer Maintenance
- 2 Year of Establishment : 2001
- 3 Names of Programmes / Courses offered : UG- B.Sc Electronics and Computer Maintenance (SF)

4. Names of Interdisciplinary courses and the departments/units involved

Department offers open course ‘Information Technology ‘for fifth semester CBCSS undergraduate students of the college.

5. Annual/ semester/choice based credit system (programme wise)

The Choice based Credit and Semester System (CBCSS) of MG University for UG Course (Model III) (6 semesters)

6. Participation of the department in the courses offered by other departments

Department offers open course ‘Information Technology ‘for fifth semester CBCSS undergraduate students of the college.

7. Courses in collaboration with other universities, industries, foreign institutions- Yes

Every year , fourth semester B.Sc E & CM students undergo 30 hours of ‘**On The Job Training**’ in electronics field under the guidance of experts from other Institutes.

List of various ‘On the Job Training ‘ sessions conducted during last five years

- Students were given training sessions on PIC Microcontroller Programming by resource persons from Quest innovative Solutions in January 2016
- Training sessions on LiTeUP003 (ATMEEL AVR + Proteus) was arranged by resource persons from Laxmi Infotek, Kalamassery in February 2015.
- Training sessions on Embedded Systems, Architecture, Project integration and testing with the help of MPLAB IDE, PCB design and fabrication was arranged in February 2014. Professionals from Grey Technolabs , Edappally lead the sessions.
- Training sessions on ‘OrCAD’ was conducted by resource persons from QUEST Innovative Systems, in January 2013
- Training for CCTV Security and Surveillance System was organized by resource persons from Reliable Integrated Security Solutions, Kochi in February 2012.
- Training sessions for PIC Microcontrollers and its programming conducted by resource persons from Quest Innovative Systems in January 2011.

8. Details of courses/ programmes discontinued (if any) with reasons - Nil

9. Number of teaching posts (PERMANENT)

Sanctioned	06
Filled	06

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	Experience
Ms. Grace P Valsan (on leave)	M.I.T	Assistant Professor	Information Technology	10
Ms. Beena A.K	M.Sc	Assistant Professor	Mathematics	10
Ms. Julie Ann Joseph	M.Sc, B.Ed	Assistant Professor	Nano Technology	7
Mr. Jibin Jose Mathew	M.Sc	Assistant Professor	Open Source Hardware	7
Ms. Simi Varghese (on leave)	M.Sc, M.Phil	Assistant Professor	Information Technology	4
Mr.Akhil T.V	M.Sc, M.Tech, M.CA	Assistant Professor	Embedded System	4
Ms. Merin Varghese (leave vacancy)	M.Tech	Assistant Professor	VLSI Design	4 months
Ms. Tresa Mathew (leave vacancy)	M.Sc , M.Tech	Assistant Professor	Applied Electronics	4 months
Mr. K.A. Venugopal	M.Com	Assistant Professor	Accountancy	10
Bisha E .Y	M.A, B.Ed	Assistant Professor	Literature	2

11. List of senior visiting faculty- Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.- 40%

13. Student -Teacher Ratio (programme wise) : B.Sc E & CM – 17 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sanctioned	1 (Technical Assistant) 1 (Lab Technician)
Filled	2

Qualifications of teaching faculty with D.Sc./ D.Litt /Ph.D / MPhil/ PG

Name	Qualification
Ms. Grace P Valsan (on leave)	M.I.T
Ms. Beena A.K	M.Sc
Ms. Julie Ann Joseph	M.Sc , B.Ed
Mr. Jibin Jose Mathew	M.Sc
Ms. Simi Varghese (on leave)	M.Sc , MPhil
Mr.Akhil T.V	M.Sc, M.Tech, MCA

Ms. Merin Varghese (leave vacancy)	M.Tech
Ms. Tresa Mathew (leave vacancy)	M.Sc , M.Tech
Mr. K.A. Venugopal	M.A Public Administration , M.Com , Diploma in International Buisness Operations
Ms. Bisha E.Y	M.A, B.Ed

15. Number of faculty with ongoing projects from (funding) agencies and grants received : Nil.

16. Departmental projects funded by DST- FIST, UGC, DBT, ICSSR etc and total grants received -

Department of E & CM organized a regional seminar '**Unite to sustain life**' in association with Kerala State Council for Science, Technology and Environment (**KSCSTE**) as part of World Ozone Day Celebrations on October 3rd 2016. Fund received from KSCSTE – Rs.14,000/-

17. Research centre / facility recognized by the University : No

18. Publications : Nil

19. Areas of consultancy and income generated : Nil

20. Faculty as members in

a) National committees b) International Committees

c) Editorial boards : Nil

Student Projects

a) Percentage of students who have done in house projects including inter departmental / programme – 20%

b) Percentage of students placed for projects in organizations outside the institution in research laboratories / Industry/ other agencies - 80%

Awards/ Recognitions received by faculty

- Ms. Julie Ann Joseph and Mr.Akhil T.V attended the syllabus restructuring workshop of B.Sc Electronics held at STAS , Edappally
- Our faculty members are actively involved in the syllabus restructuring of B.Sc Electronics and Computer Maintenance Programme of M.G.University.
- Mr. Jibin Jose Mathew implemented a people counter in the College library to find the number of persons entering the library
- Mr. Jibin Jose Mathew, Assistant Professor, Department of E & CM was selected as Quality Assurer of ASAP.
- Ms. Julie Ann Joseph, Assistant Professor, Department of E & CM was a resource person for judging the science exhibition competition held at Rajagiri School, Kalamassery .

Awards/ Recognitions received by students

- Adish A Soman of II B.Sc E & CM was a member of first prize winning M.G. University team in the National Softball championship held in U.C.College, Aluva.
- Dhananjay K.S of II B.Sc E & CM participated in the NCC , NIC , Kozhikode camp in 2016.
- Sunand Geo Tomson of II B.Sc E & CM was a member of third prize winning western group song team in M.G.University Youth Festival held at Kottayam in 2014.
- Mohammed Najeeb of I B.Sc E & CM was a member of College Netball team that won second place in intercollegiate netball competition held at Kottayam.
- Adish A Soman of I B.Sc E & CM was a member of College Baseball team that won second place in intercollegiate Baseball competition held at Kottayam.
- Three students from III B.Sc E & CM- Ashok P.V, Shinoj P S and Sidharth T won first prizes in 3 national and state level competitions in January 2014
- II B.Sc student Haridas M Naik represented Kerala in the republic day Parade in New Delhi in January 2013.
- III B.Sc student Vibin P Vijayan got selected in the MG University baseball team in 2013
- Aashish Cherian of III B.Sc E & CM was a member of State and M.G University Net Ball team in 2012.
- Vijeesh P C of II B.Sc E & CM was the member of M G University Hockey team in 2011
- Shyam Sunder V.V of II B.Sc E & CM attended the Tal Sainik Camp representing the Kerala & Lakshwadeep contingent at New Delhi in September 2011.

21. List of eminent academicians and scientists / visitors to the department

Name	Designation	Purpose
Dr. Thomaskutty Mathew	Assistant Professor, University College of Applied Sciences , Edappally	Seminar on RFID
Mr. Sam Kollannore	Assistant Professor, MES College, Marampilly	Seminar
Mr. Paul Bert K.T	Assistant Professor, Cochin College	Seminar on Microwave Techniques
Mr. Jagadeesh Kumar P	Assistant Professor, Model Engineering College, Thrikkakara	Seminar on Microcontrollers and Embedded System Development
Mr. Anand M	Assistant Professor, School of Environmental Sciences, CUSAT	Seminar on E- waste management

Seminars / Conferences /Workshops organized & the source of funding

- a) National - Nil b) International - Nil

Student profile Programme/Course wise:

Year	Applications received	Selected	Enrolled		Pass Percentage
			Male	Female	
2011	CAP/MQ	36	29	7	59 %
2012	CAP/MQ	36	29	7	41 %
2013	CAP/MQ	36	31	5	29 %
2014	CAP/MQ	36	33	3	Ongoing
2015	CAP/MQ	36	32	4	Ongoing

Diversity of Students:

Year	% of students from same state	% of students from other states	% of students from abroad
2011	100%	-	-
2012	100%	-	-
2013	100%	-	-
2014	100%	-	-
2015	97%	3%	-

22. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services etc ?

Defense services- 2

Student progression: (against % enrolled)

Student progression against enrolled	2008- 11	2009- 12	2010- 13	2011- 14	2012- 15
UG to PG	31	27	57	36	33
Employed through Campus	31	56	12	10	25
Placement other than campus recruitment	35	17	31	6	7
Entrepreneurship / Self Employment	3	0	0	15	3

23. Details of Infrastructural facilities

- a) Department Library : 172 books
 b) Internet Facility for staff and Students: Fully Wi-Fi enabled Department
 c) Class rooms with ICT facility: Yes
 d) Laboratories

A fully equipped Electronics and Computer Maintenance Laboratory with power back up.

A fully equipped Computer lab with 25 computers, Power back up and Wi-Fi connection

1. Number of students receiving financial assistance from college, university, government or other agencies

Serial Number	Scholarship	2011	2012	2013	2014	2015
1	State Government	6	3	2	4	1
2	College Management	3	3	3	6	6
3	CME Alumni Endowment	0	0	1	1	1
4	College Alumni	0	1	2	2	2
5	UBCHEA	0	0	0	2	2
6	Fees Concession from Management	1	0	0	0	0
	Total	10	7	8	15	12

2. Details on student enrichment programmes (special lectures/ workshops / seminars) with external experts

- Soft skill training sessions and personality development sessions lead by external experts are regularly arranged for all three classes of students.
- On The Job Training - This is a hands on training workshop included in the syllabus for II B.Sc E & CM students conducted by resource persons from electronic industry for a duration of 30 hours.
- **Industrial Visit-** Students of third year B.Sc E & CM visited Radio Astronomy Centre, Ooty on November 7th 2016.

Program	Resource Person	Topic	Date
Seminar	Dr. Sebastian Joseph, Assistant Professor, U.C.college	'Planetary Consciousness'	3 rd Oct 2016
Seminar	Dr.M.AnilKumar, Assistant Professor, U.C.College	Ecology, Conservation and Climatic Change	3 rd Oct 2016
Seminar	Dr.M.I.Punnoose, Associate Professor, U.C.College	'Nature Conservation ,Relevance and Responsibilities'	3 rd Oct 2016
Seminar	Dr. Martin . D, Scientist, KUFOS	Nature Awareness Program	Sept 2016
Seminar	Mr.Vasanth Shenoil Secretary, SORT, IMA	Organ Retrieval and transplantation	16 th Mar 2016
Seminar	Mr. Paulbert Thomas, Assistant Professor, Cochin College	Microwave Techniques for Communication	21 st Aug 2014
Seminar	Dr.Jagatheesh Kumar P, Sr. Assistant Professor, Model Engineering College	Microcontrollers & Embedded System Development	30 th Aug 2013
Workshop	Professionals from Keltron	Electronic System Design	26 th Oct 2013
Seminar	Mr Bruce Mathew , Associate Professor, MCA Dept, U.C.College	Open source software	7 th Mar 2012
Workshop	Students of III B.Sc E & CM	PC Maintenance & Trouble shooting	8 th Mar 2012
Seminar	Mr Bruce Mathew , Associate Professor, MCA Dept, U.C.College	Web 2.0	26 th Aug 2011
Workshop	QUEST Innovative Systems	Embedded System	8 th Dec 2011

26. Teaching methods adopted to improve student learning

- ICT enabled teaching and learning and the use of audio visual aids in class room teaching
- Remedial coaching is done for weak students.
- Personality development and soft skill training sessions are regularly conducted by external experts.
- Conducting periodical class tests and assignments
- Power point presentations of students projects and seminars.

27. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Conducted a seminar on E- waste management on 17th December 2015. Mr. Anand M, Assistant Professor , School of Environmental Sciences, CUSAT was the main speaker.
- Our III B.Sc students are involved in collecting old computers from college and using their hardware skill to make those work. Then the working computers are given to needy students at very reduced rates.
- An exhibition was conducted during Tech Neo 2012. Around 2000 students from various schools and colleges attended the program. The exhibition included students electronic projects, robotic stall , hardware stalls , a 3D theatre etc. A workshop was conducted on PC Maintenance and troubleshooting for college students. An intercollegiate Quiz Competition was also arranged.
- B.Sc E & CM students actively took part in the exhibition ‘Bhauthika’ conducted by Physics Department in March 2014. There were 9 electronic project stalls, a robotics stall, a computer hardware stall and a 3D stall from the E & CM Department.
- Actively took part in ‘Haritha Varsham’ – an initiative to clean the campus and to plant new trees on World Environment Day.

27. SWOC analysis of the department and future plans

Strength

- Dual Core Programme with Electronics and Computer Maintenance as core papers.
- A team of dedicated and competent faculty.
- Higher opportunities for Campus placements.
- Feedback from students and parents are taken regularly and they are carefully evaluated.

Weakness

- Not a post graduate department.
- Not much funding from government agencies for conducting seminars and workshops in self financing programmes.
- In recent years the pass percentage of students have declined.

Opportunities

- Encouraging research by faculty members.
- Using online resources to supplement traditional teaching methods.

Challenges

- Keeping students focused in the face of increasing competition in every sphere.
- Due to semester system, only limited time is available for completing the syllabus.
- About 90% of our students are boys and to motivate them academically is a challenge.

Future plans

- To organize national seminars which are funded by national agencies.
- To enhance learning facilities through website notes and interactive quizzes.
- To increase extension activities

DEPARTMENT OF COMMERCE

- 1) Name of the department : Commerce
- 2) Year of Establishment : 2013
- 3) Names of programmes/courses offered : UG
- 4) Name of interdisciplinary courses and the Departments/Units involved : 1) B.Com Computer Applications (Model I)
2) B.Com Finance & Taxation (Model II)
- 5) Choice based credit Semester system (Programme Wise) : 1) B.Com Computer Applications
2) B.Com Finance & Taxation
- 6) Participation of the department in courses
Offered by other department : Open Course
- 7) Courses in collaboration with other institution : Tally ERP 9. With LCC Aluva 2014
- 8) Number of Teaching Posts:

Name of the Post	Sanctioned	Filled
Asst.Professor	9	9

9) Faculty Profile

Sl.No	Name	Qualification	Designation	No .of. Years of Experience
1	Prof.P.G.Thomas	M.Com	Asst.Professor	38 years
2	Ms. Subha.T	M.Com NET	Asst.Professor	2.5 years
3	Ms. Sumitha Pankaj	M.Com	Asst.Professor	1.5 years
4	Ms.Lakshmi. P	M.A.English , M.Phil	Asst.Professor	1.5 years
5	Ms.Bisha E.Y	M.A.English , B.Ed, SET	Asst.Professor	16 years
6	Ms.Suseela.A	M.Com, PGDCA, Doing MBA	Asst.Professor	9.7 years
7	Ms.Rintu Jose	M.Com	Asst.Professor	2.5years
8	Ms.Salini.G	M.Com	Asst.Professor	7 months
9	Ms.Sabeela Ajeesh	MSc.IT, PGDIM , Doing MBA	Asst.Professor	4.7 years
10	Ms.Ancy M	MA Hindi, M.Phil	Guest Lecturer	5 years
11	Ms.Anju Sebastian	MA Malayalam , B.Ed	Guest Lecturer	2 years

10) Presentations by the Faculty members:-

Faculty Name	No .of. Presentations
Ms.Subha.T	2
Ms.Salini.G	2
Bisha .E.Y	1

11) Student Teacher Ratio (Programme Wise) : 24:1

12) Student Projects:-

Percentage of students placed for projects in organization outside institution : 18%

Name of the Course/Programme	Application Received (50% Management)	Selected (50% UG and 50% Management)	Enrolled		Drop Out
			Male	Female	
B.Com (Computer Application) 2013-2016 Batch	650	40	22	17	1
B.Com (Computer Application) 2014-2017 Batch	880	50	27	18	5
B.Com (Finance & Taxation) 2014-2017 Batch	1090	40	20	19	1
B.Com (Computer Application) 2015-2018 Batch	1210	49	29	20	0
B.Com (Finance & Taxation) 2015-2018 Batch	1215	49	35	14	0

13) Students Profile:-

14) The students who have cleared national and state competitive, Defence Service examination

: Muhammed Muhasin
B.Com Computer
Application (2014-2015)

15) Details of Infrastructural Facilities:

- a) Department Library - 152 books
- b) Internet Facilities for Staff and Students
- c) Smart Class and Computer Lab -25 systems, LCD Projector, Slate, Audio aids, Printer and Wi-Fi.

16) Number of Students receiving financial assistance from college, university, Government or other agencies

UCCANA	E-GRANTZ	FISHERIES	TRINITY
2013-2014 Vidya K.K Arun Jose 2014-2015 Nithya Thampi.V 2015-2016 Mustafa P.S	2013-2016 Greeshma P.V 2014-2017 Anitha Sivan Arya K.S Kannan .K Malavika Rakhi P.A AmalKrishna Athira M.V 2015-2018 Akhila Sabu Jithin P.K Rahul P.U Hemand Hari Keerthi Prasad	2013-2014 Ansila .K.A 2014-2015 Ansila.K.A	2015-2016 Arun Jose

17) Teaching methods adopted to improve student learning:

- Lectures
- PowerPoint Presentations
- Test Papers and Quiz Programmes
- Seminars & Debates
- Assignments
- Group Discussions
- Internal assessment
- Remedial coaching
- Viva- Voce
- Industrial visit and learning through various activities
- Projects

18) Details of Student Enrichment Programme:

19) Students Supports

- Remedial classes, Practical classes, Add-on Courses, smart class using Projectors and slate.
- Tutorials
- Value Education
- Scholarships

20) Students Achievements and Awards:

ACADEMICS
2013-2014
Our students participated in the commerce fest conducted by Al-Ameen college , Edathala and won prize worth Rs10000 for Best Manager, Treasure hunt and Spot dance
2014-2015
Five of our students won prizes in the fest conducted by MBA Department U C college for Treasure Hunt and idea presentation
2015-2016
Five of our students won Rs.7000/- for the Product launch in National Commerce Fest conducted by DiST, Angamaly. Five of our students won prize in the fest conducted by MBA Department St.Alberts college for Treasure Hunt and idea presentation.

Extra Curricular Activities (2013-2016)

College Union

Afrin T.A (Chairman) 2015-2016

Muhammed Muhasin (IIDC Rep) (2015-2016)

Sports

Following students of our department have represented and won prizes in the intercollegiate football tournaments

- Sarath Sebastian
- Amal Razik

Hockey

- Amrutha Santhosh
- Mridula Raj
- Jenny Rosa

Net Ball

The following students secured II position in intercollegiate netball tournament

- Muhammed Haseeb
- Hariz Subair
- Amar Abdul Salam
- Akshay Shaji

21) Extension Activities

Our students had done various voluntary social services under the college NSS &NCC campaign on

- Harithavarsham-planting tree
- Swachbharath-cleaning KSRTC stand & Aluva Manapuram
- Blood Donation
- Participation in Pain & Palliative Care Unit.
- Other Social Work

SWOC Analysis

Strength

According to an updated report in Global Financial Monitor, employers are presently facing a talent scarcity of accounting and finance professionals. This signifies job opportunities for graduates with a Commerce Degree are moderately promising. A Bachelor of Commerce or B.Com degree is a three year undergraduate course and is specially designed to provide students, managerial skills in commerce associated disciplines such as accounting, finance, marketing and advertising amongst others. The degree is basically structured to offer aptitude in organizational behavior and business principles by focusing on core subjects such as law, finance, statistics, marketing, accounting, economics, cooperative as well as marketing education.

Here are a few key advantages of this degree program:

- With a B.Com degree you are well prepared to be successful in both corporate and self employment.
- There are high job prospects for holders of this degree as all companies or businesses needs a Commerce Specialist, Manager or at the very least an Accountant.
- Familiarity in accounting offers you with an aptitude to comprehend and scrutinize financial reports and how they usually affect a business. A good knowledge in management and cost accounting practices is significant in decision making processes and in planning as well as evaluating the performance of a company's business activities.
- Human resource management is an additional option provided in this degree course. This choice prepares students with the essential skills in analyzing, identifying and searching solutions to problems associated to human resource activities. It covers essential managerial processes such as selection and recruitment of employees, promotions, employee welfare, talent hunting and application of work-related safety process in a company amongst others

- We have well qualified and experienced faculty to coordinate and implement the curriculum as per university direction
- We have meritorious and talented students with good percentage.
- We offered well furnished eco friendly class rooms, department library and smart class facilities.

Weakness

- Being a self financing course we don't have any grants and funds provided by UGC and others for conducting National and International seminars and workshops
- We don't have PG course , Research Department and funds for doing major and minor projects for the faculty

Opportunities

- Job opportunities for graduates in commerce are moderately promising. Bcom is a UG course provide opportunities in various streams
 - JOBS- Accountant, Tax Consultant, Banker, BPO, Auditor ,Stock Broker, Manager, Finance Consultant, Entrepreneur
 - COURSES-MBA, M.Com, ACCA, CMA, CA,ICWAI, CPA, BAT
- We have an opportunity to provide professional practical accounts training and audit training for the students
- To elevate the Department as a PG and Research Department.
- Various students enrichment activities in tie up with outside Institutions and Companies.

Challenges

- B.Com is not a technical oriented course
- Students are facing practical difficulties in doing accounting and tax related jobs due to outdated syllabus
- We are also not having enough time in the semester system to provide them various add on and skill development programme

Future Plans

- We proposed to setup an Entrepreneurship Development Club with Department of Industries and commerce , Government of Kerala to inculcate Entrepreneurial culture among youth and equip them with the skills, techniques and confidence to be an entrepreneur
- We proposed to provide professional practical accounts training and audit training for the students

- To enhance the knowledge in capital market, we planned to open an online share trading terminal in our department
- We proposed to plan an Intercollegiate Commerce Fest

DEPARTMENT OF BIOINFORMATICS

1. Name of the department : Bioinformatics
2. Year of Establishment : 2005
3. Names of Programmes / Courses offered: PG- MSc Bioinformatics.
4. Names of Interdisciplinary courses and the departments/units involved : Nil
5. Annual/ semester/choice based credit system (programme wise)
The Choice based Credit and Semester System (CBCSS) of MG University for PG Course (4 semesters)
6. Participation of the department in the courses offered by other departments: B.Sc. BT & SP, M.Sc. Biotechnology.
7. Courses in collaboration with other universities, industries, foreign institutions-Nil.
8. Details of courses/ programmes discontinued (if any) with reasons - Nil
9. Number of teaching posts (PERMANENT)

Sanctioned	04
Filled	04

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification Designation	Specialization	No. of Years of Experience
Mr. Shyam Mohan	M.Sc.,M. Phil, Assistant Professor	Biochemistry	11
Ms. Mary Jose	M.Sc., Assistant Professor	Microbiology	5
Ms. Merin Rejoy	M.Sc., Assistant Professor	Bioinformatics	4
Ms. Chinju John	M.Th., Asst. Professor	Bioinformatics	1

11. List of senior visiting faculty- Nil
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.- 5%
13. Student -Teacher Ratio (programme wise) : M.Sc. Bioinformatics – 6 : 1
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sanctioned	1 (Lab Technician)
------------	----------------------

15. Qualifications of teaching faculty with DSc/ DLitt /PhD / MPhil/ PG

Name	Qualification
Mr. Shyam Mohan	MSc, M. Phil
Ms. Mary Jose	MSc
Ms. Merin Rejoy	MSc
Ms. Chinju John	MTech

16. Number of faculty with ongoing projects from (funding) agencies and grants received :One

Mr. Shyam Mohan has been granted with UGC Minor project of Rs.3,50,000/-.

17. Departmental projects funded by DST- FIST, UGC, DBT, ICSSR etc. and total grants received –

One project : In-silico drug target identification against Cyclooxygenase –COX 2, a key enzyme mediating inflammation. Grant allocated Rs3, 50,000/-

18. Research centre / facility recognized by the University – No

19. Publications : One

Eldo Merin K, Rajesh M K, Jamshinath T.P, Hemalatha N, Gopal Murali, Thomas George V, Development of a tool for computational prediction of $\sigma 70$ promoters in *Pseudomonas* SPP using SVM and HMM approaches, Indian journal of Agricultural Sciences 84 (1) : 119-123, Jan 2014.

20. Areas of consultancy : Bioinformatics solutions to teachers across various colleges in Kerala through Workshops & Seminars

Income Generated: Nil

21. Faculty as members in a) National committees b) International Committees c) Editorial board : Nil

22. Student Projects

- a) Percentage of students who have done in house projects including inter departmental / programme – 5%
- b) Percentage of students placed for projects in organizations outside the institution in research laboratories / Industry/ other agencies - 95%

23. Awards/ Recognitions received by faculty : Nil

Awards/ Recognitions received by students: The following students have secured University ranks in M.Sc. Bioinformatics Examinations

Year	Name	Rank in University
2011	Rekha.S.Warrier	1
2012	Arya. K.R.	1
2012	Chinchu Rishikeshan	2
2013	Deepa Paulose	1
2013	Amrutha Asokan.O.	2
2013	Revathi.K.S.	3

24. List of eminent academicians and scientists / visitors to the department

Name	Purpose
Dr. J. Jayasankar	Workshop on R programming/ March 2016
Dr. Abdul Sathar	Workshop on R Programming/May 2014

25. Seminars / Conferences /Workshops organized & the source of funding

a) National - Nil b) International - Nil

26. Student profile programme/course wise:

Year	Applications received	Selected	Enrolled		Pass Percentage
			Male	Female	
2011	CAP-6 Management-11	17	2	15	88%
2012	CAP-2 Management-8	10	4	6	100%
2013	CAP-2 Management-9	11	none	11	80%
2014	CAP-4 Management-12	16	3	13	50%
2015	CAP-5 Management-12	17	2	15	Ongoing

27. Diversity of Students:

Year	% of students from same state	% of students from other states	% of students from abroad
2011	100%	-	-
2012	100%	-	-
2013	100%	-	-
2014	100%	-	-
2015	100%	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services etc.?

NET -1 (2011), ICMR- 1(2012), STECK- Scholarship for Ph.D-1 (2012), BIITP-3 (2014), CPCRI-studentship-1 (2016)

29. Student progression: (against % enrolled)

Student Progression Enrolled	2009-11 (4)	2010-12 (9)	2011-13 (17)	2012-14 (10)	2013-15 (11)
Research	1	1	1	Nil	1
Campus Placements	Nil	Nil	9	7	5
Employed	1	4	3	2	1
Self- Employed	Nil	1	Nil	Nil	Nil

30. Details of Infrastructural facilities

- a) Department Library : 292 book
- b) Internet Facility for staff and Students: Fully Wi-Fi enabled Department
- c) Class rooms with ICT facility: Yes

d) Laboratories

A fully equipped wet lab facilitated for doing microbiology and biochemistry lab works.

A fully equipped Computer lab with 24 computers, Power back up and Wi-Fi connection

31. Number of students receiving financial assistance from college, university, government or other agencies

Sr. No	Scholarship	2011	2012	2013	2014	2015
1	State Government	Nil	Nil	1	1	2
2	College Management	Nil	Nil	Nil	Nil	Nil
3	Mathew Koshy Endowment	1	1	1	1	1
4	College Alumni (UCAANA)	Nil	Nil	2	2	2
5	UBCHEA	0	0	0	0	0
6	Fees Concession-Management	0	0	0	0	1
	Total	1	1	4	4	6

32. Details on student enrichment programmes(special lectures/ workshops / seminars) with external experts

- Dr. Abdul Sathar, Assistant Professor in Statistics, Kerala University was the resource person for a One Day Seminar organized exclusively for M.Sc .Bioinformatics (2012-2014 Batch). The Topic was R Programming for Bioinformatics. The Seminar took place on 24th May 2014.
- A one day Workshop on Free Software, Linux Programming conducted at M.C.A. Department and conducted by Mr.Bruce Mathew, Assistant Professor for all the students of M.Sc.Bioinformatics in November 2014.
- Dr. J. Jayasankar, Principal Scientist, CMFRI, conducted a Workshop for students of M.Sc .Bioinformatics on Applications of R Programming on 8th & 9th March at the MCA Department Computer Lab.
- The Department of Bioinformatics organized a Seminar on “Careers in Bioinformatics” on 23rd June 2016 to bring about awareness on the opportunities and prospects in the field of Bioinformatics. There were about 100 participants of which 22 were from other colleges in Kerala.

Year Wise Student Enrichment Programmes

Students of Batch 2011-2013 attended a one month training in Computer aided Drug Design in Unibiosys Research Labs, Kochi during May 2012.

Placements from this batch are:-

- SCIGENOME LABS, Kochi- Ms. Deepa Paulose
- MEDGENOME LABS, Kochi- Ms. Hridya, Ms. Rekha Sathian and Ms. Neenu Abraham

- INDOCERT, Kochi- Mr. Babeesh
- Ms. Cicy P. Joseph- JRF at KAU, Thrissur

Students of 2012-2014 were actively involved in Awareness Campaigns in the College. On World AIDS Day, December 1 2012 and World Heart Day, September 29 2013, they distributed pamphlets, kept hoardings and conducted awareness programmes in the college.

Academic Programmes participated by Batch 2012-2014 include

- One Day Seminar at Department of Computational Biology, Karyavattom on SCILAB for Biology March 2013
- Two Day Workshop at Kerala Agricultural University on Bioinformatics Softwares May 2013
- Three Day Conference and Symposium at MACFAST, Thiruvalla, Kerala October 2013
- Two Week Training Programme at Shodaka Life Sciences, IBAB, Electronics City, Bangalore
- Ms. Anjumol Thomas, Ms. Treesa Jojo kodiyan and Mr. Jackson John were selected, interviewed and made eligible for recruitment by companies under BIITP, Biotechnology Consortium of India under DBT.
- Students of 2013-15 batch attended one week training in Biocos Life Sciences, HSR LAYOUT, Bangalore for one week.
- The 2013- 2015 batch of students under the leadership of Ms. Persis Stephen attended a two day workshop on WEKA & R Programming for Bioinformatics at Amrita Arts & Science College, Edapally. The registration fee for 10 students and teacher were paid by the college management. (Rs. 10000/-).
- Students of 2014-2016 Batch attended a two day workshop at Sree Sankara College, Kalady based on Hands on Training in Molecular Modelling and Drug Design Conducted in association with Mag Genome Technologies, Kochi on December 12-13 2015.
- UST Global conducted a Placement Drive for M.Sc. Bioinformatics students from various colleges for the Post of Java Developer on April 27 2016 in our college. 35 students participated in the Drive, of which 7 were selected. Three students from our department were also selected.

33. Teaching methods adopted to improve student learning

- ICT enabled teaching and learning and the use of audio visual aids in class room teaching
- Remedial coaching is done for weak students.
- Personality development and soft skill training sessions are regularly conducted by external experts.
- Conducting periodical class tests and assignments
- Power point presentations of students' projects and seminars.
- Hands-on experience with molecular-modeling and graphics.

34. Institutional Social Responsibility (ISR) and Extension activities: Nil

35. SWOC analysis of the department and future plans

- FIVE STRENGTHS: Reputation, Competent Faculty, Ideal time, Conducive learning atmosphere ,Freedom
- FIVE OPPORTUNITIES: Research, Health Care, ITES, IT, Bio programming
- FIVE CHALLENGES: Lack of awareness about the Course, Erratic University Schedules, Time Management, Interested students
- FIVE WEAKNESSES: Interdisciplinary nature of course, Time management, Communication skills not up to the mark considering employability, Tough syllabus, Lack of ample working days

Future Plans

1. Enhancing Academic Industry Interface by constituting an Advisory Committee with Experts.
2. Restructuring Syllabus according to the need of the industry.
3. Taking up M.Sc. Projects for students and promoting research initiative within the department.
4. Hosting more Workshops to expose students to changing trends in Bioinformatics Research.
5. Enhance student skills (Communication/Soft/Vocabulary/Presentation).

DEPARTMENT OF BIOTECHNOLOGY

1. Name of the department : **BIOTECHNOLOGY**

2. Year of Establishment : 2002

3. Names of Programmes / Courses offered

UG: BSc Biological Techniques & Specimen preparation

PG : MSc Biotechnology

4. Names of Interdisciplinary courses and the departments/units involved

Public health, Nutrition & Human Genetics (open course)

5. Annual/ semester/choice based credit system (programme wise)

UG BSc Biological Techniques & Specimen preparation

PG MSc Biotechnology

6. Participation of the department in the courses offered by other departments

Information Technology (Dept. of Electronics & Computer maintenance),

Insurance & Risk management (Dept. of Commerce)

7. Courses in collaboration with other universities, industries, foreign institutions.

Synthite, Kolenchery Training programme in Plant tissue culture for two weeks

MOSC, Medical College, Kolenchery Training programme in clinical Biochemistry & Microbiology

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of teaching posts (PERMANENT)

Sanctioned	06
Filled	06

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil. etc.)

Name	Qualification Designation	Specialization	No. of Years of Experience
Mr. Varghese Thomas .K	MSc ,NET Assistant Professor	Biotechnology	4 years & 9 months
Mrs. Jyothilekshmi .S	MSc Assistant Professor	Biochemistry	6 years & 4 months
Mrs .Asha.M.P	MSc ,NET Assistant Professor	Biotechnology	1year& 6 months
Mrs. Anju .V.Nair	MSc Assistant Professor	Biochemistry	1 year &7 months
Dr. Sareen Sarah John	MSc, MPhil, PhD Assistant Professor	Microbiology	7 months
Mrs. Ahna Ameer	M. Sc. Assistant Professor	Zoology	5 months
Mrs. Titty Giss	M.Sc. Guest Lecturer	Zoology	4 months
Miss. Geethu Paul	M.Sc. Guest Lecturer	Biotechnology	4 months

11. List of senior visiting faculty- Faculty Visits from Eminent Institutions

Prof. P. Jacob Kurien	Former Head of the Department of Zoology, U.C. College, Aluva
Dr. T. Thomas Philip	Former Principal, U.C. College, Aluva
Prof. P. J. Aleyamma	Former Head of the Department of Botany, U.C. College, Aluva

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

Programme	Percentage of lectures handled
BSc BT &SP	9%
MSc Biotechnology	12%

13. Student -Teacher Ratio (programme wise)

UG	15:1
PG	9:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Sanctioned	3
Filled	3

15. Qualifications of teaching faculty

DSc	DLitt	PhD	MPhil		
		01	01		

16. Number of faculty with ongoing projects from (funding) agencies and grants received

	National	International
Mrs. Jyothilekshmi	Nil	One Project funded by UBCHEA in 2014 ₹2.16 lakhs

17. Departmental projects funded by; etc. and total grants received

DST - FIST	UGC	DBT	SAP	ICSSR
Nil	Nil	Nil	Nil	Nil

OTHER
Project funded (UBCHEA) Mrs. Jyothilekshmi in 2014 Funded ₹2.16 lakhs

18. Research Centre /facility recognized by the University: Nil

19. Publications.

Dr. Sareen Sarah John

1. “Downstream Processing of Phytase from *Bacillus* MCCB 242 employing Aqueous Two Phase Extraction”- Sareen Sarah John, Ramya R Nair, I. S. Bright Singh, Journal of Biotechnology & Biomaterials, Vol.5 (6), Page No. 290 (2015) (ISSN:2155-952X)
2. “Larvicidal Potential of Biologically Synthesised Silver Nanoparticles against *Aedes Albopictus*” - Sareen Sarah J., Pillai Raji K., Chandramohanakumar N and Balagopalan M, Vol. 1(ISC-2011), 52-56 (2012) Res.J.Recent.Sci. (ISSN 2277 – 2502)
3. “Vermifugal Activity of Biofabricated Silver Nanoparticles” - Pillai Raji K., Sareen Sarah John, Toms Joseph C, Chandramohanakumar N and Balagopalan M, Vol. 1(ISC-2011), 47-51 (2012) Res.J.Recent.Sci. (ISSN 2277 – 2502)

20. Areas of consultancy: Nil

21. Faculty as members in

Dr. Sareen Sarah John is a member of expert committee, Board of studies- Zoology, Mahatma Gandhi University

22. Publications:

Faculty Name	Number of papers published in peer reviewed journals (national /international) by faculty and students	publications listed in International Database	Monographs/Books
Dr. Sareen Sarah John	3		

23. Honors and awards to the faculty

Dr. Sareen Sarah John	PhD awarded from School of Environmental Studies, Cochin University of Science & Technology
-----------------------	---

24. List of eminent academicians and scientists / visitors to the department

Name	Purpose and date
Dr. K. Muraleedharan Dr. B. Dinesh Kottakkal Arya vaidya sala	UBCHEA sponsored seminar entitled “Alcoholism and liver” was conducted on 4 th June, 2015
Dr. Sarala Samuel, Head, Research & Development, Kerala Ayurvedic Ltd.	UBCHEA sponsored seminar entitled “Scientific explanation on Ayurvedic Drug Dosage” was conducted on 5 th June, 2015.
Dr. Sajan Joseph, Research Director, Eli Lilly, USA	Seminar entitled “Designing of New Drugs” was conducted on 4 th June 2014.

25. Seminars/ Conferences/Workshops organized & the source of funding

National -Conference /Seminars	International -Conference /Seminars
Seminar entitled “Scientific explanation on Ayurvedic Drug Dosage”	UBCHEA sponsored seminar
Seminar entitled “Liver And Alcoholism”	UBCHEA sponsored seminar

26. Student profile programme wise:

Name of the programme	B Sc Biological techniques and Specimen preparation (2012--15)
Applications received	29
Selected	26
Male/ Female	10/16
Pass percentage	84.62%

Name of the programme	M Sc Biotechnology (2013-15)
Applications received	20
Selected	18
Male/ Female	2/16
Pass percentage	72.2%

`1

27. Diversity of Students:

Name of the programme	% of students from the same state	% of students from other states	% of students from abroad
I UG	100	0	0
II UG	100	0	0
III UG	100	0	0
I PG	95	5	0
II PG	100	0	0

28. How many students have cleared national and state competitive examinations?

Year	NET,	SLET	GATE	Civil services	Defense services	Any other
2011	01	Nil	Nil	Nil	Nil	

29. Student progression:

Student progression	Against % enrolled
UG to PG	80%
PG to MPhil	Nil
PG to PhD	22%
Employed	
Campus selection	33%
Entrepreneurship/Self employment	13%

30. Details of Infrastructural facilities

Internet facilities for staff and students.	Total number of class rooms	Library	Tutorial rooms	Class rooms with ICT facility	Students' laboratories	Research laboratories
Department Staff Room	5	1	5	0	5	0

31. Number of students receiving financial assistance from

College	University	Government	other agencies:
UCCAANA Scholarship UG-1 PG-1		UG-5 PG-4	

Financial assistance from the department /scholarships	2011-12		2012-13		2013-14		2014-15		2015-16	
	UG	PG	UG	PG	UG	PG	UG	PG	UG	PG
	1	1	1	1	1	1	1	1	1	1

32. Details on student enrichment programs with external experts

Special lectures	Workshops	Seminar
Seminar entitled "Smart study skills" by Dr. T. Thomas Philip(former Principal ,U.C. College) on 22nd July, 2015	Workshop entitled "Scientific model preparation of human organs and organelles" was conducted in September, 2014 for I BT &SP students	Seminar entitled lectures on herbal medicines by Dr. M. Manoj, Medical Officer, Department of Indian System of Medicine, Govt. of Kerala on 29 th October2014.

33. Teaching methods adopted to improve student learning

Power-point Presentations	Demonstrations through models and experiments.	Black-board teaching	Hands-on experience with molecular-modeling and graphics	Case-studies on related topics
Yes	Yes	Yes		

34. Participation in Institutional Social responsibility and Extension activities.

Ayurvedic camp was conducted in collaboration with Arya vaidya sala, Kottakkal on 4th June,2015. All the residents of the Karumallor gramapanchayath were invited for the camp.

35. SWOC analysis of the department**Strength**

- Only subject experts are appointed as faculties
- Department is having good infrastructure with well-equipped lab
- Classrooms are provided power point projectors
- Complete assessment of each student is ensured by class teachers
- Value education classes are added during the tutorial group sessions
- Feedback is taken from students after completion of each internal examinations
- Open house is conducted in the midst of each semester

Weakness

- Department is not upgraded to AICTE norms

Opportunities

- In collaboration with job consultancies, campus recruitment is provided
- NET oriented classes is provided

Challenges

- To make healthy student-teacher relationship
- By effective teaching methods,100% pass percentage is to be attained

36. Future plans.

- Department is aiming to accomplish 100% pass percentage.
- Smart classrooms to enhance learning facilities.

DEPARTMENT OF MCA

1. Name of the Department : MCA
2. Year Established : 2001
3. Names of the Programmes/Courses offered : M. C. A. (Regular, 3-year course)
M. C. A. (Lateral entry, 2 year course)-2014
4. Names of interdisciplinary courses and the departments /Units involved : Nil
5. Annual/ semester/choice based credit system : The Post Graduate Semester System of Mahatma Gandhi University for the M. C. A. (6 semesters for regular & 4 semesters for Lateral).
6. Participation of the department in the courses offered by other departments : Nil
7. Courses in collaboration with other universities, industries, foreign institutions: Nil
8. Details of courses/ programmes discontinued (if any) with reasons: Nil
9. Number of teaching posts : 15
10. Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D. / M. Phil. etc.)

	Name	Qualification	Designation	Specialization	Teaching Experience
1.	Dr. A V Alex	M. Sc. (Physics), Ph. D	Director	Physics Electronics	4.8 years
2.	Mr. Shine K George	M. C. A	Asso. Professor	Personalization	12.4 years
3.	Mrs. Veena Jose	M. C. A, M. Phil	HOD, Asso. Professor	Networking	11.4 years
4.	Mrs. Divya P B	M. Sc. (Maths) M. Phil	Asso. Professor	Fractal Geometry	10.9 years
5.	Mrs. Sini Velayudhan	M. C. A	Asso. Professor	Data Mining	10.8 years
6.	Mrs. Sherna Mohan	M. Sc. (Comp. Sci.)	Asst. Professor	Networking	9.4 years
7.	Mrs. Lee Juliet George	M. C. A.	Asst. Professor	Programming in C	6.8 years
8.	Mrs. Lince Rachael Varghese	M. C.A., M. Phil	Asst. Professor	Knowledge Management	4.2 years
9.	Mrs. Sikha B Kadayath	M.C.A., M. Phil	Asst. Professor	Knowledge Management & Business Intelligence	9 months
10.	Mrs. Surabhi P V	M. Sc (Comp. Sci.), M. Phil	Asst. Professor	Data Mining	9 months
11.	Mrs. Rintu Augustine	M. C A	Asst. Professor	Cryptography	7 Months
12.	Mrs. Thanu T S	M.C.A.	Asst. Professor	Networking	7 Months

13.	Mrs. Ancy K Paul	M.C.A.	Asst. Professor		6 Months
14.	Mrs. Sreeja R Chandran	M.C.A.	Asst. Professor		3 months
15.	Ms. Reenu Cherian	B Tech., M.Tech	Asst. Professor		1 Month

11. List of senior visiting faculty : 1

12. Percentage of lectures delivered and practical classes handled by temporary faculty (programme wise) : PG - Nil

13. Student - Teacher Ratio (programme wise) : 15:1

14. Number of academic support staff (technical) and administrative staff sanctioned and filled

Technical Staff	2
Administrative Staff	05

15. Qualifications of teaching faculty with DSC / DLitt/ PhD / MPhil/ PG

	Name	Qualification
1.	Dr. A V Alex	M. Sc (Physics), Ph. D
2.	Mr. Shine K George	M. C. A
3.	Mrs. Veena Jose	M. C. A, M. Phil
4.	Mrs. Divya P B	M. Sc. (Mathematics) M. Phil
5.	Mrs. Sini Velayudhan	M. C. A.
6.	Mrs. Sherna Mohan	M. Sc. (Comp. Sci.)
7.	Mrs. Lee Juliet George	M. C. A.
8.	Mrs. Lince Rachael Varghese	M. C.A., M. Phil
9.	Mrs. Sikha B Kadayath	M.C.A, M. Phil
10.	Mrs. Surabhi P V	M. Sc (Comp. Sci.), M. Phil
11.	Mrs. Rintu Augustine	M. C. A
12.	Mrs. Thanu T S	M.C.A.
13.	Mrs. Ancy K Paul	M.C.A.
14.	Mrs. Sreeja R Chandran	M.C.A.
15.	Ms. Reenu Mariam Cherian	B Tech., M. Tech

16. Number of faculty with ongoing projects from funding agencies and grants received

National : Nil

International : Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sl. No	Name of the Investigator	Title of the Project	Amount	Funding Agency
1	Mrs. Veena Jose	Workshop on Python Programming during 15-17, December 2011	Rs.20000	KSCSTE
2	Mr. Bruce Mathew	Staff Development Programme on “Research Methodology & Advances In Computing” during May 14-25, 2012	Rs.200000	AICTE
3	Mrs. Divya P B	INSPIRE CAMP for Plus Two students from 27/05/2013 to 31/05/2013	Rs.9,75,000	DST
4	Mrs. Divya P B	National Science Day Celebration on February 26, 2015	Rs.20000	KSCSTE

18. Research Centre/ facility recognized by the University : No

19. Publications :

a) Publications per Faculty : List attached as annexure

b) Number of papers published in peer reviewed journals (national/ international) by faculty and students : Nil

c) Number of publications listed in International Database Monographs Chapter in Books /Books Edited Books with ISBN/ISSN numbers with details of publishers Citation Index SNIP SJR Impact factor h-index :Nil

20. Areas of consultancy and income generated

- Provides lab facility and technical assistance for the conduct of JAIIB & CAIIB exam by sify
- Provides lab facility and technical assistance for the conduct of online entrance test for Sikkim & Manipal university

Year	Income generated
2014	31500
2015	103767
2016	94668

21. Faculty as members in a) National committees b) International Committees c)

Editorial Boards: Nil

22. Student projects

a) Percentage of students who have done in-house projects including interdepartmental/ programme Mini project : 100% Main Project : 0%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/ Industry/ other agencies Mini project : 0% Main Project : 100%

23. Awards/Recognitions received by faculty and students

List attached as annexure II

24. List of eminent academicians and scientists /visitors to the department

List attached as annexure III

25. Seminars/ Conferences/ Workshops organized & the source of funding

State List Attached as annexure IV

National Nil

International Nil

26. Student profile programme / course-wise

Title of the Programme	Total no. of students appeared	Division			
		Distinction %	I %	II %	Pass %
2014-2016 (Lateral)	31	2	16	0	58.06
2013-2016 (Regular)	55	4	35	3	76.37
2012-2015	60	12	27	0	65
2011-2014	57	9	20	0	50.87
2010-2013	60	14	34	0	80
2009-2012	48	11	22	0	68.75
2008-2011	52	12	25	2	75

27. Diversity of Students

General	General	OBC	SC	ST	Others(physically challenged)
2011 Admn. Regular	44	13	0	0	0
2012 Admn- Regular	12	10	0	0	0
2013 Admn- Regular	12	14	0	0	0
2014 Admn- Regular	7	19	1	0	0
2014 Admn - Lateral	2	10	1	0	0
2015 Admn- Regular	26	6	5	0	1

2015 Admn-Lateral	42	14	0	1	1
2016 Admn-Regular	20	16	0	0	0
2016 Admn- Lateral	29	29	0	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE Civil services, Defense services, etc. NET-1

29. Student progression List attached as annexure V

30. Details of Infrastructural facilities

- a. Library
- No of Text Books : 9715
- No of Reference Books : 288
- No of Journals : 46
- (National-24,International-13, Magazines-9)
- No of e-Journals(Wiley Blackwell, N List) : 2
- No. of CD & Video : 1695
- b. Internet facilities for Staff & Students : Available (16 Mbps)
- c. Class rooms with ICT facility : 6
- d. Laboratories : 4 computer labs with a total of 120 systems

31. Number of students receiving financial assistance from college, university, government or other agencies

- : College- 20
- : Government- 6
- : Other Agencies- 5

32. Details on student enrichment programmes (special lectures /workshops /seminar) with external experts List attached as annexure

33. Teaching methods adopted to improve student learning

- Power-point Presentations
- Demonstrations through models and experiments
- Black-board teaching
- Case-studies on related topics

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Refresher Programme to senior citizens in MCA Lab by "Bridging the Digital Divide cell" on 17th March 2012
- Seminar on "e waste Management for corporates during Feb 7, 2015
- Class for Senior citizens on "E transactions" during April 24, 2015.
- Class for Senior citizens on "E transactions" during May 30, 2015.
- New year Celebration with children of Janaseva Sisu bhavan December 31,2015
- Blood Donation Camp on 31 Jan 2012 & 22 Feb 2012

- World Environment Day Celebrations on June 6,2016
- International Yoga Day Celebrations on June 21,2016
- Blood Donation Camp on 20th June 2016
- Janaseva Sisubhavan Visit as part of new year celebrations on Dec 31,2015
- Visit to Seva bharathy trust as part of X mas celebrations on Dec 23,2016

Annexure I:

AWARDS/RECOGNITIONS RECEIVED BY FACULTY AND STUDENTS(23)

1. Mr. Dipin Raj of 5A Batch(2012 admn) and Tinu K Jos of 3B (2013 admn) Batch for securing first prize in *Web Designing* competition conducted by SNGIST on Feb 12 & 13, 2015.
2. Mr. Tinu K Jos and Mr.Nikhil Raveendranath of 5B Batch(Regular-2013 admn) for securing first prize in Web Designing competition conducted by FISAT on January 29 & 30, 2016.
3. Mr. Ashin Antony, Mr.Jibin Jose & Mr.Rahul A of 2015 admission Regular Batch secured 3rd prize in Word Hunt competition as part of the IT Fest „De Tecknista“ conducted by Depaul, Angamaly on Jan 14&15, 2016.
4. Mr. Ashwin Dinesh , Mr. Arun P. George, Mr. Dony Garvasis, Mr. Govind Kailas, Mr. Frankson Thomas, Mr. Lipson Jacob, Mr. Nayan Vivian of 2015 Lateral Admn. secured First Prize for External Choreography conducted by Depaul, Angamaly as part of the IT Fest „De Tecknista“ on Jan 14&15, 2016.
5. Mr. Christo Augustine, Mr. Hanish, Mr.Nijo John and Mr.Ajith of 4th semester(2014 Regular Admn.) secured 3rd prize in Gaming conducted by Depaul, Angamaly as part of the IT Fest „De Tecknista“ on Jan 14&15, 2016.
6. Mr. Asif Ali & Mr.Rakesh M (2014 Admn. Lateral) secured 1st prize for Gaming competition organized by BPC College, Piravom as part of the IT fest Tegra 2016.
7. Mr. Shelvin Bhaskaran of 2014 Lateral Admn. secured 1st prize for the Photography Competition conducted by MBA Department UC College as part of the Management Fest Inspira 2016.
8. Merin-Malayalam Essay writing 2nd ,Nijo –Malayalam elocution -1st, Dony-Quiz-3rd.Psycholgy Dept.Cycling-Lipson,Nayan,Prajith,Govind,Ashwin
9. Mr. Gijil Jacob of 2nd semester(2015 Regular Admn.) and Ms. Gloria Francis (sem 4-2104 admn regular) presented a paper on Cloud Computing organized by Naipunya College, Pongam on September 2016.

10. Mr. Christo Augustine, Mr. Hanish of 5th semester (2014 Regular Admn.) presented the paper entitled “Gas Leakage Detection System” organized by the Business Innovation and Incubation Centre (BIIC), Mahatma Gandhi University on January 12th 2017.
11. Mr. Hanish of 5th semester (2014 Regular Admn.) developed a Webapp titled “Disapp” which will serve as a tool for crowd sourcing relevant information about dengue directly from the affected communities for Center for Advancement of Global Health-CAGH (Non-profit NGO based in Cochin, India working in the area of global health). They also attended an International symposium on the same.

Annexure**LIST OF EMINENT ACADEMICIANS AND SCIENTISTS /VISITORS TO
THE DEPARTMENT (24)**

Name	Purpose and date
Swami Sachidananda Bharathy,the founder of Acharya guru of national regeneration movement.	Value education programme for Ist & 3 rd Sem students(2010 & 2009 Adm) on 21/01/2011
Dr. Achyuth Sankar,	Inauguration of AICTE Sponsored SDP on 14/5/2012
Dr. Philip Samuel,Head, Information Tech, CUSAT	Resource Person for SDP on 15/05/2012
Dr. Jacob Philip, Director,STIC, CUSAT	Resource Person for SDP on 16/5/2012
Dr. K. Rejikumar, Asst professor, NSS College , Panthalam	Resource Person for SDP on 16/5/2012
Dr. R. Rajesh, Asst Professor, Dept.. of Computer Applications, Bharathiyar University, Coimbatore.	Resource Person for SDP on 17/5/2012
Dr. T Mahalakshmi, Principal,SNIT, Vadakkevila, Kollam	Resource Person for SDP on 21/5/2012
Dr. M S Samuel, Director, MACFAST, Thiruvalla	Resource Person for SDP on 21/5/2012
Dr. Rajkumar Kannan, Associate Professor, Department of Computer Science, Bishop Heber College, Tiruchirappalli	Resource Person for SDP on 22/5/2012
Dr. M Pushparani HOD, CS Dept, Mother Teresa women's university, Kodaikanal	Resource Person for SDP on 22/5/2012
Dr. R Sreedharan, Prof & HOD, School of Management studies ,NIT Calicut	Resource Person for SDP on 22/5/2012
Dr. K V Pramod HOD, MCA, CUSAT	Resource Person for SDP on 25/5/2012
Dr. K.L.Sebastian,Indian Institute of Science , Bangalore	Resource Person for Inspire Science Camp on 27/5/2013
Sri. Prince Joseph, Senior Scientist, NPOL	To Inaugurate Inter-Collegiate Fest-rITika'15 on Feb 05, 2015
Mr. Sunil Balakrishnan, Global Head for Center Operations and Center Head for Kochi Center, UST Global	To Inaugurate Inter-Collegiate Fest-rITika'15 on Feb 05, 2015
Dr. R V G Menon, retired Principal of Govt. Engineering College-Kannur and served as Director of ANERT and President of Kerala Sasthra Sahithya Parishad, the "Peoples' Science Movement"	To Inaugurate National Science Day on 26 th Feb, 2015

Annexure III**SEMINARS/ CONFERENCES/ WORKSHOPS ORGANIZED & THE SOURCE OF FUNDING (25)**

Programme name	Date	Source of Funding
One day Workshop on 'Advanced Computing" by IIPC at UC College	14-Jan,2011	Internal Fund
Seminar on Android as part of FOSS Cell	13-Jan,2011	Internal Fund
Workshop on Python	15-17,Dec, 2011	KSCSTE
Workshop on Drupal - CDAC Chennai	22-23,March 2012	NRCFOSS, CDAC Chennai
SDP on “ Research & advances in Computing”	14-25, May 2012	AICTE
Workshop on PHP My SQL to semester 5 MCA students	5-9 April,2013,	Internal Fund
Workshop on Wikipedia to semester 1 students of MCA	12-Apr-2013	Internal Fund
INSPIRE CAMP	27-31, May 2013	DST
Workshop on Koha for teachers by SDC lead by Dr. Veerankutty, CUSAT		Internal Fund
Workshop on PHP My SQL to semester 5 MCA students	16,17,18-Jan,2014	Internal Fund
FOSS Awareness programme for students by Mr. V K Adarsh	3-Sep,2014	Internal Fund
National Science Day Celebration 2016	26, February, 2016	KSCSTE

Annexure

STUDENT PROGRESSION (29)

Batch	Total Students	Employed	
		Campus Placements	Others
2014-16 (Lateral)	31	15	8
2013-16 (regular)	55	16	12
2012-15 (regular)	60	12	20
2011-14 (regular)	58	7	35
2010-13 (regular)	59	14	38

Students Placed from 2014-16 Admission	Lekshmi S pillai,Soumya Joseph Tency Cleetus ,Kesia Simon Stephy Thomas,Midhun Gopinath Ashif Ali , Thaslima E S	Wipro (8)
	Shilja Joseph,Tensy Cleattus Stephy Thomas, Keerthy P S Bibin Joy	Corel Business Solutions (5)
	Amrutha T. A, Mable K A	Gatikk Technologies (2)
Students Placed from 2013-16 Admission	Tinu Jose K,Clinda Varghese Valerine Mariamendez, Achuth S Deepthi Dinesh, Maria John Shalin Samuel, Lakshmi V Nair Shiney P Alexander, Sonu James Animol K G,Sreesha Bhagyanath.	Wipro (12)
	Mariya John, Ashitha Gosh P A Shalu P Shajan	Corel Business Solutions (3)
	Tinu Jose K	Tele Verge Communications(1)
Students Placed from 2012-15 Admission	Arya AnandAiswarya S Shimil Thattarassery,Rinimol Davis,Veena Balachandran Dipin Raj, Teena Johnson Nisha Paul,Sruthy Mohan Nitha Varghese, Nigha Varghese Lakshmi Chandramohan	Wipro (Wipro, IBS) (UAE Exchange)
Students Placed from 2011-14 Admission	Saranya M,Sreelekshmi G T Aswathy V J. Femi Joseph,Vishnu Venu Shaibin Jose,Aswani Aravind	IBS IBS, Accenture
Students Placed from 2010-13 Admission	Soumya Sunny (UST) Basil Stephen(Huwaai) Manu Antony(Adhoc Technologies) Deepu Varghese(Adhoc Technologies) Ragesh R Menon(Adhoc Technologies) Remya Menon(Zerone Consulting) Manu antony(Speridian technologies) Biju B(Abba Soft0, Nikhil Jose P X(Abba Soft) Arun Devassy(UST), Sreelakshmi K Nair(UST) Ragesh R Menon(UST), Tessy Sebastian(UST) Manu Antony(UST)	

Annexure

DETAILS ON STUDENT ENRICHMENT PROGRAMMES WITH EXTERNAL EXPERTS

- Talk by Padmavibhushan E C G Sudharshan on 09/12/2011
- A talk by Dr Aju and Dr.Sherry of UCC on "Science and Literature" during 16-17 Aug 2012
- Talk on Money management for sem5-2010 admn by Dr. Tony, HOD, Economics Dept, UCC on 12/03/2013
- Talk by R.Sasidharan ,Principal Consultant,DMRC Komet on 11/07/2014
- Talk by Dr Rajesh R, Asso. Prof, Central Uty, Bihar on Image Processing on 12 Aug 2015
- Workshop on 'Advanced Computing" on 14/01/2011
- Training programme on Php &MySQL by Mr.Lal Paul, System Administrator , CUSAT on 22/10/2011
- Workshop on Python during 15-17 Dec 2011
- Workshop on Drupal - CDAC Chennai on 22,23 March 2012
- A seminar on Android on 13/01/2012
- A workshop on Php –MySQL was conducted on 5-6 April, 2013 and 8-9 April, 2013 by Prof Tiji Thomas, HOD, MCA, MACFAST, Thiruvalla
- Soft Skills Training by 'Riya Kariath, Software Engineer, to sem 4 (2011 admn.) on 29/11/2013
- A workshop on PHP and MySQL for 5th sem students from 16/01/2014 to 18/01/2014
- Workshop on web site management taken by RIOSIS group on 09/06/2014
- Hands on Training on VB.net by Ms. Anitha of Yada Solutions Pvt Ltd on 04-03-2015
- Talk by Dr Rajesh R to Sem4 (2013 admn & 2014 admn lateral) on August 12, 2015
- Talk on " Opportunities for MCA students in Government sectors" by placement cell on December 11, 2015
- A workshop on Php –MySQL was conducted on 14-15 January, 2016 , 16-18 January, 2016 and 19-20 January, 2016 for (2013 admn Regular A & B batches, 2014 Lateral batch) by Prof Tiji Thomas, HOD, MCA, MACFAST, Thiruvalla

- Behavioural training programmes by Mr. Ajith Sojan
- Talk by Mr. Jithin K P, Kerala sasthan sahithya parishath on “Bio diversity” as part of World Environment Day celebrations June 6,2016
- Alumni Mentoring Class by Noble A J for Sem 4 students June 18,2016
- A awareness session on importance of Yoga and a practice session as part of international yoga day celebrations on June 21,2016
- Seminar on " How to write a good research paper” for semester 5 students (2014 admn Regular, 2015 admn Lateral batch) by Dr. Sabu M K, Associate professor, MES College, Aluva on Aug 27,29-2016
- Talk on “Ruby software “by Mr Ananthana rayanan as part of Software freedom celebrations. On September 20,2016
- Training on cloud computing by IPSR Solutions Ltd on November 5, 2016
- Aptitude training for sem 5 by career launcher during 29-Nov to 3-Dec,2016

DEPARTMENT OF MBA

1. Name of the Department : Department of MBA
2. Year Established : 2013
3. Names of the Programmes/Courses offered : M B A
4. Names of inter disciplinary courses and the departments /Units involved : Nil
5. Annual/ semester/choice based credit system : Semester
6. Participation of the department in the courses offered by other departments : NA
7. Courses in collaboration with other universities, industries, foreign institutions : Nil
8. Details of courses/ programmes discontinued (if any) with reasons : Nil
9. Number of teaching posts : 9 as per AICTE norms

Name of Post	Sanctioned	Filled
Professors	1	1
Associate Professors	2	0
Asst. Professors	6	5

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.)

	Name	Qualification	Designation	Specialization	No. of Years of Teaching Exp.
i.	Padmaja Devi A	Ph. D., M.B.A., M. Com	Director	Human Resource Management	32
ii.	Suraj E S	Ph. D. (Thesis submitted), M. Phil., M. B. A.	HOD	Finance	13
iii.	Janisben Bino	M. B. A., M. Com., PGDIBO	Assistant Professor	Finance	5.2
iv.	Sujith Kumar P	M. B. A, PGDIBO, M. Com. (Pursuing)	Assistant Professor	Finance	2.7
v.	Rahul R Lexman	PGDM, M. A. Sociology (Pursuing), B. Tech	Assistant Professor	Human Resource Management	4
vi.	Sneha Rose George	M. B. A., M. Com. (completed), PGDIBO	Assistant Professor	Marketing	3

11. List of senior visiting faculty

- i) Ramaswamy T. A., M. Tech. (Industrial Engineering, IIT Kanpur)
- ii) H. Venkitachalam, M. Com, PGDBA, MBA, Ph. D.
- iii) P. V. Menon, MSc Mathematics
- iv) Adv. Marian Paul, L. L. M

12. Percentage of lectures delivered and practical classes handled by temporary faculty (programme wise) : NA

13. Student - Teacher Ratio : 15:1

14. Number of academic support staff (technical) and administrative staff sanctioned and filled

Technical Staff (Lab Assts)		Administrative Staff (store keeper)	
Sanctioned	Filled	Sanctioned	Filled
NA	NA	03	03

15. Qualifications of teaching faculty with DSC / DLitt/ PhD / MPhil/ PG

1.	Ph. D	:	1
2.	M. Phil	:	1
3.	PG	:	6

16. Number of faculty with ongoing projects from

a) National

b) International : NA

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received : NA

18. Research Centre/ facility recognized by the University : Nil

19.a. Publications per faculty

Padmaja Devi A : 4

Suraj E S : 19

Janisben Bino : 1

Sujith Kumar P : 2

Rahul R Lexman : 1

b. Number of papers published in peer reviewed journals (national / international) by faculty and students

Padmaja Devi A : 2

Suraj E S : 16

- c. Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : Nil
- d. Monographs : Nil
- e. Chapter in Books & books edited : Nil
- f. Books with ISBN/ISSN numbers with details of publishers
1. Mr Suraj E S - 3 ("Principles of management and Accounting", Chess Educational Publishers ISBN : 9788193167052, "Functional Applications of Management", Kerala University prescribed syllabus for B Com graduates, "Business ethics and corporate governance", Chess Educational Publishers ISBN : 9789385666179)
 2. Ms Janisben Bino - 1("Principles of Management and Accounting", Chess Educational Publishers ISBN : 9788193167052)
 3. Mr Sujith Kumar P - 1("Principles of Management and Accounting", Chess Educational Publishers ISBN : 9788193167052)
 4. Mr Rahul R Lexman - ("Business ethics and corporate governance", Chess Educational Publishers ISBN : 9789385666179)
- f. Citation Index
- SNIP
- SIR
- Impact factor
- h-index 1 : Nil
20. Areas of consultancy and income generated : Nil
21. Faculty as members in a) National committees b) International Committees c) Editorial Boards
- a. National Committees: Nil
 - b. International Committees: Nil
 - c. Editorial Board:
- Ms Sneha Rose George - 1 (Managing editor, 3rd eye entertainment magazine, Kerala)
22. Student projects
- a. Percentage of students who have done in-house projects including interdepartmental/ programme : Nil
 - b. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/ Industry/ other agencies
- 46 students (minor internship of 30 days duration)
- 36 students (major internship of 60 days duration)

23. Student projects

Awards/ Recognitions received by faculty and students

Faculty

Mr Suraj E S - Secured best paper award in International conferences twice

Students

National level B-School Management fests(2016)

- i) Secured first prize at Holy Grace Academy, Mala for Finance Game.
- ii) Secured first prize for Treasure hunt at Vidya Bharati Group of Institution, South Kalamassery
- iii) Secured third prize for CSR game at Rajagiri Business School, Kakkanad

24. List of eminent academicians and scientists /visitors to the department

- 1. Mr Ramaswamy T A, MTech(Industrial Engineering, IIT Kanpur)
Dr H Venkitachalam, MCom, PGDBA, MBA, PhD
- 2. Mr P V Menon, MSc Mathematics
- 3. Adv Marian Paul, LLM
- 4. Mr Gokul E K, Training Consultant
- 5. Ms Nitha Suraj, Assistant Professor, Vidya Engineering College, Trichur
- 6. Mr Ajith Kumar, Training Consultant
- 7. Mr Baby P K, CUSAT
- 8. Mr Prasad Prasad, Founder & CEO, Praxis Knowledge Solutions
- 9. Dr Mathai B Fenn, Adjunct Faculty, Marian International Institute of Management, Kerala
- 10. Mr Antony P S, Geojit BNP Paribas, Aluva
- 11. Mr T T Job, Director of Academy of Experiential learning
- 12. Mr Krishnaswamy, Co-founder, Konfidence Key
- 13. Mr Jaifer Vaipen Kattil, Assistant Vice President, Den networks
- 14. Employability training by Mahindra & Mahindra
- 15. Training session by Muthoot Securities

26. Student Profile programme/ course-wise

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
MBA 2015 Admissions (2016-2017)	95	55	19	30	Results awaiting
MBA 2014 Admissions (2015-2016)	80	50	18	17	3
MBA 2013 Admissions (2014-2015)	20	15	7	7	61.5

27. Diversity of Students : Students from the home state and Lakshadweep.

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
MBA 2016-2018	100	-	-
MBA 2015-2017	100	-	-
MBA 2014-2016	100	-	-
MBA 2013-2015	100	-	-

28. No. of students who have qualified NET.GATE Civil service, Defense etc: Nil

29. Student Progression

Student progression	Against % enrolled
UG to PG	-Nil-
PG to M.Phil.	-Nil-
PG to Ph.D.	-Nil-
Ph.D. to Post-Doctoral	-Nil-
Employed	MBA 2015-2017 - 50%
• Campus selection	(4th sem classes pursuing)
• Other than campus recruitment	MBA 2014-2016 - 90%
	MBA 2013-2015 - 100%
Entrepreneurship/Self-employment	MBA 2014-2016 - 10%

30. Details of Infrastructural facilities

Library	Books: 2000 (titles 582) Shelves: 15 Personal Computers: 3 Magazines: 4 Journals: 12 E-journal: 1
Internet facilities for Staff & Students	Wi-Fi Enabled
Class rooms with ICT facility	All classes have ICT facility
Laboratories	Computer lab with 20 machines

31. Number of students receiving financial assistance from College, University, Government or other agencies

Scholarships	2015	2014	2013
Scholarship from College	4		
Scholarship from Government			
Scholarship from Other agencies			
Financial Assistance/ Scholarship from the department			

32. Details on student enrichment programmes (special lectures /workshops /seminar) with external experts

- Motivational class was handled for the students by Mr Prasidh Prasad (founder, CEO, Praxis Knowledge Solutions)
- A session on the “ Importance of MBA in the present business Environment” was conducted by Dr mathai B Fenn(Adjunct faculty, marian International institute of Management, Kerala)
- A training session for the students was conducted by MR Antony P S (geojit BNP paribas, Aluva)
- A session on the topic “ Neuro Linguistic Programming & Mind Dynamics” was conducted by MR T T Job (director of academy of Experiential Learning)
- HR students attended an International Conference on Competency Building at CUSAT, Kochi
- Industry interaction for marketing specialization students on the topic Consumer Retail and Retail Management was held KFC, Gold Souk, Vyttila
- Survey in agricultural field was done by Finance specialization students at Munnar
- A session for students was handled by Mr Krishnanswamy on the topic “ Emerging issues and challenges in the area of Compensation management”
- Classes were conducted by Muthoot Securities for the finance specialization students
- 3 day soft skill training (Employability skills) program by Mahindra & mahindra was conducted for the students
- One day Symposium on the topic Analytics Transform Insights into action” was attended by students at Amrita institute

33. Teaching methods adopted to improve student learning

- a. Case study
- b. Seminar
- c. Audio Visual

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Nil

35. SWOC Analysis of the department and future plans

Strength

- Strong Brand Name- UC college
- Adequate resources (computers, internet, Lab etc)
- Faculty and staff commitment
- Strong bond between faculty and students
- High accessible location
- Faculty service to the college management

Weakness

- Inadequate infrastructure facilities

Opportunities

Increase in national recruitment

- Curriculum expansion
- Grand funding
- Professional development of staff
- Technical support for students, faculty and staff
- Can partner with international universities

Challenges

- High competition
- Higher education opportunities
- Online distance courses

POST ACCREDITATION INITIATIVES

In addition to the improvisation of several existing procedures and practices to sustain its performance, the College came up with new and pro-active initiatives to improve the overall quality in all its spheres, since the Reaccreditation in 2011, the focus of the college was called to face the challenges of Higher education in the era of globalization and to press towards higher goals and objectives. The college answered this call in the post accreditation period, by addressing issues related to all aspects of college life in a multifaceted way which prepares the student to face an ever-changing world. The college continues to attract students from all backgrounds and provides inclusive quality education that caters to their needs. At present 60% of the students are first generation learners and one can witness their progressive growth from one year to the next.

The dynamic nature of the college ensures that necessary changes are made so that the quality of the programme offered by the college either sustained or enhanced. Some of the measures undertaken are given below under the 4 core values identified by NAAC:

National Development

New courses have been started to improve employability of the student and also to fill the need of the community.

- B. Com Finance and Taxation,
- B. Com (Computer applications)
- M.B.A.
- M.C.A. (Lateral entry)
- M.Sc Zoology

The Centre for Religious studies has undertaken research projects on national and regional issues.

- Extension programmes have always been the “heart” of Union Christian College. This value has been sustained during the post accreditation period through programmes undertaken by individual departments for the rural communities and for Government schools where students are from the low income group. In some instances this has been a coordinated effort by the Science Departments in collaboration with the Kerala Science Forum
- The Psychology Department of the College got the status of Research Centre.
- The college has coordinated Mahatma Gandhi University research course work in an exemplary manner.
- Our college got 5 stars, the highest accreditation in ASAP a Kerala higher education initiative.
- Sports and NCC continue to be one of the strong points of the college from 2012- 2016.

Our students have won the M.G. University aggregate Team Game Championship(4-6 Place)

Conducted the South Zone Inter University women Hockey tournament in 2014

Five students of the institution represented Kerala Netball/ Hockey teams in the nineteenth National Games held at Thiruvananthapuram

Conducted National Judo subjunior championship at U C College in the year 2012 in association with Kerala Judo Association

- Every year, NCC students attend the Republic Day Parade held in New Delhi and four NCC students completed Youth Exchange Programme abroad.
- The College continues to support students from the lower socio- economic strata through several scholarships. Additionally, the college has also sought and received help from other funding agencies like Ford Foundation, Scranton, Alumni associations etc..
- The culture of research is growing in the college with a considerable increase in the number of papers published in indexed journals with impact factor >1, articles in books and editing books. The number of funded projects, recognized research centres and research scholars has continuously been on the rise. Several workshops for young interested faculty and joint projects make sure that the research culture is maintained.
- The research facility in the campus, funded by DST-FIST, encourages and enhances the researchers throughout the state. The Physics, Chemistry and Botany Departments have been recognized as DST-FIST sponsored Departments. The instruments in the Common Science Instrumentation have been well maintained and new research grade equipment added.
- The College has sustained the collaborative initiatives established earlier and has forged newer ones. Further, the college has attracted funds from national and international funding agencies that include UBCHEA, UGC, BRNS and DST-FIST for research.
- The College has 81,141 books including reference books and bound volumes of journals. Besides, the library subscribes to the N-LIST package of the INFLIBNET which provides approx. 6200 e-journals and 3 million e-books.

Students and faculty can access the e-resources anywhere in the campus through a secured network.

Learning about self

- Service Learning programmes which link the academic component to service, continues to be offered by Psychology department. As a next step this will become a compulsory part of all department curriculums. Service Learning programmes have led to action research projects involving in Psychology departments.

- The College offers a value Education course on “Ethical responses” which helps students appreciate the value of living in a pluralistic society.
- Several programmes related to the environment under the initiative of nature club together with the eco-friendly initiatives on campus helps students become eco-conscious in every aspect of their life.
- Different alumni chapters have been initiated student support system. The outcome of these initiatives is the involvement the alumni in initiating scholarships for students.

Technology Integration

- Using technology in the teaching learning process has been strengthened in the past 5 years to include the use of e-resources networked throughout the campus. A few faculty members from each department have begun the process of preparing e-content modules for their courses.
- Concerted efforts are being taken by the college to increase the speed of the internet connectivity in a secured network. The college has a 10 Mbps broadband line provided by NMEICT .Besides MCA department has another 14 Mbps connectivity All department staff rooms, library, conference halls & auditoriums have Wi-Fi facility.

Journey for cultivation of Excellence

- Faculty members are constantly exposed – through workshops, Seminars and training sessions – to new teaching-learning pedagogies, assessment tools, planning techniques and leadership styles to equip them to face the challenges posed by the present generation of students, The College ensures that the need of each level of the faculty is met by arranging programmes according to their specific need. They are also continuously updated in their own area of expertise.
- Assessment of faculty members has helped the individual look at themselves critically, make necessary changes in their professional life and grow towards excellence
- Existing International linkages have been strengthened. International scholars on campus interact with faculty and students through formal and informal sessions and conduct workshops on relevant themes.
- The College has ensured that the physical infrastructural facilities are systematically updated to meet the new, supplementary and replacement demands of the community. The changes brought about include additional class rooms and laboratories, a Women’s Hostel, New Transformer, New incinerator, additional one two wheeler parking lot and CCTV cameras installed in strategic locations.

ANNEXURE I

PUBLICATIONS BY FACULTY

English

1. Dr Jacob George C. "Autonomous Learning in ELLE: Cybernautical Approach as the Viaduct to L2 Acquisition" *CELT: A Journal of Culture, English Language Teaching and Literature*. (ISSN 1412-3320) 12.1, 2012. 16-27.
2. "Reading Comprehension of ESL Learners: Effects of Cognitive and Metacognitive Reading Activities." *Perspectives on English Language Pedagogy*. A special issue of *Journal of Indo-Canadian Studies* (ISSN 0972-330) 6:1&2, 2014. 24-37.
3. "Contextualizing Temporalities: Issac Asimov's *Foundation* novels and Frank Herbert's *Dune* Novels *Assonance: A Journal of Russian and Comparative Literary Studies*. 16: 2016. (ISSN 2394-7853).
4. Dr Jacob George C. & Ms Akhila Narayanan "Malayalam Cinema in Recent Times: Iconized Linguistic Accents as Identity Generating Devices." *Albertine Review of Literature*. (ISSN 2394-3009) 1.1, 2014. 79-88.
5. "Kabooliwalah (1993), Penpattanam (2010) and Ee Aduthakalathu (2012): Divergent Cinematic Discourses on Waste." *Discourse: Xavierian Research Journal* (ISSN 2321-0214) 3: 1, March 2015. 28-39.
6. Cheri Jacob K. "The Abuses of Semiosis: Kannaki on Screen." *Albertine Review of Literature*. (ISSN 2394-3009) 1.1, 2014. 38-49.
7. Alwin Alexander "The Omnipresent Look: Lacanian Gaze in Kadamanitta's The Kannur Fort." *TJES* 3.1 (2011): 15-20.
8. "Colonial Signs: A Semiotic Survey of the Imperial Presence in R. K. Narayan's *Swami and Friends*." *Wizcraft Journal of Language and Literature* 1.2 (2012): 135-137.
9. "The Omnipresent Look: Lacanian Gaze in Kadamanitta's The Kannur Fort." *TJES* 3.1 (2011): 15-20.
10. "Contretemps with the Hegemon(y): The Self/Other Conundrum and Hegemony in Mohsin Hamid's *The Reluctant Fundamentalist*." *Contemporary Research in India* 2.4 (2012): 12-15.
11. "Dialogic Resignification: A Bakhtinian Exegesis of the Magdalene Discourse in *Christ Recrucified*." *Wizcraft Journal of Language and Literature* 1.1 (2012): 133-137.
12. "Carnivalising the Sacred: A Bakhtinian Approach to Nikos Kazantzakis' *Christ Recrucified*" *TJELLS* 2.1 (2012): 89-98.
13. "Carnivalising the Grey Friar: A Bakhtinian Survey of Eco-Spirituality in *God's Pauper*". *Labyrinth*. 4.2 (2013): 132-136.
14. "Framing the Dalit: The Subaltern Subject in Sadgati". *TJES* 5.1 (2013): 15-20.
15. "Deseeyathayude Vyavahaarangaal ". *Sahitya Lokam*. 41.1-3 (2013) : 56-59.

16. "Translating the Subaltern : The Vulnerable Subject in C. Ayyappan's "Ghost-Speech"". *Baselius Researcher* 14.1 (2013) : 25-30.
17. "Albert Camus: Sannigdhaavasthakalile Manushyan". *Mathavum Chinthayum: Manushya Darsanam* ed. Dr. Bosco Correya. Pontifical Institute, Aluva: May-June 2015.
18. "Feminine Spirituality: Essays on Soliloquies of the Feminine Soul". *Malayalam Literary Survey*. 31.4 -33.2 (2013): 69-70.
19. „Consumptive Matter: Food as an Apparatus in *The Edible Woman*." *Perspectives on English Language Pedagogy*. A special issue of *Journal of Indo-Canadian Studies* (ISSN 0972-330) 6:1&2, 2014. Print.

Economics

20. Ms.G. Geethika Women Labour migrants and Kerala: A human rights approach with special reference to health and sanitation issues- Proceedings of Seminar on Human Rights.Issues of the Migrant Labourers in Kerala.
21. TRIPS to TRIPS- Plus: An Overview of the Indian Generic Drug Industry & Some Newfound Hurdles *Indian Journal of Politics and International Relations*
22. Ms. Rajalakshmi R, Migrant Labour Registration and violation of Human rights in Kerala: Some legal Proceedings of Seminar on Human Rights. Issues of the Migrant Labourers in Kerala
23. Dr.Ann George, Explicating the capability approach through the voices of the poor. A case study of waste picking Women in Kerala *Journal of Human development and capabilities*
24. Dr.Ann George, Changing Cities and Changing Lives: Development Induced Displacement in Kochi, Kerala *International Journal on Urban Environment*. Vol 1, issue 1. July 2015
25. Dr.Ann George, Being Employed At the Lower End. Going through And Beyond the Narratives of Waste Picking women in Kerala *The Indian Journal of Labour Economics* vol 57, No 2, 2014
26. Dr.Ann George, Education of Poor in Kerala – Achievements, aspirations and orientations *Journal of Educational Planning and Administration*. Vol XXVIII, No 3, July 2014, pp 235-248
27. Dr.Ann George, Being Less Equal: Narratives of Poor waste Picking Women in Kerala on inequality *Indian Journal of Human Development*. Volume 7 No January – June , 2013
28. Dr.Ann George, Corporate Governance and child Labour *Economic and Political Weekly*, Vol XLVII No 50, December 2012 After – life of Mobile Phones: Waste or return to production

Chemistry

29. Jenish Paul, A. Benny Cherian, Neethumol Varghese, Manjusha, Eby Thomas Thachil “ Synthesis of terminal epoxy functional siloxanes for modification of Diglycidyl ether of Bis-Phenol A” *International Journal of Engineering Sciences & Research Technology* 2015, 4(1), 435-444.
30. Anusha Mony, Harikrishnan G. Nair, Vinila, V.S., Sheela Kumari Isacc, Anitha S. Nair, Jayakumari Isacc “ Investigation of the absorption coefficient, refractive index, energy bandgap, dispersion energy urbach energy of nanocrystalline ceramic superconductor YSrBiCuO” *International Journal of recent scientific research* 2015, 6(1), 2438-2444
31. Manjusha Hariharan, Neethumol Varghese, Dr. A. Benny Cherian, Dr. P.V. Sreenivasan, Jenish Paul, Asmy Antony. K.A, “*Synthesis and Characterisation of CaCO₃ (Calcite) Nano particles from cockle shells Using Chitosan as Precursor*”, *International Journal of Scientific and Research Publications (IJSRP)*, 2014, 4(10)
32. Surya A. Mary, Bindu G. Nair, Johns Naduvath, G.S. Okram, Stephen K. Remillard, P.V. Sreenivasan, Rachel R. Philip, “Highly conductive n and p-type CuInO thin films by reactive evaporation”, *Journal of Alloys and Compounds* 2014, 600, 159–161
33. Vinila, V.S., Anusha Mony, Harikrishnan G. Nair, Sheela Kumari Isacc, Anitha S. Nair, Jayakumari Isacc “XRD studies on nanocrystalline ceramic superconductor PbSrCaCuO at different treating Temperatures” , *Crystal Structure theory and applications* 2014, 3, 1-9.
34. Anusha Mony, Sheela Kumari Isacc, Jayakumari Isacc “Bandgap Energy and optical constants of Nanocrystalline Ceramics”, *Science and Research* 2014, 3, 1451-1456.
35. Anusha Mony, Vinila, V.S., Sheela Kumari Isacc, Sam Rajan, Jayakumari Isacc “ Structural and morphological studies of nanocrystalline ceramic PbSrBaTiO₆ at different treating Temperatures, *Journal of Advances in Chemistry* 2014, 10, 3303-3313.
36. Anusha Mony, Vinila, V.S., Harikrishnan G. Nair, Sheela Kumari Isacc, Anitha S. Nair, Jayakumari Isacc “ Thermal behavior of nanocrystalline ceramic PbSrBaTiO₆”, *International Journal of Innovative Science, Engineering and technology* 2014, 1, 645-649.
37. Vinila, V.S., Reenu Jacob, Anusha Mony, Sheela Kumari Isacc, Sam Rajan, Jayakumari Isacc “ Ceramic nanocrystalline superconductor GdBaCuO at different treating Temperatures” *Journal of Crystallization Process and Technology* 2014, 4, 168-176.
38. Anitha S. Nair, Vinila, V.S., Sheela Kumari Isacc, Reenu Jacob, Anusha Mony, Jayakumari Isacc “Studies on nanocrystalline ceramic superconductor LaZrYBaCa₂Cu₃O₁₁ at three different temperatures: *Journal of Crystallization Process and Technology* 2014,4, 126-133.
39. Vinila, V.S., Reenu Jacob, Anusha Mony, Sheela Kumari Isacc, Sam Rajan, Jayakumari Isacc “ XRD analysis of nanocrystalline ceramic PbBaTiO₃” , *Crystal Structure theory and applications* 2014, 3, 57-65.

40. Neethumol Varghese, Manjusha Hariharan, Dr. A. Benny Cherian, Dr. P.V. Sreenivasan, Jenish Paul, Asmy Antony. K.A, "PVA - Assisted Synthesis and Characterization of Nano α -Alumina", *International Journal of Scientific and Research Publications (IJSRP)*, 2014, 4(10).
41. α -Axis oriented ZnS thin film synthesised by dip coating method K. R. Bindu, P. V. Sreenivasan, Arturo I. Martinez, E. I. Anila. *J Sol-Gel Sci Technol*, DOI 10.1007/s10971-013-3177-4 (2013)B
42. "Reactive blending of epoxiresin with epoxidised cresol novolac resin". Jenish paul, A. Benny Cherian, K.P. Unnikrishanan, Eby Thomas Thachil. National conference NACMS on advances in materials science: Macro to Nano scale on 16th and 17th March 2012 at U.C. College Aluva.
43. Optoelectronic and Thermoelectric properties in Ga Doped β - PbS2 nano structured thin films Reference: APSUSC23260 in journal of Applied Surface Science. 258 (2012), pp. 6257-6260
44. Evaluation of absorption coefficient of a solution by a simple experimental setup", Deepak.G, Akhildev.C,K.K.Leelamma,Lyjo.K.J, P.V.Sreenivasan and E.I.Anila,, OPTICS'11,International conference, May23-25, 2011; NIT, Calicut.
45. "Synthesis of pendant epoxy functional polydimethyl siloxane for modification of Diglycidyl Ether of Bis-phenol ".Jenish Paul, A. Benny Cherian, K.P.Unnikrishnan and Eby Thomas Thachil in *Advances in Polymer Science and Technology: An International Journal* 2011; 1 (2): 22-29.
46. "Synthesis of pendant epoxy functional polydimethyl siloxane for modification of Diglycidyl Ether of Bis-phenol ". A Jenish Paul, A. Benny Cherian, K.P.Unnikrishnan and Eby Thomas Thachil in *Advances in Polymer Science and Technology: An International Journal* 2011; 1 (2): 22-29.

Computer Science

47. Mintu Philip and Asha Das Survey: Image Encryption using Chaotic Cryptography Schemes- *IJCA Special Issue on Computational Science - New Dimensions & Perspectives* (1):1-4, 2011. Published by Foundation of Computer Science.
48. A New Bluetooth Security Architecture- CCEIT, 2011, Springer CCIS 204, pp 507-515, 2011, Asha Das and Teena George -Secure Wireless Video Streaming Using Network Coding- International Conference on Information Security 2011
Greeshma K- Social Development through Technical Education- ISTE Convention, 2014
49. Gincy Abraham- Information Communication technology in tourism and hospitality industry- Conference proceedings, 2016

Mathematics

50. Tutu M. John, Sunny Kuriakose., „Decision Making A New Approach“, Journal of Science, Technology and Management, 3(3), (2010), 29–33.
51. Tutu M. John, Sunny Kuriakose., „Possibilistic Optimistic Criteria in a Fuzzy Environment“, Advances in Fuzzy Sets and Systems, 8(1), (2011), 1–11, MR (American Mathematical Society) 2865605.
52. Tutu M. John, Sunny Kuriakose, „Decision Making under Uncertainty in a Fuzzy Environment“, International Journal of Fuzzy Mathematics and Systems, 1(3), (2011), 273–279.
53. Tutu M. John, Sunny Kuriakose, „Optimistic Criteria in a Fuzzy and Intuitionistic Fuzzy Environment“, Bulletin of Kerala Mathematical Association, 8(2), 2011, 343–349.
54. Tutu M. John, Sunny Kuriakose, „Possibilistic Pessimistic Criteria in a Fuzzy Environment“, International Journal of Fuzzy Mathematics and Systems, 1(3), (2011), 299–306.
55. Tutu M. John, Sunny Kuriakose, „Semigroup of Alternatives using Fuzzy valuation Function“, Far East Journal of Mathematical Sciences, 65(2), (2012), 199–210. MRS (American Mathematical Society).
56. Tutu M. John, Sunny Kuriakose, „Decision Criteria in a Fuzzy and Intuitionistic Fuzzy Environment“, Journal of Fuzzy Sets, IFMI, California, USA.
57. Annie Varghese, Sunny Kuriakose, Cartesian products over intuitionistic fuzzy sets, International Journal of Fuzzy Mathematics and Systems, Vol.2, No. 1 (2012) 21–27.
58. Annie Varghese, Sunny Kuriakose A., More on Cartesian products over Intuitionistic Fuzzy Sets, International Mathematical Forum, Vol. 7, 2012, No. 23, 1129–1133.
59. Annie Varghese, Sunny Kuriakose, Centroid of an intuitionistic fuzzy number, Notes on Intuitionistic Fuzzy Sets, Vol. 18, No. 1 (2012) 19–24.
60. Annie Varghese, Sunny Kuriakose A., More on Intuitionistic Fuzzy Relations, Notes on Intuitionistic Fuzzy Sets, Vol. 18, 2012, No. 2, 13–20.
61. Shiny Jose, Decomposition theorems of an intuitionistic fuzzy set, *Note on Intuitionistic Fuzzy Sets* Vol.18, No. 2, (2012), pp. 31-36
62. Shiny Jose, Note on Multi attribute decision making in intuitionistic fuzzy context, *Note on Intuitionistic Fuzzy Sets*, Vol.19(2013) NO.1, pp.48-53.
63. Shiny Jose, Multicriteria Decision Making Under Interval Valued Intuitionistic Fuzzy Context, *Journal of Fuzzy Mathematics* Vol. 21, No.4(2013)pp. 37-41.
64. Shiny Jose, Multi attribute decision making using decision makers attitude in intuitionistic fuzzy context, *International Journal of Fuzzy Mathematics and Systems* Vol.3, NO.3(2013), pp. 189-195.

65. Shiny Jose, Aggregation of Intuitionistic Fuzzy Sets using (α, β) cuts, Journal of current studies: Proceedings of National Conference on Modelling, Optimizattion and computational Techniques, S.N.M.College Maliankara 2013, pp.79-84.
66. Shiny Jose, Algorithm for solving an Assignment model in IF context, *International Journal of Fuzzy Mathematics and Systems* Vol.3 No.5(2013) pp. 345-349.
67. Shiny Jose, More on (α, β) level, Closure and Interior, in intuitionistic fuzzy context, *Georgian Educational Mine International Journal*, (2014), Vol. 1, No. 1, pp.73-77.
68. Shiny Jose, Aggregation operator, Score function and Accuracy function for Multicriteria decision problems in intuitionistic fuzzy context, *Note on Intuitionistic Fuzzy Sets*, Vol.20(2014) N0.1, pp. 40-44.
69. Shiny Jose, Multiattribute Decision making for Intuitionistic Fuzzy Sets , Proceedings of National Conference on Fuzzy Logic and its Applications to Computer Science, B.P.C.College, Piravom. February 2014, pp.31-38
70. Sheeja T K, On the topological Structure of Rough sets induced by quasi orders, *Proceediings of the UGC Sponsored National Seminar on Fuzzy Logic and its Applications to Computer Science*, B.P.C.College, Piravom, February 2014, pp 17-20.
71. T K, On the topology induced by Rough Set Approximations, Proceedings of the UGC Sponsored National Seminar on Mathematical Modelling and its Applications, UC College Aluva January 2016 (Under Press).
72. Sheeja T K, On Multi-granualtion Rough Sets, *International Journal of Granular Computiong, Rough Sets and Intelligent Systems*. (Communicated).
73. S. Arumugam, Bibin K. Jose, CsillaBujats and ZsoltTuza, equality of domination and transversal numbers in hypergraph, *Discrete Applied Mathematics*, 161(2013), pp1859-1867.
74. Bibin K. Jose, Graph products of open distance pattern uniform graph- General Mathematical Notes, Vol.18, No2, 2013 p.p 67-68.
75. Rogi Jacob, Sunny Kuriakose A Near sets through fuzzy similarity relation *Applied Mathematical Sciences*, Vol. 8, 2014, no. 41, 2035-2040.
76. Aparna Lakshmanan S., Manju K. Menon, Anu V., *Homometric number ofgraphs*, (Communicated).
77. Anu V., Aparna Lakshmanan S., *Homometric Number of a Graph and Some Related Concepts*, Lecture Notes in Computer Science, Springer-Verlag (Accepted).

MCA

78. Shine K George, Ontology based framework for news extraction in visual media- Published in the Proceedings of the International Conference on Data science and Engineering during 18-20 July 2012.

79. Priya Maniyan ,Approach to Detect Diseases using Nail Image Processing- Published in International Journal of Applied Engineering Research ISSN 0973-4562 Volume 10, Number 16 (2015)(SCOPUS).
80. Bruce Mathew-A Generic Predictive Knowledge Management Model for Fisheries with special emphasis to the catch of Oil Sardine along the South West Coast of India-Published in International Conference on Advanced Computing and Communication Systems(ICACCS-2015).
81. Veena Jose -Secure Multicasting using blowfish algorithm- Published in International Journal of Advanced Information and Communication Technology, Vol 1,issue 4, Aug 2014.
82. Divya P B- A Study on the role of fuzzy logic and rough set theory in intrusion detection systems- Published in the proceedings of the International Conference on “Mathematical modeling in Computer, Management and Medical Sciences”. [June 13-15, 2013] ,pp 172-177.
83. Lince Rachael Varghese-A QR Decomposition approach for improved anomaly detection over non-linear data Published in IJCA, Sept 2015 Vol 126, no:10.
84. A Study on anamoly detection and a proposal for an Improved anamoly detection over the Non-linear distributed data using QR-Factorization approach Published in Wide Spectrum, Vol 4, No:3(2015).
85. Rose Babu- An Efficient Routing With Congestion Control Protocol For Multihop Broadcast Routing In VANETS Published in International journal of Advanced Computational Engineering and Networking. !SSN:2320-2106 Volume-2, Issue-3, March 2014.
86. Surabhi P V, Predicting Melting Point of Medicinal Compounds using Neural Network Classifier Published in International Journal of Research in advent Technology , Vol 3, no 9, Sept 2015.

Physical Education

87. Dr.Bindu.M ,Effect of short term Aerobic exercise programme on self esteem and Body Image of Sedentary College Women- Peer refereed quarterly Inter disciplinary research journalVol.5(1) March 2015, (ISSN 2249-6696)
88. Anil Thomas Koshy & Dr.Bindu.M, Effects of yoga on mood state of adolescent girls with sedentary life style, Yoga: A panacea for lifestyle diseases *proceedings of the UGC national seminar*.
89. Anil Thomas Koshy, LEAP –A School based Intervention Programme for Lifestyle Diseases in Kerala State, Peer refereed quarterly Inter disciplinary research journalVol.4 (1) March 2014,(ISSN 2249-6696)
90. Anil Thomas Koshy, Body Image Satisfaction and Body Fat Percentage among Collegiate Athlletes and Non Athletes, Explorations a *proceedings of the UGC national seminar* (2014).

Physics

91. Electrochemical synthesis of novel TiO₂ nanotube/ ZnO nanoflakeheterostructure for dye sensitized solar cell application. Aijo John, Johns Naduvath, SudhanshuMallick, Jacob, Stephen Remillard, Paul De Young, ThoudinjaSripathi, Manju Thankamoni, Rachel Reena Philip, Nano& micro lettersDOI 10.1007/s40820-016-0099-z (2016) (IF:3.05).
92. Influence of Sb Incorporation on Optical, Electrical And Gas Sensing Properties Of Transparent ZnO Thin Films”, N.H. Sheeba, Sunil C Vattappalam, Sunny Mathew and Rachel Reena Philip, Materials Chemistry And Physics 179 (2016) 137-142. (IF:2.101).
93. In situ crystallization of highly conducting and transparentITO thin films deposited by RF magnetron sputtering, K.Aijo John,Rachel Reena Philip, T Manju,Vacuum 132(2016)91-94. (IF:1.55).
94. Electrical and transport properties of nearly stoichiometric transparent n-type silver indium oxide thin film. K. Keerthi, P. Tarachand, G. S. Okram, T. Shripathi, V. Ganesan, B. G. Nair, A. Abraham, R. R. Philip, Physica status solidi (b), Volume 253, Issue 11, pages 2230–2235, November 2016.(IF:1.66).
95. A novel method for low temperature crystallization of transparent conducting delafossite AgInO₂,K. Keerthi, K. Aijo John, B. Pradeep, M.D. Benoy, R. Anuroop, Rachel Reena Philip,DOI: 10.1016/j.jalcom.2016.09.180. (IF: 2.99).
96. Effect of thickness on nonlinear absorption properties of graphite oxide thin films V.G. Sreeja , Ajina Cheruvalathu , R. Reshmi , E.I. Anila , Sheenu Thomas, M.K. Jayaraj Optical Materials 60 (2016) 450-455. (IF:2.18).
97. Low temperature electrical conductivity and seebeck coefficient of nanostructured CuSe thin films with Ga addition, Anitha Abraham, Tarachand, Gunadhor S. Okram, Rajani Jacob, P.V. Sreenivasan, Rachel Reena Philip, DOI: .1016/j.Vacuum.2016.04.011(IF:1.55).
98. Effect of anionic concentration on the structural and optical properties of nanostructured ZnS thin films T A Safeera,N Johns and E I Anila,Optical Materials 58(2016) 32-37(IF:2.18).
99. Enhanced biocompatibility of ZnS:Mn quantum dots encapsulated with Aloe vera extract for therapeutic applications; M Anilkumar, K R Bindu,A Sneha Saj and E I Anila, Chin.Phys.B,vol.25, No.8(2016) 088103 (IF:1.603).
100. Zinc gallate and its starting materials in solid state reaction route-A comparative study,T A Safeera, N Johns, K Mini Krishna,P V Sreenivasan, R Reshmi and E I Anila; Materials Chemistry and Physics(2016)1-5).(IF 2.101)
101. Progress in anterior chamber angle imaging for glaucoma risk prediction–A review on clinical equipment, practice and research, VK Shinoj, XJJ Hong, VM Murukeshan, M Baskaran, A Tin Medical Engineering & Physics 38 (12), 1383-1391 (2016) (IF:1.6).

102. Delay signatures in the chaotic intensity output of a quantum dot laser with optical feedback, Bejoy Varghese, Manu P John and V M Nandakumaran, *Pramana*, Vol. 86, page 1021(2016).(IF 0.74).
103. Optoelectronic properties and seebeck coefficient in SnSe thinfilms” K.S.Urmila, T.A.Namitha, J.Rajani, R R Philip and B.Pradeep, *Journal of semiconductors (IOP)*
104. A Novel Cost Effective Fabrication Technique for Highly Preferential Oriented TiO₂ nanotubes”, Aijo John, Johns Naduvath, S.mallick, T.Shripathi, Manju Thankamoniamma and Rachel Reena Philip*, *Nanoscale*, 7, 20386-20390 (2015) (IF:7.76).
105. Tin Incorporation in AgInSe₂ Thin Films: Influence on Conductivity, R.Jacob, G.S.Okram, J.Naduvath, S.Mallick ,Rachel Reena Philip,*Journal of physical chemistry C*, 119 (10), 5727–5733 (2015) (IF:4.77).
106. Effect of Sn doping on properties of transparent ZnO thinfilms prepared by thermal evaporation technique”, N.H.Sheeba,Sunil C.V,J.Naduvath, P.V.Sreenivasan,S.Mathew, Rachel Reena Philip, *Chemical Physics Letters*, 635, 290-294 (2015) (IF 1.963).
107. “Optical and low-temperature thermoelectric properties of phase-pure p-type InSe thin films”, K.S.Urmilla,. T.A.Namitha, Rachel Reena Philip, B.Pradeep, *Applied Physics A*, 120, 675-681 (2015) (IF:1.704).
108. Low temperature fabrication and characterization of wurtzite structured ZnS quantum dots by chemical spray pyrolysis *Journal of Analytical and Applied Pyrolysis* Safeera, Thevaruparambil Abdulba; Anila, Edathottiyil Issac; Johns, Naduvath; Martinez, Arturo I; Sreenivasan, Perumpilly Velayudhan; Reshmi, Raman; Mallick, Sudhanshu; Jayaraj, Madambi 116(2015) 96-102. (IF:3.96).
109. Photoluminescence of Nanocrystalline ZnS Thin Film Grown by Sol–Gel Method E. I. Anila & T. A. Safeera & R. Reshmi *J Fluoresc* DOI 10.1007/s10895-015-1515-3. (IF:1.66).
110. Nanostructured zinc oxide thin film by simple vapor transport deposition P.V. Athma ,, Arturo I. Martinez ,, N. Johns , T.A. Safeera ,R. Reshmi , Anila E I *Superlattices and Microstructures* 85 (2015) 379–384. (IF:2.117).
111. In-vivo corneal imaging using optical imaging techniques for preclinical and clinical applications-An analysis, Jesmond Hong, V. K. Shinoj, V. M. Murukeshan, M. Baskaran and Tin Aung, , *Review of Scientific Instruments*, Volume 86, Issue 9, 093702(2015).(IF 1.62).
112. Irido-corneal angle and fundus documentation using a novel dual-mode imaging probe,M. Baskaran, V. K. Shinoj, V. M. Murukeshan and Tin Aung, , *Investigative Ophthalmology & Visual Science*, Volume 56, Issue 7, 1953 (2015). (IF:3.404).
113. An integrated flexible handheld probe for imaging and evaluation of iridocorneal angle,V. K. Shinoj, V. M. Murukeshan, M. Baskaran and Tin Aung, , *Journal of Biomedical Optics*, 20(1), 016014 (2015). (IF:2.859)

114. Structural and photoluminescence characterisation of dye doped polymethacrylate microfibers Parvathy R, Krishnaumar G, Anila E I, Sajeev U S IJARTET, Vol. II, Special issue X, March 2015 ISSN2394-3777(Print) ISSN 2394-3785 (Online) (IF:4.7).
115. A Study on the Optical Properties of Dye Doped Polycaprolactone Microstructures" Krishnakumar G, Parvathy Radhakrishnan, E I Anila, U S Sajeev Aquinas Journal of Multidisciplinary Research Studies Volume 1 Issue 1
116. Structural and Optical Properties of White Light Emitting ZnS:Mn²⁺ Nanoparticles at Different Synthesis Temperatures K R Bindu, and E I Anila; J. of fluorescence, 25(4)(2015) 795-801; DOI 10.1007/s10895-015-1590-5 (2015) (IF1.66).
117. Low Temperature Thermopower And Electrical Conductivity In Highly Conductive CuInO₂ Thin Films, Bindu G. Nair, G. S. Okram, Johns Naduvath, T. Shripathi, Anis Fatima, Tarachand Patel, Rajani Jacob, K. Keerthi, S. K. Remillard, and Rachel Reena Philip". Journal of Materials Chemistry C-2014, 2, 6765 (IF:4.69).
118. Highly conductive n- and p-type CuInO thin films by reactive evaporation, Surya A. Mary, Bindu G. Nair, Johns Naduvath, G.S. Okram, Stephen K. Remillard, P.V. Sreenivasan, Rachel R. Philip" Journal of alloys and compounds. 600 (2014) 159-161. (IF:2.99).
119. T. Namitha Asokan, K.S. Urmila, Rajani Jacob, Rachel Reena Philip, G.S. Okram, V. Ganesan, B. Pradeep, J. Semiconductors, 35 (2014) 052001-1 (IF:0.739).
120. Hole Concentration Effect on the Microwave Nonlinearity of Tl₂Ba₂CaCu₂O_{8±δ} Superconducting Thin Films", M.M. Bischak, J. Thomas, R.R. Philip, and S.K. Remillard, Journal of Physics: Conference Series, 507 (2014) 012042.
121. Nonlinear optical characterization of ZnS thin film synthesized by chemical spray pyrolysis method. Sreeja V G, Sabitha P V, E. I. Anila, Reshmi R, Manu Punnann John and P. Radhakrishnan 1620, 530 (2014); doi: 10.1063/1.4898292.
122. Optical Emission Spectroscopic Analysis of Plasma Plume during Pulsed Laser Deposition of PZT, S Sasanka Kumar, R Reshmi, N V Joshy, A C Saritha and M K Jayaraj, Journal of Atomic and Molecular Physics, 1(2014).
123. Observation of Room Temperature Photoluminescence from Asymmetric CuGaO₂/ZnO/ZnMgO Multiple Quantum Well Structures, P M Aneesh, M K Jayaraj, R.
124. Reshmi, R S Ajishma, L M Kukreja, Aldrin Antony, F Rojas, Joan Bertomeu, J Lopez Vidrier and S Hernandez, Journal of Nanoscience and Nanotechnology 14, 1(2014) (IF:1.556).
125. Multiple Single-Centered Attractors, JHEP12(2014)158, P.Dominic, Taniya Mandal, Prasanta K. Tripathy (IF:6.023).

126. A gel based imaging technique of the iridocorneal angle for evaluation of angle-closure glaucoma, V. K. Shinoj, V. M. Murukeshan, M. Baskaran and Tin Aung, Review of Scientific Instruments Volume 85, Issue 6, 066105 (2014). (IF:1.618).
127. Design, fabrication and characterization of thermoplastic microlenses for fiber-optic probe imaging, V. K. Shinoj, V M Murukeshan, S B Tor, N H Loh and SWLye, Applied Optics, Volume 53, Issue 6, 1083-1088 (2014). (Also included in the Virtual Journal of Biomedical Optics, Volume 9, Issue 4, 2014). (IF:1.784).
128. Structural and optical characterisation of potassium doped zinc oxide nanosheets PV Athma, N Johns, E I Anila and T A Safeera; Optical Materials 38 (2014) 223-227 (IF 2.023).
129. Effect of deposition parameters and Strontium doping on characteristics of nanostructured ZnO thin film by Chemical Bath Deposition Method", N. H. Sheeba, R.R. Philip, A. Abraham, J. Naduvath, M. P. Weiss, Z J. Deiner, S. K. Remillard, P. A. Deyoung, AIP conference Proceedings 1620,469 (2014).
130. Optical properties of ZnS:Mn^{2+} nanocrystals synthesized by chemical precipitation method, K R Bindu and E I Anila; Journal of Current Studies(JCS) Volume 4(2014)p41-44 ISSN:2277-2707.
131. "Structural, optical and electrical properties of Sb doped and undoped $\text{AgIn}_{1-x}\text{Ga}_x\text{Se}_2$ and $\text{Ag}(\text{InGa})_5\text{Se}_8$ thin films" Rajani Jacob, Stephen K Remillard, Paul A. DeYoung, Uday P. Deshpande, T. Shripathi, V. Ganesan, Johns Naduvath, P. V. Sreenivasan, and Rachel Reena Philip, Phys. Status Solidi A, 1-9 (2013) / DOI 0.1002/pssa.201330370(IF:1.605).
132. "Structural, optical, electrical and low temperature thermoelectric properties of degenerate polycrystalline Cu_7Se_4 thin films", K. S. Urmila, T. Namitha Asokan, R. R. Philip, V. Ganesan, G. S. Okram, and B. Pradeep, Phys. Status Solidi B, 1-8 (2013) / DOI 0.1002/pssb.201349183(IF:1.605).
133. Structural Studies and Valence Band Splitting parameters in Ordered Vacancy Compound $\text{AgGa}_7\text{Se}_{12}$, Rajani Jacob, R. Geethu, T. Shripathi, V. Ganesan, U. P. Deshpande, Shilpa Tripathi, B. Pradeep, Rachel Reena Philip, J.Inorg.Organomet.Polym., 23 (2013) 424 (IF:1.174).
134. V. M. Murukeshan, V. K. Shinoj, Saraswathi P. and P. Padmanabhan, "Diagnostic sensing of specific protein in breast cancer cells using hollow-core photonic crystal fiber", In: E. Y. K. Ng, U. Rajendra Acharya, Rangaraj M. Rangayyan, Jasjit S. Suri, (Eds.) Multimodality Breast Imaging: Diagnosis and Treatment, SPIE Press, Bellingham Washington USA, pp. 475-495 (2013).
135. Axis oriented ZnS thin film synthesised by dip coating method K. R. Bindu, P. V. Sreenivasan, Arturo I. Martinez, E. I. Anila; J Sol-Gel Sci Technol.68 (2013) 351-355.
136. Optoelectronic and low temperature thermoelectric effects in the OVC $\text{n-CuIn}_3\text{Se}_5$ thin films, Rajani Jacob, R Geethu, T Shripathi, G S Okram, V Ganesan, B.Pradeep, Urmila K.S and Rachel Reena Philip, Physica Status Solidi A, 209 (2012) 2195-2200. (IF:1.469).

137. Optoelectronic and thermoelectric properties in Ga doped β -PbS₂ nanostructured thin films, Geethu R, Rajani Jacob, T.Shripathi, G.S.Okram,V.Ganesan, Shilpa Tripathi, Anees Fatima, Sreenivasan P.V, Urmila K.S, B.Pradeep, Rachel Reena Philip, Applied Surface Science, 258 (2012) 6257-6260. (IF:2.112).
138. Structural, optical, electrical and low temperature thermoelectric studies on the ordered vacancy compound AgGa₃Se₅, Rajani Jacob, Geethu R, Shripathi T, Okram G S, Ganesan V, Pradeep B, Urmila K S and Rachel Reena Philip, Phys.Status Solidi B, 249 (2012) 1271- 1276. (IF:1.48).
139. Effect of nucleation layer on the growth of TiO₂ nanoflowers via solvothermal synthesis ; Oscar A. Jaramillo, Reshmi Raman and Marina E. Rincón. MRS Proceedings Nanostructured Materials and Nanotechnology, 1479, imrc12-1479-slc-o065 doi:10.1557/opl.2012.1604 (2012).
140. Liquid phase pulsed laser ablation of metal nanoparticles for nonlinear optical applications, R. Sreeja, R. Reshmi, P. M. Aneesh and M.K.Jayaraj; Science of Advanced materials 4(2012)1-10.
141. Non-supersymmetric Stringy Attractors, Pramod Dominic and Prasanta Tripathy JHEP, 1201, 030 (2012) [arXiv:1109:6918[hep-th]](IF:6.023).
142. Hollow-core photonic crystal fiber based multifunctional optical system for trapping, position sensing, and detection of fluorescent particles, V. K. Shinoj and V. M. Murukeshan, Optics Letters, Volume 37, Issue 10, 1607-1609 (2012). (Also included in the Virtual Journal of Biomedical Optics, Volume 7, Issue 7, (2012). (IF:3.292).
143. An integrated HC-PCF transverse optical trapping system for optical manipulation and detection, V. K. Shinoj and V. M. Murukeshan, Journal of Applied Physics, Volume 111, Issue 2, 023106 (1-5) (2012). (IF:2.276).
144. Chaotic oscillations in a piecewise linear spring-mass system, Manu P John and V M Nandakumaran, Theoretical and Applied Mechanics Letters, Vol. 2, page 53002(2012).
145. Synthesis of Corrugated Structured N Type PbS Thin Film E I Anila, K J Saji and U S Sajeev, Key Eng materials Vol. 500 (2012) 118-12.
146. Nanostructured ZnS powders with strong confinement effects prepared by colloidal precipitation method K R Bindu, Arturo I Martinez, Prathibha Vasudevan, N V Unnikrishnan and E I Anila, Physica E 46 (2012) 21-24.
147. Effect of NH₄Cl flux on the structural and luminescence properties of SrS:Cu,FPhosphor E I Anila and M K Jayaraj, Journal of optics 42(1) (2012) 64-66.
148. Effect of Ga incorporation on valence band splitting of OVC CuIn₃Se₅ thin films. Rachel Reena Philip, Dhanya.S, Namitha Asokan T, and B.Pradeep, Journal of Physics and chemistry of Solids, 72(2011)294-298. (IF:1.853).
149. Influence of oxygen to argon ratio on the structural optical and electrical properties of rf magnetron sputtered Ba_{0.7}Sr_{0.3}TiO₃ thin films Reshmi R, M. K. Jayaraj, M.T.Sebastian Journal of Electrochemical society, 158 (5) G124-G127 (2011).

150. High tunability of pulsed laser deposited Ba_{0.7}Sr_{0.3}TiO₃ thin films on perovskite oxide electrode R. Reshmi, A.S.Asha, P.S Krishnaprasad , M. K. Jayaraj, M.T.Sebastian , Jr Alloys and Compounds; 509(23), 6561-6566 (2011).
151. On the Stability of Non-supersymmetric Quantum Attractors in String Theory Pramod Dominic and Prasanta Tripathy JHEP, 1106, 112 (2011) [arXiv:1105:0481[hep-th]]. (IF:6.2).
152. Instanton Corrected Non-supersymmetric Attractors, Pramod Dominic and Prasanta Tripathy JHEP, 1101, 116, (2011),[arXiv:1105:0481[hep-th](IF:6.2)
153. An HC-PCF fluorescence spectroscopy for detection of microsphere samples based on refractive index scaling law,V. K. Shinoj and V. M. Murukeshan, , Optics & Photonics Journal, Volume 1, Issue 2, 85-90 (2011). (IF:0.63).
154. Numerical investigation and optimization of Hollow-core photonic crystal fiber for optical trapping of fluorescent micro particles, V. K. Shinoj and V. M. Murukeshan, Micro & Nano Letters, Volume 6, Issue 9, 785-789 (2011). (IF:0.853).
155. Characteristics of Stand-alone Microlenses in Fiber-based Fluorescence Imaging Applications, Review of Scientific Instruments, M. Mirkhalaf, V. M. Murukeshan, S. B. Tor, V. K. Shinoj and K. Sathiyamoorthy, Volume 6, Issue 9, 043110 (1-7), 2011. (Also included in the Virtual Journal of Biological Physics Research, Volume 21, Issue 9, 2011). (IF:1.618).
156. Sensitised luminescence of SrS: Dy, Cu, Cl phosphor E.I. Anila and M.K. Jayaraj; Philosophical magazine Vol. 91, No. 27, (2011), 3641–3648
157. Colour control in SrS:Cu,Cl powder phosphor, E.I.Anila ,I.P.Sanjaykumar and M.K.Jayaraj; Mater.Sci. Eng.A 530 (2011) 624-627.
158. Effect of NH₄Cl flux on the structural and luminescence properties of SrS:Cu,Cl Phosphor, E I Anila and M K Jayaraj; Proc. Of International Conference on Contemporary Trends in Optics and Optoelectronics; Jan 17-19, 2011 IIST Trivandrum.
159. Determination of Absorption Coefficient of a Solution by a Simple Experimental Setup, Deepak Gopalakrishnana, C. Akhildev, P. V.Sreenivasan, K. K. Leelammaa, Lyjo K. Joseph and E. I. Anila; AIP Conf. Proc.1391, 372-374 (2011).
160. Single Crystalline a- axis ZnS Thin Film, E I Anila, Proc. National Conference on Advanced Material Science [NCAMS], 16-17 March, 2012, U C College, Aluva, Kerala.
161. Effect of Deposition Temperature on Structural & Optical Properties of ZnS thin film K R Bindu and E I Anila Proc.National Conference on Advanced Material Science [NCAMS], 16-17 March, 2012, U C College, Aluva, Kerala
162. Characterisation of Single crystalline ZnO thin films deposited by VLS method Sarath S, Athma P.V, Reshma Ravi, Safeera T.A, Anju K.Joy and E.I.Anila Proc. National Conference on Advanced Material Science [NCAMS], 16-17 March, 2012, U C College, Aluva, Kerala.

163. Synthesis and characterization of nanostructured ZnS thin film T A Safeera, K .J Anju, P J Joffy and E I Anila : AIP. Conf. Proc. 1512, 668-669 (2013).
164. Synthesis and characterisation of ZnO nanonails T A Safeera, N Johns, P V Athma, P V Sreenivasan and E I Anila; AIP conference proceedings 1620 (2014)p. 572.
165. Nonlinear optical characterisation of ZnS thin film synthesised by chemical spray pyrolysis method Sreeja V G, Sabitha P V, E I Anila, Reshmi R, Manu Punnan John and P Radhakrishnan; AIP conference proceedings 1620 (2014) 530.
166. Photoluminescence Studies of Triethanolamine Capped Calcium Sulphide Nanoparticles Prepared via Chemical Co-precipitation Method” S Rekha and E I Anila, Proc.National seminar on Trends in Physical Sciences(TriPS) 30th and 31st July 2015; Sree Sankara College, Kalady.
167. Preparation and Structural Characterisation of Graphite Oxide Powder” V G Sreeja, R Reshmi and E I Anila, National seminar on Trends in Physical Sciences(TriPS) 30th and 31st July 2015; Sree Sankara College, Kalady.
168. Nonlinear optical characterization of graphite oxide thin film by open aperture Z- scan technique, V G Sreeja, Ajina cheruvalathu, R Reshmi, Sebin Devasia and E I Anila; AIP Conference Proceedings, 1731, 080023 (2016)doi: 10.1063/1.4947901.
169. Effect of yttrium doping on the photoluminescence of zinc gallate T A Safeera, E I Anila R Reshmi, Proceedings of 27th IRF conference 24th May 2015, Pune India pp.25 ISBN:978-93-85465-17-8.
170. Synthesis and Characterisation of Methyl Ammonium Lead Iodide Perovskite Nanoparticles by Sol Gel Method” Megha Emerse, Aparna S, Silpa Paul, Rakhy Raphael and E I Anila; Proceedings of the National seminar on Recent trends in Physics and Research, St.Xavier’s College, Aluva; 15th and 16th December 2015.
171. Synthesis and Characterization of Cd_xZn_{1-x}S Thin Films for photo voltaic Application Joissy Mathew, Nirmala Paul , E. I. Anila, Proc.National seminar on Recent trends in Physics and Research, St.Xavier’s College, Aluva; 15th and 16th December 2015.
172. Study on the Effect of Synthesis Temperature on the Structural, Surface Morphological and Optical Properties of Methyl Ammonium Lead Iodide Nanoparticles by Sol-Gel Method, K A Benazeera Beegum, Maria Paulose, V I Peter, Rakhy Raphael, V G Sreeja and E I Anila; IOP Conference Series: Material Science and Engineering 149(2016) 012078 doi:10.1088/1757-899X/149/1/012078.
173. Investigation on the Evolution of Structural, Electrical and Transmitting Properties of Aluminium Doped Zinc Oxide Thin Film as a function of substrate temperature, Sebin Devasia , P V Athma, Anumol Jose and E I Anila IOP Conf. Series: Materials Science and Engineering 149 (2016) 012077 doi:10.1088/1757-899X/149/1/012077.

174. V. K. Shinoj; Murukeshan V. M. ; Jesmond Hong ; M. Baskaran and Tin Aung, "Dual-illumination mode, wide-field probe imaging scheme for imaging irido-corneal angle region inside eye", Proc. SPIE 9524, International Conference on Optical and Photonic Engineering (icOPEN 2015), 95241L (July 17, 2015).
175. Jesmond Hong, V. K. Shinoj, Murukeshan V. M. ; Baskaran M. and Tin Aung, "In-vivo high resolution corneal imaging and analysis on animal models for clinical applications", Proc. SPIE 9524, International Conference on Optical and Photonic Engineering (icOPEN 2015), 95241J (July 17, 2015).
176. V. M. Murukeshan, Hong Xun J. Jesmond, V. K. Shinoj, M. Baskaran and T. Aung, "Non-contact high resolution Bessel beam probe for diagnostic imaging of cornea and trabecular meshwork region in eye", Proc. SPIE 9537, Clinical and Biomedical Spectroscopy and Imaging IV, 953728 (July 15, 2015).
177. V. K. Shinoj, V. M. Murukeshan, James J., M. Baskaran and T. Aung, "Micro-CCD based probe for eye imaging targeting anterior chamber angle", International Conference on Biomedical Systems, Signals and Images 2012 (BSSI 2012) November 28-December 1, 2012. (Accepted for publication in Proceedings).
178. V. K. Shinoj and V. M. Murukeshan, "Numerical study on transverse optical trapping inside hollow core PCF", Physics Procedia, Volume 19, Issue 0, 361-366, 2011.
179. M.M. Bischak, J. Thomas, R.R. Philip, and S.K. Remillard, Journal of Physics: Conference Series, 507 (2014) 012042.
180. Sreeranjani.R, Riya Jose, A.V.Ashitha, Parvathi.S.Nair, Keerthi.K, Sreenivasan.P.V and Rachel Reena Philip*, National Seminar on Current Trends In Material Science, Aquinas college, Edacochin, held on August 13-14 2014. ISBN: 978-93-5212-202-8 (2014).
181. Rajani Jacob, Rachel Reena Philip, Sheeba Nazer, Anitha Abraham, Sinitha B. Nair, B. Pradeep, K. S. Urmila, and G. S. Okram, AIP Conference Proceedings 1576, 83 (2014).
182. K. S. Urmila, T. Namitha Asokan, B. Pradeep, Rajani Jacob, and Rachel Reena Philip, AIP Conference Proceedings 1576, 69 (2014).
183. N. H. Sheeba, R.R. Philip, A. Abraham, J. Naduvath, M. P. Weiss, Z J. Deiner, S. K. Remillard, P. A. Deyoung, AIP conference Proceedings 1620, 469 (2014).
184. Sinitha B. Nair, Anitha Abraham, Pradeep B, Shripathi T., Ganesan V., Rachel Reena Philip, AIP conference Proceedings 1620, 511 (2014).
185. Geethu R, Dhanya S, Rajani Jacob, Sreenivasan P.V, T. Shripathi and Rachel Reena Philip, AIP Conf. Proc. 1447 (2012) 1065, "56th International Conference DAE Solid State Physics Symposium (SSPS).

186. Reshmi Radhakrishnan, Hiba Rahman, Dhanya S, Geethu R, Nafsia Karim, Faseela K, Sreenivasan P.V, Pradeep B, Rachel Reena Philip, published in AIP Conference Proceedings Volume 1391, OPTICS 2011: International Conference on Light, NIT Calicut, Kerala, 23–25 May 2011 ISBN:978-0-7354-0960-6.
187. Geethu R, Dhanya S, Sreenivasan P.V, Namitha Ashokan, Pradeep B, Rachel Reena Philip, published in AIP Conference Proceedings Volume 1391, OPTICS 2011: International Conference on Light, NIT Calicut, Kerala, 23–25 May 2011 ISBN:978-0-7354-0960-6.
188. Geethu R, Binitha.S, Leena.C.M, Neema Raveendran, Rary Varghese Koottala, Dhanya.S, Lyjo.K.Joseph, Rachel Reena Philip, published in a book named Modern Trends in Electronic Communication and Signal Processing, ISBN:978-93-80697-73-4 2010.
189. Effect of NH_4Cl flux on the structural and luminescence properties of $\text{SrS}:\text{Cu},\text{Cl}$ phosphor, E I Anila and M K Jayaraj;International Conference on Contemporary Trends in Optics and Optoelectronics; p 560 Jan 17-19, 2011 IIST Trivandrum.
190. Evaluation of absorption coefficient of a solution by a simple experimental Setup,Deepak.G, Akhildev.C, K.K.Leelamma, Lyjo.K.J, P V Sreenivasan and E.I.Anila;OPTICS'11,International conference,May23-25,2011; NIT, Calicut.
191. Synthesis of Zinc Sulphide nanoparticles by sol-gel methodK R Bindu , Preetha, Leni, Fahima, Mohsina,P V Athma and E I Anila Aug 14-17, COCHIN NANO 2011.
192. "Preparation of ZnS quantum dots by wet chemical method" K R Bindu,Arturo I Martinez and E I Anila,Abstracts of International conference on Nanomaterials and Nanotechnology(ISBN:978-81-920068-3-3,eISBN:978-81-920068-3-5,DOI:10.5185/ICNANO.ab-2011)18-21December2011, University of Delhi, India.
193. Photoluminescence of nanocrystalline ZnS thin films grown by sol-gel method G T Anu, T Tijin, C Ajithlal, K Athira, P Anagha, M N Neethu and E I.Anila,International conference on Nano materials and Nanotechnology (ICNANO) 18-21 December2011, University of Delhi, India.
194. Single Crystalline a- axis ZnS Thin Film, E I Anila, National Conference on Advanced Material Science [NCAMS], 16-17 March, 2012, U C College, Aluva, Kerala Effect of Deposition Temperature on Structural & Optical Properties of ZnS thin film K R Bindu and E I AnilaNational Conference on Advanced Material Science [NCAMS], 16-17 March, 2012, U C College, Aluva, Kerala.
195. Characterisation of Single crystalline ZnO thin films deposited by VLS method Sarath S, Athma P.V, Reshma Ravi, Safeera T.A, Anju K.Joy and E.I.Anila National Conference on Advanced Material Science [NCAMS], 16-17 March, 2012, U C College, Aluva, Kerala.

196. Characterization of Chemical Bath Deposited Cadmium Zinc Sulphide Thin Films, Joissy Mathew Nirmala Paul , E. I. Anila; National Conference on Advanced Material Science [NCAMS], 16-17 March, 2012, U C College, Aluva, Kerala.
197. Single crystalline ZnO thin films deposited by VS process” S Sarath , P V Athma, R Reshma, T A Safeera, K J Anju and E.I.Anila; Internantional Conference on Materials Science and Technology (ICMAT), 10-14, June, 2012, St.Thomas college, Pala.
198. Synthesis And Characterization Of Nanostructured ZnS Thin Film T A Safeera, K J Anju, P J Joffy and E I Anila 57th DAE Solid State Physics Symposium, December 3-7 2012 IIT, Bombay.
199. Synthesis And Characterization Of Nanostructured ZnS Thin Film T A Safeera, K J Anju, P J Joffy and E I Anila The second International Conference on Optoelectronic Materials and Thin films for Advanced Technology (OMTAT 2013) organized by Dept. of phyics CUSAT held from 3-5 January 2013.
200. Synthesis of Nanostructured ZnS Thin Film K R Bindu, P V Sreenivasan and E I Anila, The second International Conference on Optoelectronic Materials and Thin films for Advanced Technology (OMTAT 2013) organized by Dept. of phyics CUSAT held from 3-5 January 2013.
201. Preparation and characterisation of Calcium Sulphide nanoparticles; Sumayya P K, Jeena Lyla, Rekha S, Safeera T A and Anila E I; National seminar on recent trends in the development of nano materials and nano devices; S N M college, Maliankara ; 5-6 September (2013).
202. Synthesis and characterization of ZnO thin film by VLS method ; P V Athma and E I Anila; National seminar on recent trends in the development of nano materials and nano devices; S N M college, Maliankara ; 5-6 September (2013).
203. Structural and Optical studies in Chemical Bath Deposited ZnS nanopowders and Thin Films, Amrutha Sankar, Mary Chris Anto, E. I. Anila and K. Mini Krishna National Seminar on Advancements in Materials Science organised by Dept. of Physics, Mercy college, Palakkad held during 29-30 August 2013
204. Photoluminescent Studies in Chemical Bath Deposited ZnS nanopowders and Thin Films”, Mary Chris Anto, Amrutha Sankar, E. I. Anila and K. Mini Krishna, All Kerala Project Presentation Competition (October 3, 2013).
205. Effect of Synthesis Temperature on Photoluminescence of ZnS:Mn Nanoparticles ; K R Bindu and E I Anila; ICAFM 2014 : 2nd International Conference on Advanced Functional Materials; CSIR-National Institute for Interdisciplinary Science & Technology, Thiruvananthapuram, India ; 19-21February (2014).

206. Synthesis and characterization of Zinc Gallate Phosphors ;T A Safeera, Rosemol Thomas, Elizabeth Kurian, R Reshmi, E I Anila; ; ICAFM 2014 : 2nd International Conference on Advanced Functional Materials; CSIR-National Institute for Interdisciplinary Science & Technology, Thiruvananthapuram, India ; 19-21February (2014).
207. Non Linear Optical Characterization of ZnS Thin Film Synthesized by Chemical Spray Pyrolysis method ; V G Sreeja, E I Anila, R Reshmi, Manu P John, P V Sabitha, M Kailasnath; ICAFM 2014 : 2nd International Conference on Advanced Functional Materials; CSIR-National Institute for Interdisciplinary Science & Technology, Thiruvananthapuram, India ; 19-21February (2014).
208. Structural and Photoluminescence Study of ZnGa_2O_4 ; T A Safeera, Rosemol Thomas, Elizebeth Kurian, N Johns, K R Bindu, Reshmi Raman, K Mini Krishna,E I Anila; National Seminar on Frontiers of Nanotechnology, Sree Sankara Vidya Peetom College, Perumbavoor; 6-7 March (2014).
209. Structural and Optical Characterization of Pure and Mn doped ZnS Nanophosphor ; K R Bindu, E I Anila; National Seminar on Frontiers of Nanotechnology, Sree Sankara Vidya Peetom College, Perumbavoor; 6-7 March (2014).
210. Studies on one dimensional composite nanostructures, Manu Madhu, jyothish p p, K Sreelatha, E I Anila, U S Sajeew, National seminar on frontiers of nanotechnology Sree Sankara Vidya Peetom College, Perumbavoor; 6-7 March (2014).
211. Synthesis and Characterization of ZnO Nanonails ; T A Safeera, N Johns, P V Athma, E I Anila; International Conference on Light – OPTICS‘14, NIT Calicut, Kerala, India; 19-21 March (2014).
212. Effect of Yittrium Doping on the Photoluminescence of Zinc Gallate ; T A Safeera, E I Anila, R Reshmi; International Conference on Light – OPTICS‘14, NIT Calicut, Kerala, India; 19-21 March (2014).
213. Nonlinear Optical Characterization of ZnS Thin Film Synthesized by Chemical Spray Pyrolysis Method ; Sreeja V G, Sabitha P V, E I Anila, Reshmi R, Manu Punnan John, P Radhakrishnan; International Conference on Light – OPTICS‘14, NIT Calicut, Kerala, India; 19-21 March (2014).
214. Synthesis of Nanostructured PbS:Bi Thin Film by Chemical Bath Deposition;V G Athira, C R Roshni, T A Safeera, P V Sreenivasan, R Reshmi, M Alex and E I Anila; International conference on energy harvesting, storage and conversion(IC-EEE); CUSAT, 5-7 Feb.2015.
215. Structural and Optical Characterization of Zinc Gallate Nanoparticles;V Dhanisha, Sonu Baby, T A Safeera, R Reshmi and E I Anila, International conference on energy harvesting, storage and conversion(IC-EEE); CUSAT, 5-7 Feb.2015.

216. The Effect of Polymer Degradation in the Formation of Nano/Micro Structure of Polycaprolactone“ Nithish Mankuzhiyil David, Sonamol Mathew, Parvathy Radhakrishnan, Krishnakumar G, E I Anila , K S Sreelatha, Jacob K Chacko, Tomlal Jose E, U S Sajevev “National Conference on Advances in Crystal Growth and Nanotechnology (2014)”, CMS College, Kottayam.
217. „Study on optical properties of dye doped ps microfibers“ Krishnakumar G, Parvathy Radhakrishnan, E I Anila, U S Sajevev, K S Sreelatha “ National Seminar on Advanced Materials For Energy And Environment NSMEE 2015”, Vimala College , Thrissur.
218. “Emission Wavelength Tuning of Dye Doped Polymethylmethacrylate Microfibers for Waveguiding Applications”; Parvathy Radhakrishnan, E I Anila, G Krishnakumar, U S Sajevev, Engineering college, Mala.
219. “Effect of yttrium doping on the photoluminescence of zinc gallate” T A Safeera, E I Anila R Reshmi, International Conference on Advances in Science, Engineering and Technology – ICASET on May 24th 2015 at Pune, India.
220. “Nonlinear Optical Characterization Of Graphite Oxide Thin Film By Open Aperture Z-Scan Technique”V G Sreeja , Ajina Cheruvalathu, R Reshmi , Sebin Devasia and E I Anila; 60th DAE-Solid state Physics symposium, Amity University, UP, Dec 21-25, 2015.
221. .“Synthesis and Characterisation of Methyl Ammonium Lead Iodide Perovskite Nanoparticles by Sol Gel Method”Megha Emerse, Aparna S, Silpa Paul, Rakhy Raphael and E I Anila; National seminar on Recent trends in Physics and Research, St.Xavier’s College, Aluva; 15th and 16th December 2015.
222. “Synthesis and Characterization of $Cd_xZn_{1-x}S$ Thin Films for photo voltaic Application”Joissy Mathew, Nirmala Paul , E. I. Anila, National seminar on Recent trends in Physics and Research, St.Xavier’s College, Aluva; 15th and 16th December 2015.
223. “Synthesis and Characterization of ZnO Nanophosphor by Microwave Combustion Technique”, T A Safeera and E I Anila, IC-AMMN-2K16- International Conference on "Advances in Applied Mathematics, Materials Science and Nanotechnology for Engineering and Industrial Applications" January 7-9, Federal Institute of Science and Technology, Cochin (2016).
224. “Photoluminescence Studies of Triethanolamine Capped Calcium Sulphide Nanoparticles Prepared via Chemical Co-precipitation Method” S Rekha and E I Anila, National seminar on Trends in Physical Sciences(TriPS) 30th and 31st July 2015; Sree Sankara College, Kalady
225. “Preparation and Structural Characterisation of Graphite Oxide Powder”V G Sreeja, R Reshmi and E I Anila, National seminar on Trends in Physical Sciences(TriPS) 30th and 31st July 2015; Sree Sankara College, Kalady.

226. “Zinc Gallate Phosphor- A Study of Cr doping” T A Safeera and E I Anila; Fourth International Conference on Frontiers in Nanoscience and Technology(COCHIN NANO- 2016) February 20-23,2016, CUSAT, Cochin, India.
227. Synthesis and Structural Characterisation of Reduced Graphene Oxide, Sreeja V G, Reshmi R and E I Anila Fourth International Conference on Frontiers in Nanoscience and Technology(COCHIN NANO- 2016) February 20-23,2016, CUSAT, Cochin, India.
228. Effects of Post Annealing on Al doped ZnO Thin Films Prepared by Chemical Spray Pyrolysis for Transparent Electrode Applications, Sebin Devasia, P V Athma and E I Anila; UGC Sponsored National Workshop on Nanophotonics, 18th and 19th March 2016, CUSAT, Cochin.
229. Green emitting ZnGa₂O₄:Tb nanoparticles synthesised by wetchemical method,T A Safeera and E I Anila;; UGC Sponsored National Workshop on Nanophotonics, 18th and 19th March 2016, CUSAT, Cochin.
230. Synthesis and Characterisation of Methyl Ammonium Lead Iodide Perovskite Nanoparticles by Sol Gel Method” Megha Emerse, Aparna S, Silpa Paul,Rakhy Raphael and E I Anila; Proceedings of the National seminar on Recent trends in Physics and Research, St.Xavier’s College, Aluva; 15th and 16th December 2015.
231. Study on the Effect of Synthesis Temperature on the Structural, Surface Morphological and Optical Properties of Methyl Ammonium Lead Iodide Nanoparticles by Sol-Gel Method, K A Benazeera Beegum , Maria Poulose, V J Peter, Rakhy Raphael , V G Sreeja and E I Anila;International Conference on Advances in Materials and Manufacturing Applications (IconAMMA 2016), Amrita Vishwa Vidyapeetham University,Bengaluru Campus 14th to 16th July 2016.
232. Investigation on the Evolution of Structural, Electrical and Transmitting Properties of Aluminium Doped Zinc Oxide Thin Film as a function of substrate temperature Sebin Devasia, P V Athma , Anumol Jose and E I Anila; International Conference on Advances in Materials and Manufacturing Applications(IconAMMA2016), Amrita Vishwa Vidyapeetham University, Bengaluru Campus 14th – 16th July 2016.
233. Heterojunction between the delafossite TCO n-Copper Indium Oxide and p-Si for solar cell applications, K. Keerthi, T. Masuzawa, B. G. Nair,. Saito, K. Okano, N. Johns and R. R. Philip. 60th DAE Solid State Physics Symposium sponsored by Board of Research in Nuclear Science, Department of Atomic Energy, Government of India at Amity University UP, Noida, Uttar Pradesh during December 21-25, 2015.
234. Tin doped AgInSe₂ Thin Films With Enhanced Conductivity for Photovoltaic Applications, Rajani Jacob,Keerthi K and Rachel Reena Philip, International Conference on Energy Harvesting ,Storage and Conversion,ICEEE 2015, held at Cochin University, Feb.2015.

235. Structural, Optical and Electrical Properties of Copper Gallium Selenide Nanostructured Thin Films, Anitha Abraham, Okram G. S., Bindu G. Nair, Rajani Jacob and Rachel Reena Philip, International Conference on Energy Harvesting, Storage and Conversion, ICEEE 2015, held at Cochin University, Feb. 2015.
236. Ultraviolet Photoelectron Spectroscopic Studies on CuInO₂, B. G. Nair, K. Keerthi, T. Masuzawa, Z. Diener S. K. Remillard, K. Okano, and R. R. Philip. International Conference on Energy Harvesting, Storage and Conversion, ICEEE 2015, held at Cochin University, 2015.
237. Low Temperature Conductivity Mechanisms In Gallium Rich Copper Gallium Selenide Thin Films, Anitha Abraham, Keerthi K, G. S. Okram, Tarachand Patel and Rachel Reena Philip, 60th DAE Solid State Physics Symposium sponsored by Board of Research in Nuclear Science, Department of Atomic Energy, Government of India at Amity University UP, Noida, Uttar Pradesh during December 21-25, 2015.
238. Incorporation of TiO₂ Nanotubes with polypyrrole: Effect on Conductivity, Aijo John K, Bindu G. Nair, Vrinda S. P, A. Anitha, T. Manju, T. Shripati, U. Deshpande and Rachel Reena Philip, 60th DAE Solid State Physics Symposium sponsored by Board of Research in Nuclear Science, Department of Atomic Energy, Government of India at Amity University UP, Noida, Uttar Pradesh during December 21-25, 2015.
239. “Structural, optical, electrical properties of copper gallium selenide Nanostructured Thin films”, Anitha Abraham, Okram G. S., Bindu. G. Nair and Rachel Reena Philip, International conference IC-EEE 2015 held at CUSAT, Kochi on February 4-7, 2015.
240. “Ultraviolet Photoelectron Spectroscopic Studies on CuInO₂”, B. G. Nair, K. Keerthi, T. Masuzawa, Z. Diener, S. K. Remillard, K. Okano and R. R. Philip, International conference IC-EEE 2015 held at CUSAT, Kochi on February 4-7, 2015.
241. „Structural and optical characterization of Aluminium doped ZnO thin films prepared by chemical bath deposition technique.”, N. H. Sheeba, Keerthi. K, P. V. Sreenivasan and Rachel Reena Philip, International conference IC-EEE 2015 held at CUSAT, Kochi on February 4-7, 2015.
242. “Tin doped AgInSe₂ thin films with enhanced conductivity for photovoltaic applications.”, Rajani Jacob, Okram. G. S., Keerthi. K. and Rachel Reena Philip, International conference IC-EEE 2015 held at CUSAT, Kochi on February 4-7, 2015.
243. “Photoconductivity in nanostructured thin films of AgInSe₂: Sn and AgGaSe₂: Sn”, Rajani Jacob, Keerthi. K and Rachel Reena Philip, International conference ICNM 2014 held at 19-21 December, 2014.
244. “Nanostructured Thin films of N-type copper oxide”, Gokul. V. S, Prajith. P. P, Sreenivasan. P. V, Keerthi. K, and Rachel Reena Philip, International conference ICNM 2014 held at 19-21 December, 2014.
245. “Optoelectronic properties of phase pure InSe Thin Films”, K. S. Urmila, Namitha Asokan and B. Pradeep Rachel Reena Philip, ICAMF, NIISC, Thiruvananthapuram, 2014.

246. "The Effect of Annealing on the Physical Properties of Thin Films of Ag(InGa)Se₂ and Its Ordered Vacancy Compound Ag(InGa)₅Se₈", Rajani Jacob, Rachel Reena Philip, Surya Mary A., Sheeba Nazer, Anitha Abraham, Sinita B. Nair, P.V. Sreenivasan, B. Pradeep, S. K. Remillard, P. A. DeYoung, International conference ICAMS 2013, Sree Sankara college Kalady.
247. "Variation in Structural and Optical Characteristics of Nanostructured ZnO Thin Films with Deposition Cycles in CBD method", N. H. Sheeba, R. Jacob, A. Abraham, S. B. Nair, P.V. Sreenivasan, M. A. Surya, R. R. Philip, International conference ICAMS 2013, Sree Sankara college Kalady.
248. Aijo John, Rajani Jacob, Manju T, Rachel Reena Philip, International conference ICAMS 2013, Sree Sankara college Kalady.
249. Fabrication and characterization of photovoltaic cell with novel configuration ITO/n-OVC/p-CIS/In, R Geethu, R Jacob, P V Sreenivasan, T Shripathi, Okram G S and R R Philip, International Conference on Materials Science and Technology ICMST 2012 held on June 2012, Pala.
250. Structural, optical and Electrical Properties of nanostructured CdS thin films", A S Mary, V S Shenoy, M M N Beegum, R K Divakaran, R Geethu, R Jacob, P V Sreenivasan, N Ashokan, B Pradeep, V Ganesan and R R Philip, International Conference on Materials Science and Technology ICMST 2012 held on June 2012, Pala 1048, 198.
251. A comparative study on the optoelectronic properties of Ga doped nanostructured films of CdS and PbS, Geethu R, Rajani Jacob, Anees Fatima, Shilpa Tripathi, T. Shripathi and Rachel Reena Philip, Third International conference on frontiers in nanoscience and technology, Cochin nano 14-17 August, 2011 at Cochin organised by CUSAT.
252. Optical properties of flower-like nanostructured films of PbS, Hiba Rahman, Reshmi Radhakrishnan, Nafsia Karim, Faseela K, Dhanya S, Namitha Ashokan, B. Pradeep and Rachel Reena Philip, International conference on contemporary trends in optics and optoelectronics, 17th - 19th Jan 2011, Organized by IIST, TVM.
253. Synthesis of corrugated structured n-type PbS thin film E I Anila, K J Saji and U S Sajeew; 2011 International Conference on Advanced Materials in Microwaves and Optics (AMMO 2011) Sept 26-27, 2011, Kuala Lumpur, Malaysia.
254. Synthesis of ZnS Thin Films by Dip Coating" E I Anila, Arturo I Martinez and Dale L Perry ; 2012 MRS Spring Meeting and Exhibit, April 9-13, 2012- San Francisco, California.
255. Yellow Emitting Chitosan Capped ZnO Nanoparticles Synthesised by Wet Chemical Route , T A Safeera, S Rekha and E I Anila; Global Nanotechnology Congress and Expo, April 21-23, 2016, Dubai, UAE
256. Effects of Cerium Doping on the Morphology and Photoluminescence of Calcium Sulfide Nanophosphors, S Rekha, T A Safeera, and E I Anila; Global Nanotechnology Congress and Expo, April 21-23, 2016, Dubai, UAE

257. Jesmond Hong, V. M. Murukeshan, V. K. Shinoj, M. Baskaran, and T. Aung, "Non-contact high resolution Bessel beam probe for diagnostic imaging of cornea and trabecular meshwork region in eye", European Conferences on Biomedical Optics 2015 (ECBO 2015), Munich, Germany, June 21-25, 2015.
258. M. Baskaran, V. K. Shinoj, V. M. Murukeshan and T. Aung, "Irido-corneal angle and fundus documentation using a novel dual-mode imaging probe", Annual Meeting of the Association for Research in Vision and Ophthalmology 2015 (ARVO 2015), Colorado Convention Center, Denver, Colorado, May 3-7, 2015.
259. V. K. Shinoj, V. M. Murukeshan, Jesmond Hong, M. Baskaran and T. Aung, "Dual-illumination mode, wide-field probe imaging scheme for imaging irido-corneal angle region inside eye", International Conference on Optics in Precision Engineering and Nanotechnology 2015 (ICOPEN 2015), Singapore Expo, April 14-16, 2015.
260. Jesmond Hong, V. K. Shinoj, V. M. Murukeshan, M. Baskaran and T. Aung, "In-vivo high resolution corneal imaging and analysis on animal models for clinical applications", International Conference on Optics in Precision Engineering and Nanotechnology 2015 (ICOPEN 2015), Singapore Expo, April 14-16, 2015.
261. V. K. Shinoj, James J., V. M. Murukeshan, M. Baskaran and T. Aung, "Recent progress in ophthalmic diagnostic imaging technologies", 1st EOS Topical Meeting on Frontiers in Optical Imaging (FOI 2013), (Poster presentation), Centre Loewenberg, Murten, Switzerland, September 16 - 18, 2013.
262. V. K. Shinoj, V. M. Murukeshan, James J., M. Baskaran and T. Aung, "Micro-CCD based probe for eye imaging targetting anterior chamber angle", International Conference on Biomedical Systems, Signals and Images 2012 (BSSI 2012) (Poster presentation), Indian Institute of Technology Madras, India, November 28-December 1, 2012.
263. V. M. Murukeshan, V. K. Shinoj, M. Baskaran and T. Aung, "Diagnostic imaging of the Iridocorneal Angle for evaluation of Angle-closure glaucoma", EOS Annual Meeting 2012 (EOSAM-2012) (Poster presentation), Scotland, UK, September 25-28, 2012.
264. V. K. Shinoj and V. M. Murukeshan, "Numerical study on Transverse Optical Trapping Inside Hollow-core PCF", International Conference on Optics in Precision Engineering and Nanotechnology 2011 (ICOPEN 2011) (Poster presentation), Singapore.

Psychology

265. Malini R. (2014). Study habits and goal orientation in relation to academic achievement, In *National Conference on Enhancing Psychological Well-being (NCPEW-2014)*, organized by Department of Psychology, Bharathiar University, Coimbatore, on 20 - 21 February 2014.

266. Malini R. (2012). Underachievement: Problems in identification and remediation, 47th national and 16th international conference of the Indian Academy of Applied Psychology, Toc H institute of Science and Technology, Ernakulum, 15 – 17 June 2012.
267. Seena M. Mathai & Swathymol P. S. (2014). Demographic Correlates of Environmental Worry: An Explorative Investigation. *International Journal of Indian Psychology*, volume 2, issue 1, October. Impact factor. 4.5.
268. Seena M. Mathai. (2015). The Mediating Effect of Coping Styles on the Optimism Athletic Performance Relationship among Track and Field Athletes. *The International Journal of Indian Psychology*, Volume 2, Issue 2, No. 3, Jan- March. Pp.102-107. Impact factor, 4.5
269. Seena M. Mathai & Subramanyam, S. (2012). Locus of control correlates of coping skills among Athletes. *International journal of Multidisciplinary educational Research*. Vol (6).
270. Seena M. Mathai & Vishnu Digambhar. (2014). Driving behavior among private and public sector bus drivers- A comparative study, *Journal of Research extension and development*, Vol.2, No.8.
271. Seena M. Mathai & John, P. K. (2014). Influence of perceived autonomy support on the motivation level of players, *Indian Journal of Psychology*.
272. Seena M. Mathai & John, P.K. (2014). The relationship of Anxiety and self efficacy with task orientation among athletes, *Indian journal of Health and Wellbeing*.
273. Seena M. Mathai. (2013). Big five correlates of mental toughness among track and field athletes, *Indian Journal of Psychology*, Special issue, January.
274. John Varghese and Seena M Mathai. (2014). *Relationship of resilience with wellbeing among institutionalized and non-institutionalized women*. In Proceedings of 5th International Conference on Life skills education, organized by Loyola College, Thiruvananthapuram, 24-25 February 2014.
275. Akhil S. Kumar, Labeeb Mohammed, Syna Soosan Abraham and Seena M. Mathai. (2012). Issues in the holistic development of adolescents. *Handbook of Management and Behavioural Science* Vol.-VI. Wisdom publications, Delhi.
276. Paul John Konat and Seena M. Mathai. (2012). *Sensation seeking among high and low achieving varsity athletes*. Proceedings of the International conference on sports and Nutrition, MacMillan Publishers India Limited,
277. Seena M. Mathai and S. Subramanian. (2012). *Psychological correlates of athletic performance among track and field athletes*. Proceedings of the International conference on sports and Nutrition, MacMillan Publishers India Limited,
278. Seena M. Mathai. (2011). *The effect of personality and self esteem on job satisfaction*. In The Proceedings of UGC Sponsored National Seminar on Self Esteem and Mental Health Promotion among Teachers, organized By S. N. M Training College, Moothakunnam, Ernakulam in Association with Dept. of Psychology, Union Christian College, Aluva,

279. Neelima Ranjith. (2013). Psychological Perspective on Gender Equality. *Zenith international Journal of Multidisciplinary Research*, Vol 3(7). July, pp156-160. Scientific Journal *Impact Factor* 2013: 4.326.
280. Cinderlla V. P, Neelima Ranjith. (2012). Age difference between spouses and age at the time of marriage as contributing factors to marital adjustment. *International Journal of social Sciences and Interdisciplinary Research*, Vol 32, July-Sept, pp 25-29. *Impact Factor* of IJSSIR, 3.503.
281. P.S. Mathuranath, Annamma George, Neelima Ranjith, Sunitha Justus., et al. (2012) Incidence of Alzheimer's Disease In India: A 10 Year Follow – Up Study. *Neurology India*, Dec, Vol 60, Issue 6, Pages 625-630. *Impact Factor*, 1.044.
282. Naila Abdul Karem & Neelima Ranjith. (2012). Face book Addiction among Youngsters of Kerala. *Indian Journal of Health and Well Being*, Vol 2; Issue 5, Page 1191-1201. *Impact Factor*, 0.47.
283. Neelima Ranjith & Manju Madhu. (2012). *Parent - Child Relationship from the Child's Perspective*. In The Proceedings of UGC Sponsored National Seminar On Child Development, organized By Sree Sankaracharya University Of Sanskrit, Kalady, 22 – 24 February.
284. Neelima Ranjith. (2011). *Mental Health Issues among Teachers - What You See Is The Tip of The Iceberg* in the Proceedings of UGC Sponsored National Seminar on Self Esteem and Mental Health Promotion among Teachers, organized By S. N. M Training College, Moothakunnam, Ernakulam in association with Department of Psychology, Union Christian College, Aluva.
285. Akhil S. Kumar, Mohammed Labeeb P., Syna Soosan Abraham & Seena M. Mathai. (2012). Issues in holistic development of adolescents. *Handbook of Management and Behavioural Science*. Vol.-VI. Wisdom publications, Delhi. ISBN: 978-93-81505-27-4.
286. Shony Mathew P. J. & Vidhya Ravindranadan. (2014). Vocational Rehabilitation of Mild Mentally Challenged Adults. *International Journal of Indian Psychology*, Volume 3, Issue 1, no. 6, Oct-Dec. *Impact factor*, 4.5.
287. Shony Mathew P. J. & Vidhya Ravindranadan. (2014). Behaviour Modification of mentally Challenged Adults with Computer Training. *International Journal of Business and Administration Research Review*. Vol. 1, Issue No. 3, Jan- March. Pp. 102-107.
288. Shony Mathew P. J. & Vidhya Ravindranadan. (2013). The Impact of Computer Training in the Competencies of Mild Mentally Challenged Individuals. *International Journal of Current Research*. Volume 5, Issue 9, pp. 2654-2656. *Impact factor*, 3.072.
289. Vidhya Ravindranadan. (2012). Mental Health Status of Parents of Children with Special needs. *Indian Journal of Health and Wellbeing*. 3 (2) 543-545.
290. Shony Mathew P. J. & Vidhya Ravindranadan. (2012). Social Maturity of Trained and Untrained Mentally challenged Individuals, *Indian Journal of Health and Wellbeing*, 3(2) 540-542.

291. Vidhya Ravindranadan & Nishima J. S. (2012). Correlates of Self Esteem and Intelligence. A study on High School Students, *MISBAH*.
292. Vidhya Ravindranadan & Nishima J. S. (2012). Personality and Sibling Gender: An Analytical study on Female College Students. *Research Scholar*.
293. Vidhya Ravindranadan & Immanuel Thomas. (2011). State-Trait Anxiety, Spiritualism and Maladjustment in Relation to Phobia. *Indian Journal of Health and Wellbeing*.

Biotechnology

294. Dr.Sareen Sarah John“Downstream Processing of Phytase from *Bacillus* MCCB 242 employing Aqueous Two Phase Extraction”- Sareen Sarah John, Ramya R Nair, I. S. Bright Singh,Journal of Biotechnology & Biomaterials, Vol.5 (6), Page No. 290 (2015) (ISSN:2155-952X).
295. “Larvicidal Potential of Biologically Synthesised Silver Nanoparticles against *Aedes Albopictus*” - Sareen Sarah J., Pillai Raji K., Chandramohanakumar N and Balagopalan M, Vol. 1(ISC-2011), 52-56 (2012) Res.J.Recent.Sci. (ISSN 2277 – 2502).
296. “Vermifugal Activity of Biofabricated Silver Nanoparticles” - Pillai Raji K., Sareen Sarah John, Toms Joseph C Chandramohanakumar N and Balagopalan M, Vol. 1(ISC-2011), 47-51 (2012) Res.J.Recent.Sci. (ISSN 2277 – 2502).

Zoology

297. Shirley Thomas, Jini Jimmy, Karmaly K.A, Sumesh S. (2016) Comparison of ant diversity in paddy agroecosystems of Kuttipuzha and Thottakkattukara of Ernakulam district. Discourse – Xaverian Research Journal 4(2): 843-97.
298. Shirley Thomas.(2012). *Neurophysiology* in “Ecophysiology of Man” edited by Dr.A.K.Prema. Published by the Zoological Society of Kerala. Kottayam.
299. Shirley Thomas.(2011). *Protistan diversity* in „Invertebrate Diversity of Kerala“: Edts. Dr.A.K.Prema , Dr.MLJoseph & Dr. Vincent Terrence Rebello. Published by the Zoological Society of Kerala. Kottayam.
300. Shirley Thomas.(2011). *Fishes* in” Vertebrate Diversity of Kerala” Edts. Dr.A.K.Prema , Dr. Vincent Terrence Rebello and Mini.K.D. Published by the Zoological Society of Kerala, Kottayam.
301. Rima Joseph & John Joseph (2011). „Efficacy of Wettable Powder (W.P.) formulation of *Bacillus thuringiensis* var. *israelensis* (Bti) in the control of Fourth Instar larvae of *Culex sitiens*“. Heartian Journal of Pure and Applied Sciences, Vol.1 (1):36-38.

302. Lakshmi P & Rima Joseph (2012). „The pollination ecology of *Ixora coccinea* L. (Rubiaceae)“. Biofest 2012- Abstracts. Sree Narayana College, Punalur, Kollam.
303. Rima Joseph & Thara K.Simon. (2013) A Preliminary Survey on Anthophiles of Selected Tropical Vegetable Crops”. Journal of Palynology Vol. 49:1-6.
304. Elizabeth, V. M., Sudhikumar, A. V. & Sebastian, P. A. (2012). Ultra structural comparison of spinneret morphology of two orb weaving spiders. *Explorations. Volume: 4 (1)*. 30 – 39.
305. Elizabeth, V. M., Sudhikumar, A. V. & Sebastian, P. A. (2012). A preliminary study on ultra structure of spinneret morphology of funnel web building spider *Hippasa pisaurina* Pocock, 1900 (Areaneae, Lycosidae). *Heartian Journal of Arts and Science*. 46-52.
306. Elizabeth, V. M., Sudhikumar, A. V. & Sebastian, P. A. (2014). Vertical stratification of spiders in Kuttanad rice agroecosystem, Kerala. Journal of Biological Control. 28(2):doi10.18641/jbc/28/2/58303.
307. Elizabeth V. Mathew, M. K. Raju and P. A. Sebastian. Further description of *Cyrtophora bidenta* Tikader, 1970 (Araneidae) - an endemic spider species of India – first report from the Western Ghats. *Proceedings of the National Conference on Modern Trends in Zoological Research*. 224-227. ISBN No. 978-81-909551-8-8.
308. Elizabeth, V. M., & Sebastian, P. A. (2013). Ultra structural comparison of spinneret morphology of some orb weaving spiders. *Animal Diversity, Natural History and Conservation*. Vol. 3. Daya Publications, New Delhi. 71-93. ISBN 978-81-7035-8305.
309. Elizabeth, V. M., & Sebastian, P. A. (2015). Throwing more light on morphology of *Cyrtophora bidenta* Tikader, 1970 (Araneidae) - an endemic spider species of India, with checklist of the genus from southern Western Ghats. *Animal Diversity, Natural History and Conservation*. Vol. 5. Daya Publications, New Delhi. 75-84. ISBN 978-93-5124-616-9.
310. Niladevi K.N. and Revathy T.V. (2015) Isolation of phosphate solubilizing bacteria from soil samples and its effect on plant growth in field trials. *Discourse – Xavierian Research Journal* 3(2): 4-12.
311. Midhula M, Shyla M.H, and Niladevi K.N (2016) Biopesticidal activity of *Verticillium lecanii* against cowpea aphid (*Aphis craccivora*). *Discourse – Xavierian Research Journal* 4(2): 1-13.

Bioinformatics

312. Eldo Merin K, Rajesh M K, Jamshinath T.P, Hemalatha N, Gopal Murali, Thomas George V, Development of a tool for computational prediction of $\sigma 70$ promoters in *Pseudomonas* spp using SVM and HMM approaches, *Indian journal of Agricultural Sciences* 84 (1) : 119-123, Jan 2014.

Botany

313. Manju M George and Subramanian R.B (2016) Callus induction and plant regeneration in aromatic grasses –Cymbopogon flexuosus, C. citratus and Vetiveria zizanioides. Proceedings- national seminar on „Recent trends and advances in plant sciences“ Union Christian College, Aluva. March 9-10. ISBN-978-93-5267-163-2
314. Manju M George (2016) Transformation studies in Coleus forskohlii an important medicinal plant. Proceedings In national seminar on „Recent trends and advances in plant sciences“ Union Christian College, Aluva. March 9-10. ISBN-978-93-5267-163-2.
315. Effect of matrix composition on differentiation of nestin-positive neural progenitors from circulation into neurons Anumol Jose and Lissy K Krishnan Journal of Neural Engineering, 7, 036009, 2010 (doi:10.1088/1741-2560/7/3/036009)
316. Standardization of an Extracellular Matrix Composition for Attachment of circulating progenitor cells and differentiation in to neurons .Anumol Jose & Lissy. K. Krishnan TERMIS- NA conference held at Toronto in June 12-16, 2007 (poster presentation)
317. Assessing function in a thoracic contusion model of spinal cord injury. J.P. Griffin, A. Toft ,Anumol Jose, & J.S. Riddell. IMB symposium, University of Glasgow, UK , March 28- 31 2010 (poster presentation)
318. Extraction and Evaluation of Anthocyanin from Dioscorea Alata (L.) for Its Application as a Natural Food Colour. Anumol Jose Rafiya Muhammed, The International Journal Of Science & Technoledge (ISSN 2321 – 919X) Vol 3 Issue 9 September, 2015
319. Extraction and Evaluation of an Anthocyanin Rich, Food Colourant from Fruits of Syzygium cumini (L.) Skeels Rafiya Muhammed and Anumol Jose J. Chem. Bio. Phy. Sci. Sec. B, November 2015 – January 2016; Vol.6 No.1; 204-213.
320. A Comparative study on the nutritional quality of horse gram and other selected Pulses Kalyani Krishna and Anumol Jose, International Journal of Chemistry and Pharmaceutical Sciences. IJCPS, 2015, 3(11): 2099–2103
321. Evaluation of a treadmill based gait analysis system for functional assessment of rodent spinal cord injury models. A. Jose, J.P. Griffin, A. Toft & J.S. Riddell. 40th annual meeting of Neuroscience federation (SFN) neuroscience 2010 which will be held at San Diego, U.S.A in Nov 13-17, 2010 (accepted for poster presentation).
322. Justin R. Nayagam, 2015. Sprouting Value Index: A New Concept in Evaluation of Rooting of Cuttings. *World Journal of Agricultural Research*, Vol. 3, No. 4, 139-142. Available online at <http://pubs.sciepub.com/wjar/3/4/4>. © Science and Education Publishing DOI:10.12691/wjar-3-4-4. 2.

323. Justin R Nayagam, 2015. Ergastic Crystals In Identification Of *Costus Pictus*: A Medicinal Spiral Ginger In Herbal Medicine. *Journal of Experimental Biology and Agricultural Sciences*, August - 2015; Volume – 3(4). 378.- 383 DOI: [http://dx.doi.org/10.18006/2015.3\(4\)](http://dx.doi.org/10.18006/2015.3(4)).
324. Justin R Nayagam and K.I. Mani Varghese, 2015. IBA induced Rooting Characteristics in Golden Shower Tree: Evaluation using SVI Concept. *International Journal of Agriculture and Forestry* p-ISSN: 2165-882X e-ISSN: 2165-8846 2015; 5(5): 287-290 doi:10.5923/j.ijaf.20150505.04.
325. Justin R. Nayagam, 2015. Sprouting Value Index: A New Concept in Vegetative Propagation Trials Using *Costus Pictus*. *Modern Agricultural Science and Technology*. Volume 1, No. 1, pp. 40-45. Doi: 10.15341/mast (2375-9402)/01.01.2015/004.
326. Justin R Nayagam, and K. I. Mani Varghese, 2015. Sprouting Value Index: A Mathematical Approach for Evaluation of Vegetative Propagation in Tree Species. *American Journal of Environmental Protection*. Volume 4, Issue 6, pp: 271-274, DOI: 10.11648/j.ajep.20150406.11
327. Justin R. Nayagam and Mani Varghese, K.I. 2015. Sprouting Value Index: A Mathematical Approach For Evaluation Of Rooting Media Efficiency. *International Journal of Current Agricultural Research*. Vol. 4, No. 10, PP 145-148.
328. Justin R. Nayagam, Mani Varghese K. I. 2015. Germination Performance in Sowing Media and Root Trainer Performance of Indian Kino Tree. *International Journal of Agriculture Innovations and Research*: Vol. 4, (3) 469 – 474.
329. Justin R. Nayagam. 2015. Sprouting Value Index: A Mathematical Evaluation Of IBA Induced Rooting Characteristics In Lemon Tree Stem Cuttings. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)* ISSN: 3159- 0040 Vol. 2 Issue 11, November – 2015.
330. Justin R. Nayagam. 2015. IBA Induced Rooting Characteristics in Night Jasmine Plant: Evaluation Using SVI Concept. *RA Journal of Applied Research* Volume- 1, Issue- 11, Pages-383-388, Dec-2015. ISSN (e): 2394-6709.
331. Justin R. Nayagam and Mani Varghese K. I. 2015. Germination Pattern and Root Trainer Performance of *Mimusops elengi* L. *South Asian Journal of Experimental Biology*; 5 (3): 94-100; 2015.
332. Justin R. Nayagam and Mani Varghese K. I. 2015. Germination Pattern and Root Trainer Performance of *Terminalia arjuna*: A Troublesome Tree Species in Plantation Trials. *Open Access Library Journal*; 2: e2167.
333. Justin R. Nayagam, 2015. IBA induced Rooting Characteristics in Coral Bush: Evaluation Using SVI Concept. *International Journal of Current Research*. Volume 8(1), pp. 24964-24967

334. Justin R. Nayagam, 2016. IBA induced Rooting Characteristics in Marathi Moggu Stem Cuttings: Evaluation Using SVI Concept. *International Journal of Current Microbiology and Applied Sciences*. Volume 5(1): 734-739. <http://dx.doi.org/10.20546/ijemas.2016.501.074>.
335. Justin R Nayagam and Anitta Roy 2016. Economically Important Plant Diversity along Selected Beach-sides of Central Kerala: Extending Cultivation to Beach-sides of Indian Peninsula. *Journal of Plant Health and Technology*. Volume1(1): JPHT-1-001.
336. Presented a paper entitled “Sprouting Value Index: A Mathematical Approach for Evaluation of Vegetative Propagation in Tree Species” in the IFABL (International Forum: Agriculture, Biology and Life Sciences) 2016, held at Kurume, Japan, 5-8 August 2016.
337. Presented a paper entitled “Experimental Service-Learning for Blind Student Development through Regional Partnership” in the International Service – Learning Symposium at Lingnan University, Hong Kong, March 11 – 12, 2016.
338. Presented a paper entitled “Stewardship of Water through Ensuring Sustainable Development of River Banks” in the 4th Asia Pacific Regional Conference on Service – Learning, held at Hong Kong and Mainland China, during June 6 – 7, 2013
339. Published and presented a paper entitled Germination characteristics and root-trainer performance of *Saraca asoca* (Roxb.) de. Wilde. in the proceedings of the national seminar on Conservation, Cultivation and Sustainable Utilization of *Saraca asoca* during 16-17 Oct 2007, at Kerala State Forest Research Institute, Peechi, Thrissur. Pp 60-63.
340. Published a paper in the proceedings entitled “Clonal planting stock preparation for *Pongamia pinnata*: An indigenous tree species of India for canopy building and forest rejuvenation” in the national seminar on biodiversity conservation in protected areas-opportunities and challenges, held on 23-24th Jan 2009, Christ University, Bangalore. Pp 12-15.
341. Presented and published a paper entitled “Rooting characteristics in *Saraca asoca*: the technology for mass clonal propagule preparation using exogenous application of auxin”. Abstracts of Swedeshi Science Congress 2010. pp 63.

Malayalam

Dr. Muse Mary George

342. Samakalika Madhyamangalile Stree, Malayalam Research Journal, May-August 2012
343. *Pothujeevithathinte Kathakal, Bhashaposhini*, October 2015.
344. Painkili padum kalathekkurishe, Grandhalokam October 2013
345. *Pannikal, Bhashaposhini*, September 2015.
346. Kalame Kelkka, Sahithya Chakravalam, Dec 2013
347. *Kanappedunnayayum Kanappedathavayum*, Pranahta Book, March 15

- 348. *Premathinte Pravarthi mandalanga*, Thanma Magazine, may 2015
- 349. *Vartha oru Sareeramane*, Sasthragathi, March 15
- 350. *Premathekurishe pinneyum*, Padabhetham, April 2015
- 351. *Veendum chila veettukaryangal*, Madhavum Chinthayum, July to August 2014
- 352. *Pennezhuthum Pothu Samuhavum*, Assisi November 2013

Dr. M.I. Punnoose

- 353. Sunday school Adhyapanam Enna samoothika saparya, article published in the church weekly magazine, September, 2012
- 354. Christian Vamozhi Paramparyam: article published in Samrakshakan Magazine, March 2013
- 355. Borobudoorile Vismaya Kazchakal, published in Church weekly, June, 20
- 356. Indonesian Orma Kuripukal , travelogue published in Church weekly, December,2012

Dr. Mini Alice

- 357. Veruvevunilamillaattha Adukkalakal – Puthukaala Penkavithakalkkoru Padanam, Samghaditha, 2014 October
- 358. Penkoodukal Unarum Kaalam, Viswadarmam, 2014 March
- 359. Pazhamarappacchakalude Kavitha, Kairaliyude Kaakka, 2014 April
- 360. Koodaaravaasiyaaya Daivam, Church Weekly, 2014 June
- 361. Pranayachashakam Mattolam Nukarnnu, , Kairaliyude Kaakka, 2014 July

Dr. Vidhu Narayan

- 362. Computerum Bhashayum Malabar Research Manual(Peer Reviewed Journal) Vol .1 No.1 April 2013ISSN 2320 - 947X
- 363. Asan Padanam Veekshanangalum Viyojanakurippukalaum Vivekodayam Journal,Kumarana Asan National Institute of Culture, Govt. of Kerala, Thonnakkal, Thiruvananthapuram, 2013 july- September issue
- 364. ONV Kavithakalile Kalidasan Sargabahrathi Jounal 2015 June ISSN 2454-8472
- 365. Malayala Natakam Sameepanangalum Sadhyathakalum (Editor) Bhoomi Malayalam Journal Book8 issue 1 January 2016

Capt.K.S.Narayanan

- 366. Editor -Paurasthya Saahithya Siddhaanthangal – Prasakthiyum Prayogavum – compilation of seminar proceedings conducted by vidwan P. G Nair research centre Department of Malayalam, U.C.College, AluvaISSN No.2394-9791 Book 7/Issue 1/February 2015.

Dr. Siby M. Eapen

367. Keralathile parppida sangalpam kerala Bhasha institute Thiruvananthapuram
368. Purusharachanakalile sthreebimbangal Vinjanakairali pattu kerala Bhasha institute Thiruvananthapuram February 2012
369. Venalinte kathiyum mazhayude hrudayavum oruma monthly Thiruvananthapuram ISSN NO.2320-1568 September 2013
370. Samanwayathinte soumya vazhikalum sandhiyakatha samaramozhikalum Oruma monthly Thiruvananthapuram April 2011 ISSN NO.2320-1568

Dr.Aju K.N.

371. "Prayuktha Vamseeeya Sangeetha Patanam", Keli Bi-monthly, The official Journal of Kerala Sangeetha Nataka Akademi, Thrissur, February-May, 2012.
372. "Mahabharathathile Varnavamsa Vyathakal", Bhashaposhini, Kottayam, August, 2015.
373. "Cinemayile Nirangalude Soundarya rashtreeyangal", Bhashaposhini, January, 2012, Kottayam.
374. "Cheettu- Verukal, Vazhikal", Bhashaposhini, August, 2012, Kottayam.
375. Cinemayile Folklore, Cinema enna Folklore", Left Word Monthly, Thiruvananthapuram, December, 2015.
376. "Boddhi: Cinemayil oru prathishedham ", Mathrubhumi Daily, July 6,
377. "Gomamsam enna rashtreeya bhakshanam ", Samakalika Malayalam Weekly, Ernakulam, April 3, 2015.
378. "Savarnanubhoothiyude Vipareethangal", Bhoomi Malayalam Research journal, Department of Malayalam, U.C.College, Aluva, February, 2015, ISSN: 2394-9791.
379. "Aathmayanangalude Bodhi", Samakalika Malayalam Weekly, Ernakulam, January 2, 2015.
380. "Filing for Freedom: Gour Hari Dastaan ", IFFK Daily Bulletin, Kerala Chalachithra Academy, Thiruvananthapuram, December 18, 2014.
381. "Problematising Parallel Cinema: Main Syteam/Many Streams? ", IFFK Daily Bulletin, Kerala Chalachithra Academy, Thiruvananthapuram, December 17, 2014.
382. "Small worlds, Big People ", IFFK Daily Bulletin, Kerala Chalachithra Academy, Thiruvananthapuram, December 17, 2014.
383. "Face to Face with Politics ", IFFK Daily Bulletin, Kerala Chalachithra Academy, Thiruvananthapuram, December 16, 2014.
384. "Recovering Suppressed Films ", IFFK Daily Bulletin, Kerala Chalachithra Academy, Thiruvananthapuram, December 15, 2014.

385. "It is all about White Hairs? ", IFFK Daily Bulletin, Kerala Chalachithra Academy, Thiruvananthapuram, December 15, 2014.
386. "Saamskarika Uthkantakalude Cinemakal", IFFK Daily Bulletin, Kerala Chalachithra Academy, Thiruvananthapuram, December 12, 2014.
387. "Cinema (Ta)kiss", Kalakaumudi Weekly, Thiruvananthapuram, December 14, 2014.
388. "Folklore Pookkum Cinemavanam", Deshabhimani Weekly, Kozhikkodu, December 14, 2014.
389. "Bahishkrutha Cinemakalude Kanavasantham", Madhyamam Weekly, Kozhikkodu, December 8, 2014.
390. "Madyam: Sannidhyam, Abhavam, Nirodhanam- Cinema srushtikalile soochakangal, Ora monthly, Alappuzha, December, 2014.
391. "Sadacharam Enna Duracharam", Amalolbhava Monthly, Assissi shanti kendra, karukutti, November, 2014
392. "Manjil Virinja Haider", Madhyamam Weekly, Kozhikkodu, October 27, 2014.
393. "Onasamasyayum Pooranavum", Malayalajalakam Monthly, Adoor, September, 2014.
394. "Translation as Hegemony : Initial Thoughts on the (re)presentation of Subaltern/Regional Writings in(to) English", Tapasam, Journal for Kerala Studies, Association for comparative studies, Vol.9, Issue 1-4, April 2014.
395. "Pazhanchollukalude Rashtreeyam", Amalolbhava, Bimonthly, Assissi shanti kendra, karukutti, February, 2014.
396. "I'm Still Old" Ora Monthly, Alappuzha, Vol 1, Issue 12, June, 2014.
397. "Googoleekaranakalathe Gruhaphalam", Amalolbhava, Bimonthly, Assissi shanti kendra, karukutti, April, 2013 26." Chitharikkappedunna Padmasanangal" Ora Monthly, Alappuzha, Vol 1, Issue 12, November 2013.
398. "Samskara patanathil A.R-nu pankundu" , (Interviewed article-1), Mathrubhumi weekly, Kozhikkodu, Book 91, Issue 24, August 25-31, 2013.
399. "Samskara patanathil Chathikkuzhikalundu", (Interviewed article-2), Mathrubhumi weekly, Kozhikkodu, Book 91, Issue 24, August 25-31, 2013.
400. "Samskara patanathil ninnu Rashtreeyam Chorunno?",(Interviewed article-3), Mathrubhumi weekly, Kozhikkodu, Book 91, Issue 24, August 25-31, 2013.
401. "Bhashayum samoohavum adhava Malayalavum malayaliyum", Amalolbhava, Bimonthly, Assissi shanti kendra, karukutti, August, 2013.
402. "Bhakshana drisya vicharangal", Pachakkuthira monthly, DC Books, February Issue, 2012, Kottayam.

403. “Thilakkam Mangatha Thiruseshippukal”, Samakalika Malayalam Varika, July 27, 2012.
404. “Jootha Jeevithathile Vyathirikthathakal”, Samakalika Malayalam Varika, August 3, 2012.
405. “Kannakiyude Chilamboli: Oru Puravarithathinte Sthala kala Sancharangal”, Deshabhimani Weekly, August 12, 2012.
406. “Mobile Kiliyude Kelvium Vayanayum”, Pachakkuthira Monthly, DC Books, Kottayam, October 2012.
407. “Buddhaprathimakale Ippoalum Bhayakkunnathu Aarokke?”, Mathrubhumi Weekly, December 2-8, 2012.

Mr.Saju Mathew

408. Unnatha Vidyabhyasa Rangathe Keninilangal, Teacher’s Voice, Autumn 2014

Ms.Shimi Psaul

409. Leopauld sedar senghor, Kerala Bhasha Institute, March 2013,TVM,ISBN 978817638349-3
410. “Vilapangal punaragyanam cheyyumbol” strinathmeeyatha vicharangal visahkalanagal,2012,C.S.S Publications,Thiruvalla,ISBN 978-81-7821-488-7
411. “Stree surakshithayalla”,Matruboomi daily news,2013,Januuary 1st African vamseeyathaude akaporul senghor krithikalil, Vamsheeyatha vicharavum weekshnavum,2013,U.C.College,Alluva
412. “Kathavishkarathinte naveenaroopangal” ,Sahitya vimarsham,2011, vol3, issue 2,april

Hindi

413. R S Radhika :Article published in ` Sahitya Mandal Pathrika ` on the topic *Samay Se Sarokaar Rakhta Sahityakar* `
414. R S Radhika: An Article based on the Poetry Collection entitled *,Bhoomikayein Khatam Nahin Hoti `* by Harishchandra Pandey was published in the book entitled ` Kavita Ka Varthaman ` edited by Dr. P. Ravi .
415. Ruby Elsa Jacob: An Article based on the Poem Collection of Swapnil Srivastava entitled `Swapnil Srivastav Ki Kavitaavom Mem Bharateeyata ` published in Anusheelan Patrika by Department of Hindi , CUSAT. (January 2011).
416. Ruby Elsa Jacob: Article titled `Samakaleen Hindi Upanyasom Mem Visthapan `was published in Bharatha Patrika Trilingual Monthly (January – March 2014) issue.
417. Ruby Elsa Jacob: Article Published in Bharatha Patrika Trilingual Monthly (April – May 2015) issue entitled `Samakaleen Upanyasom Mem Pravasi Bharateeyom Ka Yatharth `.

Paper Presentations and Publications by Students

1. Sherin Jose. (2015). *Resilience and well being among Athletes and non athletes*. UGC sponsored National seminar on „Health and Life style“. Department of Physical Education, Union Christian College, Aluva.
2. Thanooja Faisal & Seena M. Mathai. (2015). *Resilience and spirituality among athletes and non-athletes*. UGC sponsored National Seminar on „Health and Life style“. Department of Physical Education, Union Christian College, Aluva.
3. Pranav Jacob & Marikutty P. J. (2015) *Emotional intelligence in athletes and non-athletes: A comparative study*. UGC sponsored national seminar on “Health and Life style”. Department of Physical Education, Union Christian College, Aluva.
4. Rinsa Jacob & Chinnu Abraham. (2014). *Perceived loneliness among adolescents: A cross cultural perspective*. UGC sponsored National Seminar on „Counselling and Psychotherapy“, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 - 6 December.
5. Jain George, Jinson Elias & Neelima Ranjith. (2014). *Cyber Bullying among Adolescents*. UGC sponsored National Seminar on „Counselling and Psychotherapy“, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 - 6 December.
6. Shony Mathew P. J. & Vidhya Ravindranadan. (2014). *Vocational Rehabilitation of Mild and Moderate Mentally Challenged Adults*, UGC sponsored National Seminar on „Counselling and Psychotherapy“, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 - 6 December.
7. Merin Valsan & Marikutty, P. J. (2014) *Internet addiction among College students*. UGC sponsored National Seminar on „Counselling and Psychotherapy“, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 - 6 December.
8. Neelu Sunny & Neelima Ranjith. (2014). *Personality Characteristics Reflecting Achievement Motivation of Adolescents*, UGC sponsored National Seminar on „Counselling and Psychotherapy“, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 - 6 December.
9. Christina Mariam Chacko. (2014). „*Psychological correlates of academic performance*“ UGC sponsored National Seminar on „Counselling and Psychotherapy“, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 - 6 December.
10. Christina Mariam Chacko (2014). *The contribution of academic performance to happiness and positive self-esteem among adolescents*, Christ University Bangalore.

11. Meghana Shankar, Christina Mariam Chacko & Syna Soosan Abraham. (2014). *Psychological correlates of academic performance*. UGC sponsored National Seminar on „Counselling and Psychotherapy“, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 - 6 December.
12. Rinsa Jacob & Shema Elizabeth Kovoov. (2014). *Perceived Loneliness among Adolescents- A Cross Cultural Perspective*. UGC sponsored National Seminar on „Counselling and Psychotherapy“, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 - 6 December.
13. Chinnu Abraham & Shema Elizabeth Kovoov. (2014). *Perceived Loneliness among Adolescents*. UGC sponsored National Seminar on „Counselling and Psychotherapy“, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 - 6 December.
14. Sherin Jose. (2014). *Resilience and well being among Athletes and non athletes* at the two day UGC sponsored National seminar on „Counselling and Psychotherapy“. Prajyoti Niketan College, Pudukkad, Trissur, 5 - 6 December.
15. Swathymol, P. S. & Seena M. Mathai. (2014). *Relationship of self-efficacy and self –regulation on menopausal adjustment*. UGC Sponsored National Conference on „Enhancing Psychological Well Being“ (NCEPW2014), Department of Psychology Bharathiar University, 20-21 February.
16. Athulya Manohar & Seena M. Mathai. (2014). *Social Support as a Determinant Factor in Menopause Management*. UGC Sponsored National Conference on „Enhancing Psychological Well Being“ (NCEPW2014), Department of Psychology, Bharathiar University, 20-21 February.
17. Rohini V. S. & Seena M. Mathai. (2014). *Perceived stress among Private and KSRTC bus drivers*. UGC Sponsored National Seminar on „Counselling and Psychotherapy, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 – 6 December.
18. Thanooja Faisal & Seena M. Mathai. (2014). *Resilience and spirituality as correlates of psychological well-being*. UGC Sponsored National Seminar on „Counselling and Psychotherapy, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 – 6 December.
19. Sherin Jose & Seena M. Mathai (2014). *Resilience and well-being among athletes and non-athletes*. UGC Sponsored National Seminar on „Counselling and Psychotherapy“, Department of Psychology, Prajyoti Niketan College, Pudukad, Trissur, 5 - 6 December.
20. Jills Varghese, Swathymol P. S. & Seena M. Mathai. (2013). *Relationship of resilience with life satisfaction and sensation seeking among hockey players*. 23rd National Conference of Sports Psychology, 29-31 January, Christ College, Iringalakuda, Kerala.
21. Paul John Konat & Seena M. Mathai. (2013). *Anxiety and self- efficacy as predictors of task orientation among athletes*. 23rd National Conference of Sports Psychology, 29-31 January, Christ College, Iringalakuda, Kerala.

22. Pranav Jacob Varghese, Eldhose Mathai & Seena M. Mathai (2013). *Self-efficacy, resilience and humor as coping among athletes and non-athletes*. 23rd National Conference on Sports Psychology, 29-31 January, Christ College, Iringalakuda, Kerala.
23. John, P. K. & Seena M. Mathai (2013). *Perceived autonomy support and motives of physical activity as predictors of athletic performance*. National conference on „Positive Psychology“, Pondicherry University.
24. Ashya K. Salim, Nikitha Sunny, Vimal Y. Johnson & Seena M. Mathai (2013). *Enhancing Self Efficacy - the Role of National Service Scheme in the Enhancement of Self efficacy among College students*. National conference on „Positive Psychology“ Pondicherry University.
25. M.K. Arjunan & Seena M. Mathai (2013). *Mental health status, Locus of control and Perceived self-efficacy of adolescents from broken and intact families- A comparative study*. National conference on“ Positive Psychology“, Pondicherry University.
26. Vidya N. & Seena M. Mathai (2012). *Comparative analysis of personality, leadership styles and emotional intelligence among today's most preferred professionals*. National conference on „Positive Psychology“, Pondicherry University.
27. Tanya Francis, Syna Soosan Abraham and Seena M. Mathai. (2012). *Optimistic attitude and Happiness- An analytical study on the influence of grandparents in personality development in adolescence*. National conference on „Positive Psychology“, Pondicherry University.
28. Paul John Konat & Seena M. Mathai. (2012). *Sensation seeking among high and low achieving varsity athletes*. International Conference of Applied Psychology, Chandigarh University, 24-25 February.
29. Eldhose N. J., Rony Ninan Koshy & Seena M. Mathai (2012). *Self-esteem of Athletes and Non-Athletes*. International Conference of Applied Psychology, Chandigarh University, 24-25 February.
30. Xavier S. & Seena M. Mathai. (2012). *Predictors of self-efficacy among athletes*. International Conference of Applied Psychology, Chandigarh University, 24-25 February.
31. Jeena Johny & Seena M. Mathai. (2012). *Locus of Control and Self-Esteem among Television Professionals*. National conference on „Positive Psychology“, Social Integrity and Adolescence, 21 - 23 January.
32. Ashiya K. Salim, Nikitha Sunny & Seena M. Mathai. (2012). *Enhancing Self efficacy- the Role of National Service Scheme in the Enhancement of Self efficacy among College students*. National conference on „Socio Cultural Prospects of Positive Psychology in India“, Little Flower Institute of social Sciences and Health, Kozhikode

33. Akhil S. K, Labeeb P. K., Syna Soosan Abraham and Seena M. Mathai. (2012). *A survey on the road blocks to the holistic development of adolescents*. National seminar on „Psychological counselling: Practices, Problems and Prospects“, Govt. College for Women, Thiruvananthapuram, Sponsored by the Department of Collegiate Education
34. Akhil S. Kumar, Mohammed Labeeb P. K., Syna Soosan Abraham. (2012). *A survey on the road blocks to the holistic development of adolescents*. National seminar on „Psychological counselling: Practices, Problems and Prospects“, Govt. College for Women, Thiruvananthapuram, Sponsored by the Department of Collegiate Education.
35. Praseetha Sukumaran & Syna Soosan Abraham. (2012). *Emotional intelligence: A comparative study on male and female College students*. National conference on „Socio Cultural Prospects of Positive Psychology in India“, Little Flower Institute of Social Sciences and Health, Kozhikode.
36. Syna Soosan Abraham & Rohini Reghunath. (2012). *Awareness of health & hygiene practices*. International conference of the Indian Academy of Applied Psychology. Toc H institute of science and technology, Ernakulam.
37. Tanya Francis, Syna Soosan Abraham & Seena M. Mathai. (2012). *Optimistic attitude and happiness in life: An analytic study of the contribution of grandparents to personality development of children*. International conference of the Indian Academy of Applied Psychology. Toc H institute of science and technology, Ernakulam.
38. Vidya N. & Seena M. Mathai (2012). *Comparative analysis of personality, leadership styles and emotional intelligence among today's most preferred professionals*. 47th National and 16th International Conference of the Indian Academy of Applied Psychology, Toc H Institute of Science and Technology, Ernakulam, 15 – 17th June.
39. Divya Krishna, Aiona Liz, Syna Soosan Abraham & Seena M. Mathai. (2012). *Influence of media exposure on proactive coping method among adolescents*. International conference of the Indian Academy of Applied Psychology. Toc H institute of science and technology, Ernakulam.
40. Vidya N. & Neelima Ranjith. (2012). *Outlook towards Crime and Criminal Behaviour among Youth*. National Conference on „Socio Cultural Prospects of Positive Psychology in India“, Little Flower Institute of Social Sciences and Health, Kozhikode, 23 -25th January.
41. Divya Krishna. (2012). *Anxiety and frustration tolerance: A comparative study between diabetic and non diabetic people*. Interdisciplinary Research Fair. ReAP (Research Advancement Programme) organized by Department of home science, St. Teresa's College, Ernakulam.

42. Akhil S. K, Labeeb P. K., Syna Soosan Abraham (2011). *Attitude towards the use of corporal punishment and self esteem of higher secondary school teachers*. UGC sponsored National Seminar on „Self Esteem and Mental Health Promotion among Teacher“s. SNM training College, Muthakunnam, Ernakulam, Kerala.
43. Synthesis and Characterisation of Methyl Ammonium Lead Iodide Perovskite Nanoparticles by Sol Gel Method”Megha Emerse, Aparna S, Silpa Paul,Rakhy Raphael and E I Anila; National seminar on Recent trends in Physics and Research, St.Xavier”s College, Aluva; 15th and 16th December 2015.
44. Synthesis of Nanostructured PbS:Bi Thin Film by Chemical Bath Deposition;V G Athira, C R Roshni, T A Safeera, P V Sreenivasan, R Reshmi, M Alex and E I Anila; International conference on energy harvesting, storage and conversion(IC-EEE); CUSAT, 5-7 Feb.2015.
45. Structural and Optical Characterization of Zinc Gallate Nanoparticles;V Dhanisha, Sonu Baby, T A Safeera, R Reshmi and E I Anila, International conference on energy harvesting, storage and conversion(IC-EEE); CUSAT, 5-7 Feb.2015.
46. Structural and Photoluminescence Study of ZnGa_2O_4 ; T A Safeera, Rosemol Thomas, Elizebeth Kurian, N Johns, K R Bindu, Reshmi Raman, K Mini Krishna,E I Anila; National Seminar on Frontiers of Nanotechnology, Sree Sankara Vidya Peetom College, Perumbavoor; 6-7 March (2014).
47. Synthesis and characterization of Zinc Gallate Phosphors ;T A Safeera, Rosemol Thomas, Elizabeth Kurian, R Reshmi, E I Anila; ; ICAFM 2014 : 2nd International Conference on Advanced Functional Materials; CSIR-National Institute for Interdisciplinary Science & Technology, Thiruvananthapuram, India ; 19-21February (2014).
48. Preparation and characterisation of Calcium Sulphide nanoparticles; Sumayya P K, Jeena Lyla, Rekha S, Safeera T A and Anila E I; National seminar on recent trends in the development of nano materials and nano devices; S N M college, Maliankara ; 5-6 September (2013).
49. Synthesis And Characterization Of Nanostructured ZnS Thin Film T A Safeera, K J Anju, P J Joffy and E I Anila 57th DAE Solid State Physics Symposium, December 3-7 2012 IIT, Bombay.
50. Synthesis And Characterization Of Nanostructured ZnS Thin Film T A Safeera, K J Anju, P J Joffy and E I Anila The second International Conference on Optoelectronic Materials and Thin films for Advanced Technology (OMTAT 2013) organized by Dept. of physics CUSAT held from 3-5 January 2013.

51. Single crystalline ZnO thin films deposited by VS process” S Sarath , P V Athma, R Reshma, T A Safeera, K J Anju and E.I.Anila; Internantional Conference on Materials Science and Technology (ICMAT), 10-14, June, 2012, St.Thomas college, Pala.
52. Characterisation of Single crystalline ZnO thin films deposited by VLS method Sarath S, Athma P.V, Reshma Ravi, Safeera T.A, Anju K.Joy and E.I.Anila National Conference on Advanced Material Science [NCAMS], 16-17 March, 2012, U C College, Aluva, Kerala.
53. Photoluminescence of nanocrystalline ZnS thin films grown by sol-gel method G T Anu, T Tijin, C Ajithlal, K Athira, P Anagha, M N Neethu and E I.Anila,International conference on Nano materials and Nanotechnology (ICNANO) 18-21 December2011, University of Delhi, India
54. Evaluation of absorption coefficient of a solution by a simple experimental Setup,Deepak.G, Akhildev.C, K.K.Leelamma, Lyjo.K.J, P V Sreenivasan and E.I.Anila;OPTICS’11,International conference,May23-25,2011; NIT, Calicut.
55. Reshmi Radhakrishnan, Hiba Rahman, Dhanya S, Geethu R, Nafsia Karim, Faseela K, Sreenivasan P.V, Pradeep B, Rachel Reena Philip, published in AIP Conference Proceedings Volume 1391, OPTICS 2011: International Conference
56. Sreeranjani.R, Riya Jose, A.V.Ashitha, Parvathi.S.Nair, Keerthi.K, Sreenivasan.P.V and Rachel Reena Philip, National Seminar on Current Trends In Material Science, Aquinas college, Edacochin, held on August13-14 2014.ISBN: 978-93-5212-202-8 (2014).
57. Optical properties of flower-like nanostructured films of PbS, Hiba Rahman, Reshmi Radhakrishnan, Nafsia Karim, Faseela K, Dhanya S, Namitha Ashokan, B.Pradeep and Rachel Reena Philip, International conference on contemporary trends in optics and optoelectronics, 17th -19th Jan 2011, Organized by IIST, TVM.
58. Study on the Effect of Synthesis Temperature on the Structural, Surface Morphological and Optical Properties of Methyl Ammonium Lead Iodide Nanoparticles by Sol-Gel Method, K A Benazeera Beegum,Maria Paulose,V I Peter, Rakhy Raphael, V G Sreeja and E I Anila; IOP Conference Series: Material Science and Engineering 149(2016) 012078 doi:10.1088/1757-899X/149/1/012078.
59. Synthesis and Characterisation of Methyl Ammonium Lead Iodide Perovskite Nanoparticles by Sol Gel Method” Megha Emerse, Aparna S, Silpa Paul,Rakhy Raphael and E I Anila; Proceedings of the National seminar on Recent trends in Physics and Research, St.Xavier’s College, Aluva; 15th and 16th December 2015.
60. Synthesis and characterization of nanostructured ZnS thin film T A Safeera, K .J Anju, P J Joffy and E I Anila : AIP. Conf. Proc. 1512, 668-669 (2013).

61. Characterisation of Single crystalline ZnO thin films deposited by VLS method Sarath S, Athma P.V, Reshma Ravi, Safeera T.A, Anju K.Joy and E.I.Anila Proc. National Conference on Advanced Material Science [NCAMS], 16-17 March, 2012, U C College, Aluva, Kerala
62. Determination of Absorption Coefficient of a Solution by a Simple Experimental Setup, Deepak Gopalakrishnana, C. Akhildev, P. V.Sreenivasan, K. K. Leelammaa, Lyjo K. Joseph and E. I. Anila; AIP Conf. Proc.1391, 372-374 (2011).

BOOKS

Dr. Sebastian Joseph

1. *Cochin forests and the Making of British*, Published by primus, New Delhi, 2015.
2. „The Great Chavarian Revolution“ in Dr. P. F. Gopakumar (ed.), *Faces of Social Reform in Kerala*, 2015.

Dr. Rajan Varughese

3. Swayambharana College : Sankalpam Yadhathyam ,2015
4. Encounters: A University on Trial 2012.

Dr. Muse Mary George

5. Sthreeye Enikkum Ninakkum Enthu , CSS Books, Thiruvalla
6. *Udaladhikaram*- Book published by Olive Publishers, Kozhikkode, May 2015.
7. Lokakavitha (Study, Editor) Text Book for 2nd Semester BA Malayalam Text Book – Published by Mahatma Gandhi University, Central Co-operative Society December 2011

Dr. Vidhu Narayan

8. Kaalyakalam 6th Semester BA Malayalam Text Book published by M.G.University Central Co-operative store November 2011

Dr. Siby M. Eapen

9. Arangu muthal Abhrapali Vare-Study-State Institute of Languages, Thiruvananthapuram.
10. Kathunna Kaalukal Poetry Study-Z library Thiruvananthapuram.
11. Pratheeka Nighandu State Institute of Languages, Thiruvananthapuram.
12. Pahzhayakrithi puthiyavayana, 2011, U.C College, Aluv

Dr. Justin R. Nayagam

13. PLANTATION TECHNOLOGY FOR SEVEN TROPICAL TREE SPECIES. March 2015. Pages 464. Published by Lambert Academic Publishers, Germany. ISBN -13: 978-3-659-40484-9

14. Compendium on *Costus Pictus*: A Medicinal Spiral Ginger. Pages 64. February 2015. Published by Lambert Academic Publishers, Germany. ISBN 13: 978-3-659-62481-0.

Dr. Ruby Elsa Jacob

15. „*Samakaleen Hindi Upanyasom Mem Visthapan* ` [ISBN – 978-93-86248-02-2] published by Vidya Prakashan , Kanpur.

Dr.E I Anila

16. Strontium Sulfide Phosphors, E I Anila LAP LAMBERT Academic publishing, Germany (ISBN: 978-3-8465-2990-4) 2011

Chapters in Books Published by Faculty

Jacob George C.

1. “Margaret Atwood’s Bodily Harm: Fictional (Re)presentations of a Nation.” *Introducing Canadian Literature: Revised Edition*. Alwaye: JICS, 2013. 64-70. (ISBN 978-93-5104-994-4).
2. “Robert Kroetsch’s *What the Crow Said*: From Chaos to Order.” *Introducing Canadian Literature: Revised Edition*. Alwaye: JICS, 2013. 95-99. (ISBN 978-93-5104-994-4).
3. “Making their Voices Heard: Emergence of Arabic-Canadian Literature” *Introducing Canadian Literature: Revised Edition*. Alwaye: JICS, 2013. 209-216. (ISBN 978-93-5104-994-4).
4. “Gaia in Isaac Asimov’s *Foundation* Novels: Ecological Hypothesis as Fictional Terminus.” *Proceedings of UGC Sponsored National seminar on Literature and the Environment*. Sree Sankaracharya University of Sanskrit. 2016.

Rekha Nair

5. Diaspora Families: a Study of Jhumpa Lahiri’s “Unaccustomed Earth” and “Hell-Heaven.” *Familial Portraits: Cognizance of Indian Writing in English* (ISBN 978-81-910124-0-8).
6. “Intended Level of Competence and Actualized Level of Performance” *Proceedings of the U.G.C sponsored national seminar on „Models of Teaching: An Enquiry into the Pedagogical Discourses of Teaching in Humanities, Social Sciences and Technology*, M.E.S College, Marampally.; ISBN: 978-81-923985-0-1.
7. “De-contextualised Reading Components as a *raison d’être* for Learner Alienation: A Critique of the Undergraduate Programme of M. G. University.” *Proceedings of the U.G.C sponsored national seminar on „Models of Teaching: An Enquiry into the Pedagogical Discourses of Teaching in Humanities, Social Sciences and Technology*, M.E.S College, Marampally.; ISBN: 978-81-923985-0-1.

Alwin Alexander

8. "Carnivalised Scripture: A Bakhtinian Reading of *Christ Recrucified* by Nikos Kazantzakis." *Revisitations: The Politics of Rewriting Old Texts*. Irinjalakkuda: PG Dept. of English, St. Joseph's College, 2011. 67-74.
9. "Franciscan Carnival: A Dialogic Study of Eco-Spirituality in *God's Pauper*." *Green Perceptions: Ecology and Texts*. Kalamassery: Dept. of English, St. Paul's College, 2011. 58-63.
10. "The Search for Self: A Bakhtinian Approach to the Self/Other Dialogue in Lalithambika Antharjanam's *Agnisakshi*." *Deconstructing Foundations: Postmodern Perspectives in Writing*. Changannur: Dept. of English, Christian College, 2011. 20-26.
11. "Nature Unfinalized: A Bakhtinian Reading of Literary Ecology in Bibhutibhushan Bandyopadhyaya's *Aranyak*." *Indian Literary Historiography and Counter Currents in Postcoloniality*. Eds. Asha Susan Jacob and Tom Thomas. Kozhencherry: PG Dept. of English, St. Thomas College, 2012. 34-42.
12. "Emerging (Cyber)Spaces: Paradigms of Transformed Sensibilities in Mukundan's *Nrutham*." *Remapping of Reality Through Visual Technology: Interdisciplinary Engagements*. Ed. Dr. Tessy Anthony C. Cochin: Dept. of English and Centre for Research, St. Teresa's College, 2012. 79-84.
13. "Dialogising Didactics: Reckoning Pedagogy with Reader-Response Theory and Bakhtinian Templates". *Global Dimensions of English*. Ed. Dr. S. Stephen Jebanesan. Chennai: Research & PG Dept. of English, Madras Christian College, 2013. 15-25
14. "Narrativising the Subaltern: The Site/Sight of the Couple in Kamala Das' Poetry." Portrayal of Family in Indian Writing in English - Seminar Proceedings – UGC National Seminar Organised by Dept. of English NMSS Vellaichamy Nadar College, Madurai on the 15th of March 2013.
15. "Vanyathakalude Ithihasam: Parisdhitimanovignaneeyam Khasakinte Ithihasathil." *Ithihasangalude khasak*. Editor. N. Jayakrishnan. Thiruvananthapuram: Bhasha Institute, 2011. 548-556.
16. "Aalahayude pennmakalil Zelofehadinte puthrimare adayalappeduthumpol" *Sthreinaathmeeyatha: Vicharangaal vishakalanangal*. Editor. Dr. Mini Alice. Thiruvalla: C.S.S., 2012. 137-145.
17. "Ooranubhavangalude Uriyaattangal". *Pandu Saattu Kalichappol*. Sibumodayil. Thiruvananthapuram: Parithi Publications, 2013.
18. "Introduction". *Reverent Reminiscences*. Dr. A. M. Chacko. Thiruvalla: CSS, 2013.
19. „Udalinte Punarakhyanangal“ in *Nashtapetta Naanayam* ed. Sr. Dr. Noel Rose Published by SPCS, Kottayam. 2014

20. „Dialogising Didactics: Bakhtinian Concepts as Templates for Pedagogy“ in *Innovations in ELT in the Changing Context* eds. Prashant Mishra & G. A. Ghanashyam Published by Sarup Books, New Delhi 2014
21. „Consumptive Matter: Food as an Apparatus in *The Edible Woman*“ *Journal of Indo-Canadian Studies: Perspectives on English Language Pedagogy* ed. Dr. Jacob George C Published by JICS . 2014
22. „What“s Cooking? – Decoding the Table in Malayalam Movies“ in *Re-tracking the Celluloid: History, Politics and Popular Culture in Films* eds. Dr. J Anjana & Renjith Krishnan K R. 2014.

Sheenu Varghese

23. “De-contextualised Reading Components as a *raison d’être* for Learner Alienation: A Critique of the Undergraduate Programme of M. G. University.” *Proceedings of the U.G.C sponsored national seminar on „Models of Teaching: An Enquiry into the Pedagogical Discourses of Teaching in Humanities, Social Sciences and Technology* M.E.S College, Marampally.; ISBN: 978-81-923985-0-1.

Nino Baby

24. Women on Wheels: The *She-taxi* Initiative in Kerala as a Strategy for Empowerment of Women
25. Dr. P.V. Sreenivasan contributed a chapter in a book titled “Engineering Chemistry and Environmental studies” (2014).

Seena M. Mathai

26. The effect of psychosocial intervention in the management of menopausal complications. In *Reaching Our Voices-Psychology of Women*. Germany: Lambert academic Publishing
27. Personality Development. In B.N Ghosh (Eds.) *Soft Skill Management and personality Development*, New Delhi: Tata Mc Graw Hill.
28. (2012) Decision making. In B.N Ghosh (Eds.) *Soft Skill Management and personality Development*, New Delhi: Tata Mc Graw Hill.

Neelima Ranjith.

29. Clinical and demographic profile of degenerative dementia from a memory clinic in south Kerala. In Dhanya N. (Eds.), *Ageing and Society – A Multi Disciplinary Approach*. Excel India Publishers, New Delhi, ISBN: 978-93-82062-84-4.
30. Serial position curve. In Nobert M. Seal (Eds.), *Encyclopedia of Science of Learning, Part 19* (3050-3051). Springer Publication. Citation index 35

Dr. M.I. Punnoose

31. Edited a research journal titled “Vamseeeyatha;Vicharavum Veekshanavum”
32. Published 8 issues of Darpanam literary magazine

33. Edited Snehahastham, a journal published by the journalism students.
34. Edakali Pattukal Oru Patanam, published in Christial Folklore, published by Folklore Academy.

Dr. Mini Alice

35. Jalajeevithatthinte Pensaakshyangal, Nashtappetta Naanayam, Dr. C. Noal Rose (Ed.), Sahitya Pravarthaka Sahakarana Sangam, 2014 March
36. Chaavuthullal – Praadesikacharithratthinte Ulkhananangal, Malayala Novel Randaayirathinu Sesham, Dr. K. K. Sivadas(Ed.), 2014 June
37. Mazhappaattakalkku Chiraku Mulakkumbol, Erinju Katthunna Vaakkukal – Rajalakshmiyude Rachanaaprapanjam, Kerala Bhasha Institute, Thiruvananthapuram, 2014 july

Dr. Vidhu Narayan

38. Malayalavum Samkethikathayum Book-Malayalam Thayverukal puthunampukal, Dakshina, Chennai page-332-337 ISBN No 81-9230832 Publication year: 2015
39. Cyber Lokavum Malayala Bhashayum Book Malayala Bhashayum Madhyama Vicharavum CMS College, Kottayam, pages 45-50 ISBN 978-81-925991-2-0 Publication year: 2014

Dr. Sibum. Eapen

40. Kavithayude Utharalikhithakalam. Article in Book Samakalikamalayalakavitha puthumayum palamayum. ISSN No.2394-9791
41. Kathayum kazhchaseelangalum Article in Book samakalika malayalacherukatha U C College Aluva January 2012 ISSN No.2394-9791
42. Pracheen amalayalakavithayile yathrakal mithum yatharthiyavum Article in Book Pazhaya krithi puthiya vayana U.C.College January 2011 ISSN No.2394-9791
43. Sugathakaumarikkavitha oru saileevicharam Article in Book Kattukiliyude pattu kerala Bhasha institute Thiruvananthapuram ISBN No 81-7636-920-4 July 2011

Dr. Aju K.N.

44. .“S.K.Pottekkattinte Kathakal”, Academic Journal of Vimala college, Thrissur, 2013
45. “A cultural history of „taste” in films: From Pather Panchali to Salt and Pepper”, Revisiting Cultural Studies: Towards a new critical paradigm, Marthoma college, Tiruvalla, ISBN 978-93-82952-00-8, 2012.
46. “Swayambharana College: Vakkum Porulum ”, Swayambharana College: Sankalpam, Yatharthiyam, Sahitya Pravarthaka Sahakaran Sangham (SPCS), Kottayam, ISSN: 978-93-85488-36-8.

47. “Keralathile Joothar: Charithram, Jeevitham, Samskaram”, Aureole (ISSN: 2249-7862), A journal of multi disciplinary studies and research, St.Stephen’s College, Uzhavoor, Vol.IV, December 2012.
48. .“ Translation as Hegemony”, Indian Literary Historiography and Counter Currents in Postcoloniality (ISBN 978-81-7821-436-8), Proceedings of the UGC National seminar, 2012, Postgraduate department of English, St.Thomas College, Kozhencherry.

Mr. Saju Mathew

49. Nadan Premavum Nagarabhavanayum, *Kadha Thedunna SancharI* , Chelavur Venu (Ed.), Chintha Publishers, Thiruvananthapuram, 2014

Ms. Shimi Paul Baby

50. Aduneekathayile streepaksha nilapadukal, strinatha adichamartalukal vicharangaal, 2015, Little Flower, Guruvayoor
51. “Athmakathayile chritraparatha” thudi-Kannur University Publications, 2014 april, ISBN 2320-888
52. Reinterpreting laminations, Feminine Spirituality reflection and discourse, 2014, C.S.S Tiruvalla, ISBN 978-81-7821-6485.
53. “Adhikaravum prathirodhavum varthamanapustakathil”, Pahzhayakrithi puthiyavayana, 2011, U.C College, Aluva.
54. Dr. P.V. Sreenivasan contributed a chapter in a book titled “Engineering Chemistry and Environmental studies” (2014).
55. Dr. Ruby Elsa Jacob „*Samakaleen Sahity : Vividh Pariprekshy* ` - a criticism edited by Dr. Sanjay . L. Madar , published by Taxshila Prakashan , New Delhi [ISBN -978-81-7965-280-0]

ANNEXURE II

AUDITED INCOME / EXPENDITURE STATEMENTS OF THE

COLLEGE

<u>THE UNION CHRISTIAN COLLEGE, ALWAYE</u>			
<u>BALANCE SHEET AS AT 31ST MARCH, 2016</u>			
	As per Schedule	As at 31.03.2016	As at 31.03.2015
		₹	₹
I SOURCES OF FUNDS			
1 Reserves and surplus:			
a. Capital Fund	1	11,24,45,872.93	10,32,98,390.21
b. Capital Reserve	2	42,78,560.71	40,42,407.71
c. Gratuity Reserve (Management)		20,00,000.00	20,00,000.00
		11,87,24,433.64	10,93,40,797.92
2 Endowment Funds	3	1,12,10,637.60	92,10,816.60
3 Current Liabilities and Provisions:			
a. Other Liabilities	4	3,06,18,098.55	3,80,20,117.05
Total		16,05,53,169.79	15,65,71,731.57
II APPLICATIONS OF FUNDS			
1 Fixed Assets	5	8,71,44,198.03	7,44,72,228.66
2 Capital Work-in-Progress	6	76,02,979.00	1,43,27,319.00
		9,47,47,177.03	8,87,99,547.66
3 Investments	7	8,57,543.83	8,57,543.83
4 Current Assets, Loans & Advances:	8		
a. Cash on Hand		2,27,054.00	5,08,010.00
b. Cash with Banks		5,07,28,157.29	5,01,68,107.05
c. Balance with Government-Treasury		73,35,698.28	73,27,372.28
d. Loans and Advances		66,57,539.36	89,11,150.75
		6,49,48,448.93	6,69,14,640.08
Total		16,05,53,169.79	15,65,71,731.57
Notes and Additional Information:	9		
DIRECTORS			

As per our separate report of even date attached

THE UNION CHRISTIAN COLLEGE, ALWAYS			
BALANCE SHEET AS AT 31ST MARCH, 2015			
	As per Schedule	As at 31.03.2015	As at 31.03.2014
I SOURCES OF FUNDS			
1 Reserves and surplus:			
a. Capital Fund	1	103,298,390.21	89,570,368.23
b. Capital Reserve	2	4,042,407.71	3,855,775.75
c. Gratuity Reserve (Management)		2,000,000.00	2,000,000.00
		109,340,797.92	95,426,143.98
2 Endowment Funds	3	9,210,816.60	7,172,932.60
3 Current Liabilities and Provisions:			
a. Other Liabilities	4	38,020,117.05	29,310,256.05
Total		156,571,731.57	131,909,332.63
II APPLICATIONS OF FUNDS			
1 Fixed Assets	5	74,472,228.66	68,820,318.31
2 Capital Work-in-Progress	6	14,327,319.00	7,575,485.00
		88,799,547.66	76,395,803.31
3 Investments	7	857,543.83	857,543.83
4 Current Assets, Loans & Advances:	8		
a. Cash on Hand		508,010.00	31,876.00
b. Cash with Banks		50,168,107.05	40,171,066.46
c. Balance with Government-Treasury		7,327,372.28	6,685,684.28
d. Loans and Advances		8,911,150.75	7,767,358.75
		66,914,640.08	54,655,985.49
Total		156,571,731.57	131,909,332.63
Notes and Additional Information:	9		
DIRECTORS			
<i>As per our separate report of even date attached</i>			

THE UNION CHRISTIAN COLLEGE, ALWAYS			
BALANCE SHEET AS AT 31ST MARCH, 2014			
	As per Schedule	As at 31.03.2014	As at 31.03.2013
		₹	₹
I SOURCES OF FUNDS			
1 Reserves and surplus:			
a. Capital Fund	1	8,95,70,368.23	8,81,82,080.89
b. Capital Reserve	2	38,55,775.75	36,63,511.75
c. Gratuity Reserve (Management)		20,00,000.00	20,00,000.00
		9,54,26,143.98	9,38,45,592.64
2 Endowment Funds	3	71,72,932.60	64,83,143.60
3 Current Liabilities and Provisions:			
a. Other Liabilities	4	2,93,10,256.05	2,27,36,129.96
Total		13,19,09,332.63	12,30,64,866.20
II APPLICATIONS OF FUNDS			
1 Fixed Assets	5	6,88,20,318.31	5,75,72,325.97
2 Capital Work-in-Progress	6	75,75,485.00	1,56,58,431.00
		77,63,95,803.31	7,32,30,756.97
3 Investments	7	8,57,543.83	8,57,543.83
4 Current Assets, Loans & Advances:	8		
a. Cash on Hand		31,876.00	66,339.00
b. Cash with Banks		4,01,71,066.46	3,44,78,400.76
c. Balance with Government-Treasury		66,85,684.28	63,58,676.28
d. Loans and Advances		77,67,358.75	80,73,149.36
		5,46,55,985.49	4,89,76,565.40
Total		13,19,09,332.63	12,30,64,866.20
Notes and Additional Information:	9		
DIRECTORS			

As per our separate report of even date attached

THE UNION CHRISTIAN COLLEGE, ALWAYE			
BALANCE SHEET AS AT 31ST MARCH, 2013			
	As per Schedule	As at 31.03.2013	As at 31.03.2012
		₹	₹
I SOURCES OF FUNDS			
1 Reserves and surplus:			
a. Capital Fund	1	88,182,080.89	78,363,997.00
b. Capital Reserve	2	3,663,511.75	3,287,075.75
c. Gratuity Reserve (Management)		2,000,000.00	2,000,000.00
		93,845,592.64	83,651,072.75
2 Endowment Funds	3	6,483,143.60	6,178,774.60
3 Current Liabilities and Provisions:			
a. Other Liabilities	4	22,736,129.96	26,379,788.81
Total		123,064,866.20	116,209,636.16
II APPLICATIONS OF FUNDS			
1 Fixed Assets	5	57,572,325.97	58,916,334.48
2 Capital Work-in-Progress	6	15,658,431.00	1,528,522.00
		73,230,756.97	60,444,856.48
3 Investments	7	857,543.83	857,543.83
4 Current Assets, Loans & Advances:	8		
a. Cash on Hand		66,339.00	732,577.00
b. Cash with Banks		34,478,400.76	40,170,320.56
c. Balance with Government-Treasury		6,358,676.28	6,361,822.28
d. Loans and Advances		8,073,149.36	7,642,516.01
		48,976,565.40	54,907,235.85
Total		123,064,866.20	116,209,636.16
Notes and Additional Information:	9		
DIRECTORS			

As per our separate report of even date attached

CERTIFICATES



UNION CHRISTIAN COLLEGE

(Affiliated to Mahatma Gandhi University, Kottayam)
Website: ucCollege.edu.in E-mail: ucc@ucCollege.edu.in

Post Box : 5
ALUVA- 683 102
Ernakulam Dist, Kerala
Fax: 2607534,
2609194
☎ 2604003, 2609194

Declaration by the Head of the Institution

I certify that the data included in this Self Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peerteam will validate the information provided in this SSR during the peer team visit.




Signature of the Head of the institution

Seal



PRINCIPAL
College Aluva-2

Place: Aluva

Date: 27.03.2017



UNION CHRISTIAN COLLEGE

(Affiliated to Mahatma Gandhi University, Kottayam)
Website: ucCollege.edu.in E-mail: ucc@ucCollege.edu.in

Post Box : 5
Aluva- 683 102
Ernakulam Dist, Kerala
Fax: 2607534,
2609194
☎ 2804003, 2809194

Certificate of Compliance

(Affiliated/ Constituent/ Autonomous Colleges and Recognized Institutions)

This is to certify that Union Christian College, Aluva, Kerala fulfills all norms:

1. Stipulated by the affiliating University and/or
2. Regulatory Council/Body [such as UGC, NCTE, AICTE, MCI, DCI, BCI, etc.] and
3. The affiliation and recognition [if applicable] is valid as on date.

In case the affiliation/recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the Institution will sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the College website.

Place: Aluva
Date: 27.03.2017




Principal
U.C. College, Aluva



Mahatma Gandhi University

PRIYADARSINI HILLS P.O., KOTTAYAM - 686 560

(Established by Kerala State Legislature by Notification
No. 3431/Leg. CI/85/Law, dated 17th April 1985)

Ac A1/1/8332/Acad/2017

04.04.2017

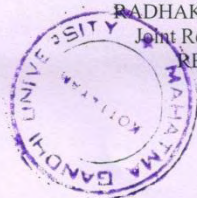
TO WHOM IT MAY CONCERN

This is to certify that Union Christian, College, Aluva, Ernakulam Dist., Kerala, offering the following Programmes, is an aided Arts and Science College affiliated to Mahatma Gandhi University, Kottayam, Kerala.

Sl.No.	Name of the Course(s) and duration	Affiliation	Period of validity
		Permanent/Temporary	
1	BA English (3 Years)	Permanent	
2	BA Malayalam (3 Years)	Permanent	
3	BA Economics (3Years)	Permanent	
4	BA History (3 Years)	Permanent	
5	B.Sc. Mathematics (3 Years)	Permanent	
6	B.Sc. Physics (3 Years)	Permanent	
7	B.Sc. Botany (3 Years)	Permanent	
8	B.Sc. Chemistry (3 Years)	Permanent	
9	B.Sc. Psychology (3 Years)	Permanent	
10	B.Sc. Zoology (3 Years)	Permanent	
11	B.Sc. Computer Science (3 Years)	Permanent	
12	MA English (2 Years)	Permanent	
13	MA Malayalam (2 Years)	Permanent	
14	MA History (2 Years)	Permanent	
15	MA Economics (2 Years)	Permanent	

Exchange : EPABX : 0481-2731050 to 2731068 Enquiry : 0481-2731050-Extn. 1199, 1300, 1378, 1274
Fax : 91-481-2731002, 2731009, 2731011 Website : www.mguniversity.edu E-mail : mgu@md2.vsnl.net.in

16	M.Sc. Mathematics	(2 Years)	Permanent	
17	M.Sc. Physics	(2 Years)	Permanent	
18	M.Sc. Chemistry	(2 Years)	Permanent	
19	M.Sc. Botany	(2 Years)	Permanent	
20	M.Sc. Zoology	(2 Years)	Permanent	
21	M.Sc. Psychology	(2 Years)	Permanent	
22	B.Com. Finance & Taxation Model II	(3 Years)	Temporary	2016-17
23	B.Com. Computer Applications Model I	(3 Years)	Temporary	2016-17
24	B.Sc. Biological Techniques & Specimen Preparation	(3 Years)	Temporary	2016-17
25	B.Sc. Computer Maintenance & Electronics	(3 Years)	Temporary	2016-17
26	M.Sc. Biotechnology	(2 Years)	Temporary	2016-17
27	M.Sc. Bioinformatics	(2 Years)	Temporary	2016-17
28	MCA	(3 Years)	Temporary	2016-17
29	MCA (Lateral Entry)	(2 Years)	Temporary	2016-17
30	MBA	(2 Years)	Temporary	2016-17



Radhakrishna Pillai B.
 RADHAKRISHNA PILLAI B.
 Joint Registrar in-charge of
 REGISTRAR

23236735/ 23239437/23235733
23232701
23237721/ 23232317/23234116/
23236351



UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAGAR MARG
NEW DELHI-110002
विश्वविद्यालय अनुदान आयोग
बहादुरशाह ज़ाफर मार्ग
नई दिल्ली - 110 002

UGC Website : www.ugc.ac.in

F.1-1/2016 (CPP-I/C)

March, 2016

The Principal
Union Christian College
Alwaye – 683 102
Dist. Ernakulam
Kerala

1-4 MAR 2016

Subject : Recognition of College under Section 2(f) and 12 (B) of the UGC Act, 1956.

Sir/Madam,

With reference to your letter dated 25.01.2016 on the above subject, I am to inform you that the name of **Union Christian College, Alwaye – 683 102, Dist. Ernakulam, Kerala** established in the year of **1921**, affiliated to **Mahatma Gandhi University, Kottayam** has **already** been included in the list of Colleges maintained under **Section 2(f) & 12 (B)** of the UGC Act, 1956 under the head **Non - Government College** teaching upto **Master's Degree**.

Yours faithfully,

Charan Dass
(Charan Dass)
Under Secretary



Mahatma Gandhi University

PRIYADARSINI HILLS P.O., KOTTAYAM - 686 560

(Established by Kerala State Legislature by Notification
No. 3431/Leg. CI/85/Law, dated 17th April 1985)

CERTIFICATE

Certified that **Union Christian College, Aluva**, affiliated to Mahatma Gandhi University, Kerala is included under section 2(f) & 12B of the UGC Act 1956. The college is included on page **487** in the list of colleges under section 2(f) & 12B of UGC Act published by the UGC and updated as on 31st January 2017 .

Priyadarsini Hills

Date: 09.03.2017

DIRECTOR

College Development Council



Exchange : EPABX : 0481-2731050 to 2731068 Enquiry : 0481-2731050-Extn. 1199, 1300, 1378, 1274
Fax : 91-481-2731002, 2731009, 2731011 Website : www.mguniversity.edu E-mail : mgu@md2.vsnl.net.in



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. South-West/I-2812317226/2016/EOA

Date: 05-Apr-2016

To,

The Principal Secretary,
Deptt. Of education, Govt. of Kerala,
Govt. Sectt. Annexe,
Thiruvananthapuram-695001

Sub: Extension of approval for the academic year 2016-17

Ref: Application of the Institution for Extension of approval for the academic year 2016-17

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F.No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	South-West	Application Id	1-2812317226
Name of the Institute	UNION CHRISTIAN COLLEGE,ALUVA	Permanent Id	1-8170861
Name of the Society/Trust	UNION CHRISTIAN COLLEGE,ALUVA	Institute Address	U C COLLEGE PO, ALWAYE, ERNAKULAM DIST, KERALA, COCHIN, ERNAKULAM, Kerala, 683102
Institute Type	Unaided - Private	Society/Trust Address	U C COLLEGE PO, ALWAYE, ERNAKULAM DIST, KERALA,ALUVA,ERNAKULAM,Kerala,683102

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2016-17

Application Id: 1-2812317226			Course	Full/Part Time	Affiliating Body	Intake 2015-16	Intake Approved for 2016-17	NRV Approval status	PO/ PN/ Gulf quota Approval status	Foreign Collaboration/ Twinning Program Approval status
Program	Shift	Level								
MCA	1st Shift	MCA 2nd Year Direct	MASTERS IN COMPUTER APPLICATIONS	FULL TIME	Mahatma Gandhi University, Kottayam	60	60	NA	NA	NA

Application Number: 1-2812317226

Note: This is a Computer generated Report.No signature is required.

Printed By : AE6868411

Page 1 of 2
Letter Printed On:7 May 2016



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

MCA	1st Shift	POST T G R A D U A T E	MASTERS IN COMPUTER APPLICATIONS	FULL TIME	Mahatma Gandhi University, Kottayam	60	60	NA	NA	NA
-----	-----------	---	--	--------------	--	----	----	----	----	----

The above mentioned approval is subject to the condition that UNION CHRISTIAN COLLEGE,ALUVA shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

Note: Validity of the course details may be verified at www.aicte-india.org

Dr. Avinash S Pant
Vice - Chairman, AICTE

Copy to:

- The Regional Officer,**
All India Council for Technical Education
Health Centre Building
Bangalore University Campus
Bangalore - 560 009, Karnataka
- The Director Of Technical Education,**
Kerala
- The Registrar,**
Mahatma Gandhi University, Kottayam
- The Principal / Director,**
UNION CHRISTIAN COLLEGE,ALUVA
U C COLLEGE PO, ALWAYE, ERNAKULAM DIST, KERALA,
COCHIN,ERNAKULAM,
Kerala,683102
- The Secretary / Chairman,**
UNION CHRISTIAN COLLEGE, ALUVA
U C COLLEGE PO, ALWAYE, ERNAKULAM DIST, KERALA,
ALUVA,ERNAKULAM,
Kerala,683102
- Guard File(AICTE)**

Application Number: 1-2812317226
Note: This is a Computer generated Report.No signature is required.
Printed By : AE6868411

Page 2 of 2
Letter Printed On:7 May 2016



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

F.No. South-West/I-2811911724/2016/EOA

Date: 05-Apr-2016

To,

The Principal Secretary,
Deptt. Of education, Govt. of Kerala,
Govt. Sectt. Annexe,
Thiruvananthapuram-695001

Sub: Extension of approval for the academic year 2016-17

Ref: Application of the Institution for Extension of approval for the academic year 2016-17

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F.No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	South-West	Application Id	1-2811911724
Name of the Institute	UNION CHRISTIAN COLLEGE	Permanent Id	1-2190444941
Name of the Society/Trust	UNION CHRISTIAN COLLEGE	Institute Address	U C COLLEGE, U C COLLEGE P O, ALUVA, ERNAKULAM, KERALA, ALUVA, ERNAKULAM, Kerala, 683102
Institute Type	Unaided - Private	Society/Trust Address	U C COLLEGE P O,ALUWAYE, ERNAKULAM, KERALA, ALUVA, ERNAKU LAM, Kerala, 683102

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

To conduct following courses with the intake indicated below for the academic year 2016-17

Application Id: 1-2811911724			Course	Full/Part Time	Affiliating Body	Intake 2015-16	Intake Approved for 2016-17	NRI Approval status	PIO / FN / Gulf quota Approval status	Foreign Collaboration/Twinning Program Approval status
Program	Shift	Level								
MANAGEMENT	1st Shift	POST GRADUATE	MASTERS IN BUSINESS ADMINISTRATION	FULL TIME	Mahatma Gandhi University,	60	60	NA	NA	NA

Application Number: 1-2811911724

Note: This is a Computer generated Report.No signature is required.

Printed By : AICN008615

Page 1 of 2
Letter Printed On:18 May 2016



All India Council for Technical Education
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

		DUA TE	ON		Kottayam					
--	--	-----------	----	--	----------	--	--	--	--	--

The above mentioned approval is subject to the condition that UNION CHRISTIAN COLLEGE shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

Note: Validity of the course details may be verified at www.aicte-india.org

Dr. Avinash S Pant
Vice - Chairman, AICTE

Copy to:

- The Regional Officer,**
All India Council for Technical Education
Health Centre Building
Bangalore University Campus
Bangalore - 560 009, Karnataka
- The Director Of Technical Education,**
Kerala
- The Registrar,**
Mahatma Gandhi University, Kottayam
- The Principal / Director,**
UNION CHRISTIAN COLLEGE
U C COLLEGE,
U C COLLEGE P O,
ALUVA,
ERNAKULAM,
KERALA,
ALUVA,ERNAKULAM,
Kerala,683102
- The Secretary / Chairman,**
UNION CHRISTIAN COLLEGE
U C COLLEGE P O,ALWAYE,ERNAKULAM,KERALA,
ALUVA,ERNAKULAM,
Kerala,683102
- Guard File(AICTE)**

Application Number: 1-2811911724
Note: This is a Computer generated Report.No signature is required.
Printed By : AICN008615

Page 2 of 2
Letter Printed On:18 May 2016



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

Certificate of Accreditation

*The Executive Committee of the
National Assessment and Accreditation Council
on the recommendation of the duly appointed
Peer Team is pleased to declare the
Union Christian College
Aluva, affiliated to Mahatma Gandhi University, Kerala as
Accredited
with CGPA of 3.35 on four point scale
at A grade
Valid up to March 26, 2016*

Date : March 27, 2011



MA Perumal
Director

EC/55/RAR/105



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission

Quality Profile

Name of the Institution : Union Christian College

Place : Aluva, Kerala

Criteria	Weightage (W _i)	Criterion-Wise Grade Point Averages (Cr _i GPA)	W _i X Cr _i GPA
I. Curricular Aspects	050	3.40	170
II. Teaching-Learning and Evaluation	450	3.17	1427
III. Research, Consultancy and Extension	100	3.75	375
IV. Infrastructure and Learning Resources	100	3.40	340
V. Student Support and Progression	100	3.90	390
VI. Governance and Leadership	150	3.33	500
VII. Innovative Practices	050	3.00	150
Total	$\sum_{i=1}^7 W_i = 1000$		$\sum_{i=1}^7 (W_i \times Cr_i \text{ GPA}) = 3352$

$$\text{Institutional Score} = \frac{\sum_{i=1}^7 (W_i \times Cr_i \text{ GPA})}{\sum_{i=1}^7 W_i} = \frac{3352}{1000} = 3.35$$

Grade = **A**

Descriptor = **VERY GOOD**

Date : March 27, 2011



HARIPAN
Director

- This certification is valid for a period of Five years with effect from March 27th 2011
- An institutional CGPA on a four point scale in the range of 3.01 - 4.00 denotes A grade (Very Good), 2.01 - 3.00 denotes B grade (Good), 1.51 - 2.00 denotes C grade (Satisfactory)
- Scores rounded off to the nearest integer

EC/55/RAR/105

Peer Team Report on Institutional Re-Accreditation of Union Christian College, Aluva, District Ernakulam, Kerala-683102	
Section I: GENERAL	Information
1.1 Name & Address of the Institution:	Union Christian College, Aluva, District Ernakulam, Kerala-683102.
1.2 Year of Establishment:	<ul style="list-style-type: none"> June 8th, 1921
1.3 Current Academic Activities at the Institution (Numbers):	<ul style="list-style-type: none"> B.A/B.Sc-14 and PG Courses- 12
<ul style="list-style-type: none"> Faculties/ Schools: 	<ul style="list-style-type: none"> Arts, Computer Applications & Sciences (UG & PG)
<ul style="list-style-type: none"> Departments/ Centres: 	<ul style="list-style-type: none"> 26
<ul style="list-style-type: none"> Programmes/ Courses offered: 	<ul style="list-style-type: none"> U.G. 5-Arts, 9 Sciences; P.G. 5 Arts, 6 Sciences, 1 Computer Applications; and 4 Vocational
<ul style="list-style-type: none"> Permanent Faculty Members: 	<ul style="list-style-type: none"> Sanctioned-87, Permanent – 81
<ul style="list-style-type: none"> Permanent Support Staff: 	<ul style="list-style-type: none"> Sanctioned-46, Permanent-42 and one Technical
<ul style="list-style-type: none"> Students: 	<ul style="list-style-type: none"> UG- 464 Male & 976 Female: Total 1440; PG- 62 Male & 417 Female: Total 479; Research Scholars- 14 Male & 19 Female: Total 33
1.4 Three major features in the Institutional context (As perceived by the Peer Team):	<ul style="list-style-type: none"> Institution with an illustrious legacy and acclaimed educational contribution. Grant-in-aid, Minority, UGC 2(f) and 12(B) recognized co-educational institution permanently affiliated to Mahatma Gandhi University, Kottayam, Kerala. Semi-urban in nature, offers good number of UG and PG programmes which caters to the needs of socially & economically weaker sections of the society.
1.5 Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	<ul style="list-style-type: none"> 16th -18th March 2011
1.6 Composition of the Peer Team which Undertook the on- site visit:	
Chairperson	Dr. Latha Pillai Pro-Vice-Chancellor, Indira Gandhi National Open University Maidan Garhi, New Delhi – 110 068
Member	Dr. N. D.Wani Former Director Colleges, Department of Higher Education, Jammu & Kashmir
Member	Prof. Muthukalingan Krishnan Professor and Head of Department of Environmental Biotechnology, Bharathidasan University, Tiruchchirappalli-620024, Tamil Nadu
NAAC Coordinator	Mr. B. S. Ponnudiraj Assistant Adviser, NAAC, Bangalore-560072, Karnataka

Section I: CRITERION WISE ANALYSIS	
2.1 Curricular Aspects:	
2.1.1 Curriculum Design & Development:	<ul style="list-style-type: none"> • Curricula design aimed to develop global competencies. • Faculty involved in Boards of Studies of the Parent University. • International linkages promoted through Human Potential and Community Development, and United Board of Christian Higher Education.
2.1.2 Academic Flexibility:	<ul style="list-style-type: none"> • Good number of programs at UG, PG level along with few certificate / Diploma courses. • Scope to introduce new schemes like Commerce, Law, self-financed courses.
2.1.3 Feedback on Curriculum	<ul style="list-style-type: none"> • Mechanism adopted for obtaining feedback from students • Community and alumni feedback are collected systematically.
2.1.4 Curriculum Update	<ul style="list-style-type: none"> • Curriculum adopted as per University's norms. • About 10 faculty members on Boards of Studies of the University take initiative on curriculum revision.
2.1.5 Best Practices in Curricular Aspects (If any):	<ul style="list-style-type: none"> • Involvement of students in academic and physical activities of the institution. • Coaching classes for SC/ST and minority sections of the society.
2.2 Teaching-Learning & Evaluation:	
2.2.1 Admission Process and Student Profile	<ul style="list-style-type: none"> • Admission process is transparent and merit based. • Social equity guaranteed as per University and Government norms.
2.2.2 Catering to the Diverse Needs:	<ul style="list-style-type: none"> • Students entry level knowledge are assessed • Remedial classes for disadvantaged students and appropriate arrangements for advanced learners are available. • Tutorials for slow learners conducted.
2.2.3 Teaching-Learning Process:	<ul style="list-style-type: none"> • Academic Calendar and Teaching Plan prepared by all departments. • Departmental Library facilities are available. • Field visits / exploration studies form a part of experiential learning.
2.2.4 Teacher Quality:	<ul style="list-style-type: none"> • The staff recruitment is as per the guidelines of UGC, Government and University. • Active participation of faculty in seminars/workshops/conferences at national and international level. • Few faculty members have received National and State Awards.
2.2.5 Evaluation Process and Reforms:	<ul style="list-style-type: none"> • Students and Parents are kept well informed about the progress. • Choice Based Credit and Semester System (CBCSS) is followed at UG level. • Examination guidelines are adhered to.

2.2.6 Best Practices in Teaching-Learning and Evaluation (If any):	<ul style="list-style-type: none"> Interactive teaching-learning methods are used. Language laboratory is made use of. Free Open Source Software(FOSS) is made use of.
2.3 Research, Consultancy & Extension:	
2.3.1 Promotion of Research:	<ul style="list-style-type: none"> Many members of the faculty significantly involved in research – major and minor research projects. 8 departments are recognized for research, 24 recognized guides, and 9 have guided 20 scholars. Management supportive in terms of financial assistance for encouragement of research.
2.3.2 Research and Publications Output:	<ul style="list-style-type: none"> Over 54 research publications, 2 research journals, 107 research articles published. 16 Ph.Ds' produced during last five years and others involved in completing research programmes. Five departments have made good contribution in research field. Two departments have DST-FIST. Research projects sanctioned in 2011 is approximately Rs.28/- lakhs
2.3.3 Consultancy:	<ul style="list-style-type: none"> Limited consultancy provided without honorarium. Expertise needs to be built up for Consultancy.
2.3.4 Extension Activities:	<ul style="list-style-type: none"> NCC, NSS, Nature Club, Science forum, all subject associations / clubs involved in outreach programmes. Institution has set a good network with different Social Service Organizations, viz., Kudumbasree, Energy Conservation Club, Pollution Control Board.
2.3.5 Collaborations:	<ul style="list-style-type: none"> The college has collaborations for international academic exposure The linkages / collaborations are utilized.
2.3.6 Best Practices in Research, Consultancy & Extension (If any):	<ul style="list-style-type: none"> Research atmosphere in the Campus Significant publications made by a few departments–Botany, Chemistry, and Malayalam. The college publishes two journals.
2.4 Infrastructure and Learning Resources	
2.4.1 Physical Facilities for Learning:	<ul style="list-style-type: none"> Adequate infrastructure in pace with academic growth in the campus. Hostel accommodation in 5 girls hostels and one boys hostel Campus in 42 acres eco-friendly with sufficient additional support facilities. Concerted attempts to promote green campus and waste disposal management systems.
2.4.2 Maintenance of Infrastructure:	<ul style="list-style-type: none"> Sufficient budgetary provision made for necessary maintenance. Works Department maintains college infrastructure.
2.4.3 Library as a Learning Resources	<ul style="list-style-type: none"> College Library accession is automated.

	<ul style="list-style-type: none"> • N-List in library started. • Online journals are available.
2.4.4 ICT as Learning Resources:	<ul style="list-style-type: none"> • Computers with internet facility to be enhanced. • Audio-visual facilities are available. • Faculty and students are engaged in computer training.
2.4.5 Other Facilities:	<ul style="list-style-type: none"> • Separate Hostels for girls and boys. • Health Centre is available. • Parking and Canteen facilities are available.
2.4.6 Best practices in Infrastructure and Learning Resources(if any)	<ul style="list-style-type: none"> • Beautiful campus with healthy atmosphere. • Library facilities extended to neighbouring college students.
2.5 Student Support and Progression:	
2.5.1 Student Progression:	<ul style="list-style-type: none"> • Good performance in University Examinations. • Many University ranks are obtained consistently over the years by the College. • The College has produced 3 IAS/IPS officers in the last 5 years.
2.5.2 Student Support:	<ul style="list-style-type: none"> • Commendable contribution in sports and physical education at University and National level • Satisfactory contributions of Placement and guidance cells. • Good number of scholarships are awarded.
2.5.3 Student Activities:	<ul style="list-style-type: none"> • Strong Students Union exists. • Good cultural and sports activities. • College Magazines facilitates creative writings.
2.5.4 Best Practices in Student Support and Progression (If any):	<ul style="list-style-type: none"> • Active Alumni participation in the development of the college. • Subject specific students activities through different associations / clubs
2.6 Governance and Leadership:	
2.6.1 Institutional Vision and Leadership:	<ul style="list-style-type: none"> • A proactive management. • Responsive leadership. • Vision 2020 - developed by the college.
2.6.2 Organizational Arrangements:	<ul style="list-style-type: none"> • Well defined administrative and academic structure. • Internal Quality Assurance Cell networks effectively with all constituents
2.6.3 Strategy Development and Deployment:	<ul style="list-style-type: none"> • Well planned development projects. • Good office automation.
2.6.4 Human Resource Management:	<ul style="list-style-type: none"> • Most of the sanctioned posts are filled. • Career development programs are encouraged.
2.6.5 Financial Management and Resource Mobilization:	<ul style="list-style-type: none"> • Self-financing courses were introduced. • Optimal utilization of budget. • Strong financial support from alumni and parents.
2.6.6 Best Practices in Governance and Leadership (If any):	<ul style="list-style-type: none"> • Democratic structure of governance. • Training the young faculty for leadership.
2.7 Innovative Practices:	
2.7.1 Internal Quality Assurance System: (IQAS)	<ul style="list-style-type: none"> • IQAC is effective with academic requirements of the college.

	<ul style="list-style-type: none"> • Endowments by Alumni and faculty are appreciable. • Initiative in institutionalizing best practices demand attention.
2.7.2 Inclusive Practices:	<ul style="list-style-type: none"> • Representation of disadvantaged section of society quite high. • The ratio of boys to girls is 1:3 among the students.
2.7.3 Stakeholder Relationships:	<ul style="list-style-type: none"> • Very healthy relationship with stakeholders. • More efforts are required to meet the expectations in the teaching-learning and overall progression of stakeholders.

Section III: OVERALL ANALYSIS	Observations
3.1 Institutional Strengths:	<ul style="list-style-type: none"> • A premier institution of higher education in semi urban location with secular outlook. • Excellent academic ambience at campus. • Strong alumni and parent contribution to the academic and financial growth of the institution. • Good academic performance at UG and PG level.
3.2 Institutional Weaknesses:	<ul style="list-style-type: none"> • More efforts to be made for students progression. • Only few Job oriented/Add on courses introduced. • Placement and Counseling cell need to be strengthened.
3.3 Institutional Opportunities:	<ul style="list-style-type: none"> • Scope for introduction of self employed/vocational courses is high. • More academic and collaborative programmes may be initiated. • Scope to take up minor and major research projects and benefit other neighboring institutions through expertise. • The college can explore the possibilities of getting more funds from UGC/DST/DBT, etc. • Coaching centre for competitive examinations may be strengthened further.
3.4 Institutional Challenges:	<ul style="list-style-type: none"> • Institution may explore the possibility of getting autonomous status. • Expansion of programmes in terms of management and commerce, Law, Food Science & Technology, Fine Arts for benefit of student community. • Residential facilities for staff and boys students need to be considerably increased. • Vision and Mission with Action in planned manner.

Section IV: Recommendations for Quality Enhancement of the Institution

1. Range of programmes need to be broadened to include Commerce, BBA, Food Science & Technology, Fashion & Designing, farming, dairy, Piggery, Poultry, Mushroom cultivation and horticulture.
2. Department of Music and Fine Arts may be set up to sustain and promote the regional culture.
3. Vocational programs need to be expanded and made effective.
4. Wi-fi campus and technology integration may be established.
5. College may endeavour to identify and seek scholarships and grants from various funding agencies.
6. Active academic collaborations between the departments of the college may be encouraged.
7. Students' support system needs augmentation which may make them to participate more at national and international level.
8. The institution may make concerted efforts to transform into an Autonomous College.

I agree with the observations of the Peer Team as mentioned in the Report.

Name and Signature of the Head of the Institution with Office Seal and date

Signatures of the Peer Team Members:

Name and Designation		Signature with date
Dr. Latha Pillai Pro.Vice Chancellor, Indira Gandhi National Open University, Maidan Garhi, New Delhi-110 068.	Chairperson	
Prof. Muthukalingan Krishnan Professor and Head of Department of Environmental Biotechnology, Bharathidasan University, Tiruchchirappalli-620024, Tamil Nadu	Member	
Dr. N. D.Wani Former Director Colleges, Department of Higher Education, Jammu & Kashmir	Member	
Mr. B. S. Ponnudiraj Assistant Advisor, NAAC, Bangalore – 560072, Karnataka	NAAC Coordinator	



3-4(012)/2012(UG)(XII PLAN)/KLMG012/SWRO

The Accounts Officer
South Western Regional Office
University Grants Commission
P.K. Block, Palace Road
Gandhinagar, Bangalore

21-Mar-14

Sub: Release of Grants-in-aid to UNION CHRISTIAN COLLEGE, ALUVA, ERNAKULAM DISTRICT for the year 2013-2014 under "General Development Assistance" (Plan)

Sir/Madam,

I am directed to convey the sanction of the University Grants Commission for payment of grant of Rs.2865512/- for the year 2013-2014 equivalent to 40% of XIIth Plan allocation to UNION CHRISTIAN COLLEGE, ALUVA, ERNAKULAM DISTRICT for "General Development Assistance" (Plan), expenditure to be incurred during 2013-2014.

NAME OF THE SCHEME	HEAD OF ACCOUNT	ALLOCATION Rs.	GRANT TO BE SANCTIONED BY 2013-14 40% OF ALLOCATION Rs.	GRANT ALREADY SANCTIONED IN 2012-13 AS Ad-hoc GRANT (Other than Building) Rs.	GRANT NOW BEING SANCTIONED (Other than Building) Rs.	BALANCE Rs.
General Development Assistance (Block Grant)	2(B)	7726280/-	3090512/-	225000/-	2865512/-	4635768/-

You are requested to utilise the sanctioned amount proportionately as detailed below :-

GENERAL - 2220771.8/-	SC - 429826.8/-	ST - 214913.4/-
-----------------------	-----------------	-----------------

- The amount released may be utilised within the allocated amount under Grant-in-aid General (31) and Capital Assets (35) as conveyed vide letter no. 3-4(012)/2012(UG)(XII PLAN)/KLMG012/SWRO dated 21-Mar-2014. Re-appropriation of funds between Grant-in-aid General (31) and Capital (35) is not permissible.
- The sanctioned amount is debitable to 2(B) and is valid for payment during the financial year 2013-2014 only.
- The amount of the Grant shall be drawn by the Accounts Officer/Drawing and Disbursing Officer, South Western Regional Office, UGC, Bangalore on the Grants-in-aid bill and shall be disbursed to and credited to the Principal of the College through Electronic mode as per the following details:
 - Details (Name & Address) of Account Holder: UNION CHRISTIAN COLLEGE, ALUVA, ERNAKULAM DISTRICT
 - Account No: 2176873968
 - Name & address of Bank branch: CENTRAL BANK OF INDIA, ALWAYE,(ALUVA),K.R TOWERS,MARKET ROAD,ERNAKULAM, KERALA-683101
 - MICR Code: 682016004
 - IFSC Code: CBIN0280964
 - Type of Account: SB
- This grant can be availed by aided colleges/courses only.
- The grant is subject to the adjustment on the basis of utilisation certificate in the prescribed proforma submitted by the College.
- The college shall maintain proper accounts of the expenditure out of the grants which shall be utilised only on approved items of expenditure.
- The College may follow the General Financial Rules, 2005 and take urgent necessary action to amend their manuals of financial procedures to bring them in conformity with GFRs, 2005 and those don't have their own approved manuals on financial procedures may adopt the provisions of GFRs, 2005 and instructions/guidelines

8. The Utilization Certificate to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to UGC as early as possible after the close of current financial year.
9. The assets acquired wholly or substantially out of University Grants Commission's Grant shall not be disposed or encumbered or utilised for the purposes other than those for which the grant was given without proper sanction of the UGC and should at any time the College ceased to function, such assets shall revert to the University Grants Commission.
10. A Register of Assets acquired wholly or substantially out of the grants shall be maintained by the College in the prescribed proforma.
11. The grantee institution shall ensure the Utilization of grants-in-aid for which it is being sanctioned/paid. In case of non-utilization/part utilization thereof, the simple interest @ 10% per annum as amended from time to time on unutilised amount from the date of drawal to the date of refund as per provisions contained in General Financial Rules of Govt. of India will be charged.
12. The College shall follow strictly the Government of India/UGC's guidelines regarding implementation of the reservation of policy [both vertical (for SC, ST and OBC) and horizontal (for person with disability etc.)] in teaching and non-teaching posts.
13. The College shall fully implement the Official Language Policy of Union Govt. and comply with the Official Language Act, 1963, and Official Languages (Use for Official Purposes of the Union) Rules, 1978 etc.
14. The sanction is issued in exercise of the delegation of powers vide UGC office order No.130/2013[F.No.10-11/12(Admn. IA & B)] dated 28/5/2013.
15. The College shall take immediate action for its accreditation by National Assessment and Accreditation Council (NAAC).
16. The accounts of the College will be open for audit by the Comptroller and Auditor General of India in accordance with the provisions of General Financial Rules, 2005.
17. The annual accounts i.e. balance sheet, income and expenditure statement and statement of receipts and payments are to be prepared strictly in accordance with the Uniform Format of Accounting prescribed by the Government.
18. The funds to the extent are available under the Scheme.
19. This issues with the concurrence of IFD vide Diary No. 7783 and dated 04-03-2014 respectively.
20. An amount of Rs.0/- out of the grant of Rs. 225000/- sanctioned vide letter No.3-4(012)/2012(UG)(XII PLAN)/KLMG012/SWRO dated 30-03-2013 has been utilized by the College for the purpose for which it was sanctioned and noted in Grants-in-aid Register at Page No - 290.
21. The grant is sanctioned on the basis of the information/documents provided by the college. In case of any discrepancy in the above information and the college is found ineligible for the above grant at the time of expert committee meeting the college is liable to refund the sanctioned grant along with interest.
22. The college shall ensure involvement of Technical advice on and supervision of specifications and construction standards.
23. College should abide by the UGC Regulation on curbing the menace of ragging in the Higher Educational Institution 2009, and shall take action in accordance with these regulations against those found guilty of ragging and/or abetting ragging actively or passively or being part of an conspiracy to promote ragging.

Yours faithfully

Copy to

1. The Principal
UNION CHRISTIAN COLLEGE
ALUVA
ERNAKULAM DISTRICT - 683 102
(He/She is requested to abide by these instructions/guidelines of sanction order.)

(Dr.N. Gopukumar)
Deputy Secretary

2. Officer of Director General of Audit, Central Revenues, AGCR Building, I.P. Estate, New Delhi
- 3 The Director

Department of Collegiate Education
Vikas Bhawan, Thiruvananthapuram - 33

4. The Dean/Director, College Development Council
MAHATMA GANDHI UNIVERSITY
PRIYADARSHINI HILLS (PO)
KOTTAYAM - 686 560

5. Office copy

(Neethu S Thulaseedharan)
Education Officer



ज्ञान-विज्ञान विमुक्तये

F.No 3-4(012)/2012(UG)(XII PLAN)/KLMG012/SWRO

The Principal
UNION CHRISTIAN COLLEGE
ALUVA

ERNAKULAM DISTRICT - 683 102

UNIVERSITY GRANTS COMMISSION
SOUTH WESTERN REGIONAL OFFICE
P.K. Block, Palace Road, Gandhinagar
Bangalore-560 009.
Phone : (080) 2228 0380 Fax : (080) 2228 0381

21-Mar-14

Sub: XII Plan allocation under General Development Assistance to Colleges –

Sir/Madam,

I am directed to convey the approval of the UGC to UNION CHRISTIAN COLLEGE, ALUVA, ERNAKULAM DISTRICT, the XIIth plan allocation under the "General Development Assistance" (GDA) for the development of undergraduate and postgraduate education. The UGC in the XIIth plan has decided to provide grants under General Developmental Assistance as 'Block Grant'. The college will have the flexibility to incur expenditure as per the needs of the college. Accordingly, grant allocated under GDA to the college is under two object heads viz. Grant-in-aid General(31) and Capital Assets (35).

Capital Assets (35) 80% of total allocation Rs.	Grant-in-aid General (31) 20% of total allocation Rs.	Total Rs.
6181024/-	1545256/-	7726280/-

- The aforementioned allocation is for the development of undergraduate and postgraduate education. The amount released may be utilised within the allocated amount under Grant-in-aid General (31) and Capital Assets (35) as conveyed vide letter no. 3-4(012)/2012(UG)(XII PLAN)/KLMG012/SWRO dated 21-Mar-2014. Re-appropriation of funds between Grant-in-aid General (31) and Capital (35) is not permissible.
- The heads under which college can incur expenditure include Books and Journals, Equipment, Instrumentation facilities, Construction/Extension/Renovation of building, improvement of existing premises, competence building initiatives in colleges, Educational innovation, Field Work/Study Tours, Extension Activities, ICT in education, Common room and toilet for women, Day Care Centre, Human Rights and Duties Education and, Career and Counseling Cell.
- The college has to constitute a Planning Board with Principal as Chairman and Heads of departments, IQAC Coordinator, Librarian Bursor/Senior person from the Accounts department, as members.
- The Planning Board will finalise allocation to Undergraduate and Postgraduate departments after identifying the heads and deciding on priorities of departments.
- The eligibility criteria for Undergraduate and Postgraduate departments to get assistance under the scheme is given in the XIIth plan guidelines for General Development Assistance Grant to Colleges. The Planning Board may refer to the guidelines before finalizing allocation to Undergraduate and Postgraduate departments.
- Expenditure on construction/extension/renovation of building should not exceed 50% of the total grant under GDA. The college must inform the requirement of funds or otherwise for construction/extension/ renovation of building to UGC-SWRO, as per the procedure given in the XIIth Plan guidelines for the scheme of Development Assistance to colleges for the construction of buildings during the XIIth Plan to enable release of first installment grant for construction/extension/renovation purpose.
- After finalizing the budget allocation for Undergraduate and Postgraduate education, the Planning Board should submit the details as per Annexure-I and Annexure-II in the XIIth Plan guidelines alongwith building committee resolutions, in case funds required for Construction/Extension/Renovation, to the UGC, SWRO, Bangalore, on or before 31st June, 2014.

Yours faithfully

N. G. Srinivas



Government of India
Ministry of Human Resource Development
Department of Higher Education
Statistics Division
New Delhi

Certificate

Reference No. C-11742-2016

This is to certify that Dr. Manju M George of U.C. College, P.B. No.5, Aluva - 683 102 has successfully uploaded the data of All India Survey on Higher Education (AISHE) 2016-2017.

(B N Tiwari)

Dated: 24/04/2017

Deputy Director General

