

# MAR ATHANASIUS COLLEGE

KOTHAMANGALAM, KERALA – 686 666



## SELF STUDY REPORT FOR ASSESSMENT AND RE-ACCREDITATION



SUBMITTED TO  
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL (NAAC)  
BANGALORE- 560 072

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## PREFACE

The College, managed by the Mar Athanasius College Association, had a humble beginning way back in 1955, with 127 students and staff strength of 15. Since then the College made consistent progress providing higher education to many generations of youth in and around central Kerala. Today, this minority educational institution, situated in a rural hinterland, excels in academics, sports and games as well as in the realm of social service.

In spite of the fact that the majority of students enrolling in the College are from the economically and socially backward sections of society, the College strives to impart to them quality education, which in turn will lead to economic stability and security. We are proud of the fact that the College was accredited at 'A Grade' by NAAC in 2002 and reaccredited at 'A Grade' in 2010. The College has also been selected as a 'College with Potential for Excellence' by UGC.

As we stand at the threshold of the third cycle of NAAC accreditation, it gives me immense satisfaction to present this Self Study Report (SSR). This report is a comprehensive representation of the efforts being put in to maintain the highest standards of excellence in academics and related fields. The report also traces our attempts to implement suggestions made by the Peer Team during the previous visit.

With a glorious past and focused present, the students, the faculty and the Management of Mar Athanasius College looks forward to a promising future.

Dr. Densely Jose

Principal

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## EXECUTIVE SUMMARY

The College is a minority institution managed by Mar Athanasius College Association, a charitable society registered under the Charitable Societies Act. Mar Athanasius College is a premier institution of higher education situated with rural hinter land settings of Kerala. It has an impressive history of six decades in imparting value education in central Kerala. In 2002 a committee of Vice Chancellors selected it as one among the top ten Colleges in the state. The college also has the rare distinction of being the first College in Kerala to be accredited with *A Grade* (Institutional score-85) by the National Assessment and Accreditation Council (NAAC) in 2002. When the reaccreditation was done in 2010 the College was placed again in ‘A grade’ with a GPA of 3.22. In 2009 the College was given the status of *College with Potential for Excellence (CPE)* of UGC and it was later extended up to 31 March 2019. The College was selected as the ‘Best College in Sports’ in 2014 by the Sports Council of Kerala. The college was also honoured with *Palathully Award* (2007), *Bhoomimithra Award* (2008), *National Environmental Awareness Award* (2008), and the *Green Award* (2011). With all such laurels the College now long for academic autonomy to delve its quest for excellence.

When the College started functioning in the year 1955 with intermediate classes, there were only 127 students and 16 teachers. In the academic year 1957-58, Under Graduate courses and in 1965-66, Post Graduate courses commenced. Currently there are 13 Under Graduate and 16 Post Graduate courses spread over in science, commerce, arts and humanity streams. The College also has four research centers in English, Chemistry, Physics and Economics with excellent facilities. At present there are 1812 students, 117 teachers and 61 non-teaching support staff. Of the permanent teaching faculty 62 percent have research degrees of either Ph. D or M Phil and a large number of them are merited with University ranks in the qualifying examinations.

The central focus of the College has always been on academic excellence by both students and teachers. The students of the College have secured 78 ranks in the Mahatma Gandhi University Examinations since 2000. In the last five academic years alone, the students of the College bagged 31 ranks in University examinations. The College has vibrant alumni and its members adorn many high positions within and outside the state. The teaching faculty has also been pursuing their academic interest with great zest and zeal by taking up major and minor research projects and publishing research papers in reputed journals. The Department of Science and Technology (DST), Govt. of India, awarded Rs. 79 lakhs under the ‘FIST Programme- 2011’ to strengthen teaching and research facilities of Science Departments in the College.

The College finds its place on top of the ladder among reputed institutions nearby in terms of physical infrastructure and amenities to the student community in the campus. Internet facility was made available to students as early as in 1996, the library functions fully automated since 1997 and a full time

student counsellor is available in the campus. Besides, the College has well equipped laboratories, air-conditioned seminar halls, 11 smart classrooms, reprographic centre, non-resident students' centre, Wi-Fi connectivity, instrument maintenance facility, academic technology centre, network resource center, computer centers with internet access, sophisticated instrumentation centre, DST-FIST lab, indoor stadium, indoor shooting range, Olympic standard swimming pool, women's hostels, boy's hostel, waste water treatment plant etc. The College happens to be the first musical campus in the country.

The College library is a treasure house of knowledge with around 62,650 books, 62 journals, 80 periodicals, and 800 reference texts. The library is an active participant in the Information and library network of UGC (INFLIBNET).

The College quite rightly boasts of its brilliant achievements in the field of sports and games. The Sports Authority of India (SAI) singled out the College as a sub-centre in Athletics (2007), which is the first of its kind in Mahatma Gandhi University. The College is the first to receive financial assistance from Kerala Cricket Association (KCA) to set up indoor net facility for training budding cricketers.

In the M. G University Athletic Meet, the college athletic team became champions in the Men's section in the years 2006, 2007, 2008, 2010, 2011, 2012, 2013 and 2014 (eight times) and was runner up twice - in 2005 and 2009. The College Athletic Team won the Championship for men and women in the College Games organized by the *Sports Council of Kerala* (2013-14).

Anilda Thomas, Sheena N V, Arunima P. M. and Vishnu Prasad represented India in various International events such as Common Wealth Games, Glasgow (Scotland), World Athletic Championship (Moscow), Asian Athletic Championship (Pune), Asian Indoor Athletic Championship Hangzhou (China), World University Games, Kazan, (Russia), Junior SAF Games (Ranchi), and Commonwealth Chess Championship (Chennai) during 2011-15.

The College won University championship in Football in 1997, 1998, 2000, 2002, 2004, 2008, 2009 and 2012 (eight times) and runner up in 1996, 1999, 2001, 2005, 2011 and 2013 (six times). It was also University champions in Volleyball thrice - in the years 2007, 2011 and 2012, runner up twice in 2008 and 2009 and placed second runner up in 2010. The college won University championship in cross country in the years 1995, 1999, 2007 and 2010 and runner up thrice in 2006, 2008 and 2009.

The year long Diamond Jubilee Celebrations (2015) of the College was inaugurated early this year by His Holiness Moran Mor Ignatius Aphrem-II, the Patriarch of Antioch and All the East and the supreme head of Universal Syrian Jacobite Church in the presence of Sri. Oommen Chandy, the Honorable Chief Minister of Kerala. As a part of the celebration the Department of Physics organized an International Conference on 'Frontiers of Plasma Physics and Technology' in Kochi during 13-17 April 2015. The Conference was organized in cooperation with International Atomic Energy Agency (IAEA), FAIR

(Facility for Antiproton and Ion Research, Germany), Technical University of Darmstadt, Germany, and Tu Wien (Technical University of Vienna, Austria). 150 delegates from 20 countries participated in the conference.

Dr. A.P.J. Abdul Kalam, the former President of India, visited the college on 6 June 2010 and addressed the students on 'Empowering the Youth towards Vision 2020'. Apart from these, scientists from Indian Institute of Science, Indian Institute of Technology, Raman Research Institute, Mahatma Gandhi University, Cochin University of Science and Technology (CUSAT), etc. have visited the college in various occasions.

The saga of Mar Athanasius College is one of the never-ending journeys with new landmarks conquered in quick successions. With newer milestones of Diamond Jubilee in sight and with a dream and drive to build new generations of hardworking learners, the story of Mar Athanasius College goes on.

Mar Athanasius College of Engineering (MACE), Kothamangalam situated in the same campus enjoys a unique and prestigious position in the realm of higher education in Kerala. Established in 1961, MACE has made the best use of its potential to reach the present status, out of sheer commitment and hard work. MACE rightly claims a legacy of its own as the first engineering college in Asia under a Christian Management. It is one of the pioneers in engineering education in Kerala and one among the only three Government Aided engineering colleges in the state. The college is recognized by the All India Council for Technical Education (AICTE) and affiliated to Mahatma Gandhi University, Kottayam.

Mar Athanasius International School, the latest venture of the Mar Athanasius College Association is also functioning in the same campus. The School is defined to be a new generation school, aimed at providing international standards in education. The school is affiliated to the Cambridge International Examinations, U. K. vide Registration No-IN715. The International General Certificate of Secondary Examination (IGCSE) is a globally recognized qualification, offered by the CIE. The School is also affiliated to ICSE (Indian Council for Secondary Education) vide Affiliation No. KE-122/2011. The school caters to the diverse academic needs of the students with a global perspective. The School has a student strength of around 500 at present and is aiming to conquer the challenging horizons in the field of primary education in Kerala by providing the best and the unique.

Mar Baselios College, situated in Adimaly, is a Self- Financing college affiliated to Mahatma Gandhi University which is owned and managed by Mar Athanasius College Association, Kothamangalam. The higher education dreams of aspiring young generations of the High Ranges of Kerala have been fructified by starting the college in Adimaly. The college started functioning in the year 2003 and is offering B.Com (Computer Application), BCA, BBA, M.Com (Finance), MSW and MTA. The College has now grown in to an educational institution enjoying high reputation.

## **SWOC analysis of the institution**

The accreditation and reaccreditation of the College with 'A' Grade by the NAAC peer team was a huge morale booster for all stakeholders including the Management. The Management and staff were keen to sustain and improve standards for the benefit of students and community around the College in tune with the vision, mission and objectives of the institution.

The Management and the IQAC felt that a self evaluation was inevitable to position the College attuned with the emerging academic demands and knowledge explosion. SWOC analysis as a powerful tool was proposed to build a vibrant future on the present strength and opportunities. A systematic SWOC analysis with the following objectives was conducted.

- Explore the current opportunities before the College for further expansion and diversification.
- Rejuvenate the system to further enhance the quality of performance at all levels in the College.
- Overcome the lapses of the institution, by reinventing the inner strength
- Assess the baseline effectively for enabling the Management to initiate a strategic planning.

SWOC analysis was administered in three segments of stakeholder constituencies. Level 1 was for the College Management segment. Level 2 was conducted among a representative group of 35 persons from students, teaching and non-teaching staff and the PTA. Finally at level 3, the points and suggestions generated from levels 1 and 2 were discussed and validated by a five member Process Validation Group (PVG) consisting of all the segments participated in the evaluation process.

The SWOC ideas generated during the process validated by PVG were as follows:

### **Strengths identified**

- ❖ Effective Management
- ❖ NAAC Reaccreditation with A grade
- ❖ College with Potential for Excellence (CPE)-Phase I and II
- ❖ 60 years of legacy
- ❖ FIST support from DST
- ❖ Excellent Infrastructure
- ❖ Competent teaching faculty
- ❖ Well functional library with more than 60,000 books
- ❖ New generation courses
- ❖ Well equipped laboratories



- ❖ Sophisticated Instrumentation Centre
- ❖ Wi-Fi campus
- ❖ Eco-friendly campus
- ❖ Over 60000 Alumni
- ❖ Demand pressure for admission
- ❖ National and International level recognition in Sports

### **Weaknesses identified**

- ❖ First generation learners as students
- ❖ Under utilization of library facilities
- ❖ Inadequate fund for extracurricular activities
- ❖ No staff quarters
- ❖ Lack of energy conservation strategies and energy auditing
- ❖ Conveyance difficulty for students
- ❖ Lack of refreshment facility
- ❖ Shortage of Technical staff
- ❖ Lack of effective waste management

### **Opportunities explored**

- ❖ Utilization of nonconventional energy
- ❖ New generation courses
- ❖ Up-gradation of ICT Technologies
- ❖ Community extension programmes
- ❖ Collaboration with National and International Organizations
- ❖ Consultancy services
- ❖ Organize International seminars
- ❖ Vocational training / Certificate courses
- ❖ Imparting value education
- ❖ Faculty / student exchange programmes
- ❖ Promotion of student Entrepreneurship Development Club
- ❖ Utilization of alumni resources

### **Challenge Perceived**

- ❖ Falling students standard due to entry level constraints
- ❖ Lack of Academic Autonomy
- ❖ Competition from self financing professional colleges
- ❖ Inconsistency of Govt. regulations
- ❖ Procedure hurdles in the appointment of staff
- ❖ Value erosion of student community

The SWOC analysis provided ample opportunity in formulating effective expansion strategy. The action plan thus formulated is being implemented by the Management and staff with cooperation from PTA and alumni of the College

## 1. PROFILE OF MAR ATHANASIUS COLLEGE

### 1. Name and Address of the College:

Name :	Mar Athanasius College	
Address :	Kothamangalam College P. O	
City : Kochi	Pin :686666	State : Kerala
Website :	www.macollege.in	

### 2. For Communication:

Designation	Name		Mobile	Fax	Email
Principal	Dr. Densely Jose	0485 2822512	949535 4563	0485 2822512	mac@macollege.in
IQAC Co-ordinator	Dr. Aby P. Varghese	0485 2822512	989582 3469	0485 2822512	iqac@macollege.in

### 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 (*Annexure I*)

6. Sources of funding: Grant-in-aid

7. a. Date of establishment of the college: 14/07/1955

b. University to which the college is affiliated: Mahatma Gandhi University, Kottayam, Kerala

c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks(If any)
i. 2 (f)	-	<i>Annexure II</i>
ii. 12 (B)	-	

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

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)? : Yes  
Date of recognition: 18/03/2010 (*Annexure III*)

b. for its performance by any other governmental agency? Yes  
DST-FIST, Date of recognition 15/02/2012 (*Annexure IV*)

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

Location *	Rural area with tribal concentration ( <i>Annexure V</i> )
Campus area in sq. mts.	250000 sq. mts.
Built up area in sq. mts.	19390.08 sq. mts.

11. Facilities available on the campus

- Auditorium/seminar complex with infrastructural facilities: ✓
- Sports facilities
  - i. play ground: ✓
  - ii. swimming pool: ✓
  - iii. gymnasium: ✓
- Hostel
  - Boys' hostel ✓
    - i. Number of hostels: 1
    - ii. Number of inmates: 80
    - iii. Facilities (mention available facilities)
  - Girls' hostel: ✓
    - i. Number of hostels :2
    - ii. Number of inmates: 70+140 = 210
    - iii. Facilities: Computers, Wi.-Fi, Library, and Recreation
- Working women's hostel: Nil
- Residential facilities for teaching and non-teaching staff: Nil

- Cafeteria: ✓
- Health centre ✓
  - i. First aid: ✓
  - ii. Emergency care facility: On Call
  - iii. Ambulance: On Call
  - iv. Health centre staff :-  
 Qualified doctor✓, Part-time✓  
 Qualified Nurse✓, Full time✓
- Facilities like banking: Nil, post office (✓), book shops (✓)
- Transport facilities to cater to the needs of students and staff: Nil
- Animal house: Nil
- Biological waste disposal: ✓
- Generator for management/regulation of electricity and voltage: ✓
- Solid waste management facility: ✓
- Waste water management ✓
- Water harvesting: ✓

12. Details of programmes offered by the college (Give data for current academic year)

Programme Level	SI No	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned Student Strength	No. of students admitted
UG	1	B Sc. Mathematics	3 years	Plus Two	English	32	37
	2	B Sc. Statistics	3 years	Plus Two	English	32	34
	3	B Sc. Physics	3 years	Plus Two	English	32	37
	4	B Sc. Chemistry	3 years	Plus Two	English	32	40
	5	B Sc. Botany	3 years	Plus Two	English	32	40
	6	B Sc. Zoology	3 years	Plus Two	English	36	38
	7	B A English	3 years	Plus Two	English	40	51
	8	B A Hindi	3 years	Plus Two	Hindi	30	33
	9	B A Economics	3 years	Plus Two	English	40	49
	10	B A Sociology	3 years	Plus Two	English	40	50
	11	B A History	3 years	Plus	English	40	48

				Two			
	12	B Com (Computer)	3 years	Plus Two	English	50	50
	13	B Com (Tax : Procedure and Practice)	3 years	Plus Two	English	30	38
PG	1	M Sc. Mathematics	2 years	Degree	English	15	15
	2	M Sc. Physics	2 years	Degree	English	12	14
	3	M Sc. Chemistry	2 years	Degree	English	10	12
	4	M Sc Botany	2 years	Degree	English	10	10
	5	M A Economics	2 years	Degree	English	19	14
	6	M A English	2 years	Degree	English	19	15
	7	M Com.	2 years	Degree	English	19	15
	8	M. Sc Biotechnology	2 years	Degree	English	20	13
	9	M. Sc Biochemistry	2 years	Degree	English	20	4
	10	M. Sc Microbiology	2 years	Degree	English	20	7
	11	M. Sc Zoology	2 years	Degree	English	15	10
	12	M. Sc Actuarial Science	2 years	Degree	English	15	14
	13	M. Sc. Statistics	2 years	Degree	English	15	9
	14	M. A History	2 years	Degree	English	15	4
	15	M. A Sociology	2 years	Degree	English	15	5
	16	M. Com International Business	2 years	Degree	English	15	15
Ph. D.	1	Physics					3
	2	Chemistry					5
	3	Economics					19
	4	English					14
Add-on courses	1	Math lab					
	2	Taxation					

13. Does the college offer self-financed Programmes? : Yes

Ten (Nine PG and one UG programmes)

14. New programmes introduced in the college during the last five years if any?

Yes, 7 New Programmes

- M.Sc. Actuarial Science (2012)
- M. Sc. Zoology (2012)
- M.Sc. Botany (2014)

- M.A. History (2014)
- M.Sc. Statistics (2014)
- M.A. Sociology (2014)
- M.Com International Business (2014)

15. List the departments:

Faculty	Departments	UG	PG	Research
Arts	English	√	√	√
	Hindi	√	-	-
	Economics	√	√	√
	History	√	√	-
	Sociology	√	√	-
Science	Chemistry	√	√	√
	Physics	√	√	√
	Mathematics	√	√	-
	Botany	√	√	-
	Zoology	√	√	-
	Statistics	√	√	-
Commerce	Commerce	√	√	-
Others	Biotechnology	-	√	-
	Biochemistry	-	√	-
	Microbiology	-	√	-
	Actuarial science	-	√	-
	International Business	-	√	-
	Tax: procedure and Practice	√	-	-

16. Number of Programmes offered under

- annual system: Nil
- semester system: 29
- trimester system: Nil

17. Number of Programmes with

- Choice Based Credit System: 13 UG Programmes
- Inter/Multidisciplinary Approach: Nil
- Credit and Semester System: 16 PG Programmes

18. Does the college offer UG and/or PG programmes 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	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor		*M	*F	*M	*F
	*M	*F	*M	*F	*M	*F				
Sanctioned State Government Recruited	-	-	6	15	13	40	30	9	1	-
Yet to recruit	-	-	-	-	9		-	-		
Self Financing Staff Recruited	-	-	-	-	48		14	11	1	1
Yet to recruit	-	-	-	-	-		-	-	-	-

\*M-Male \*F-Female

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.	-	-	4	9	6	11	30
M.Phil.	-	-	1	4	3	9	17
PG	-	-	1	2	4	20	27
Temporary teachers							
Ph.D.	-	-	-	-	3		3
M.Phil.	-	-	-	-	2		2
PG	-	-	-	-	43		43

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	2011-12		2012-13		2013-14		2014-15	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	77	131	84	128	83	137	83	152
ST	12	35	19	34	16	47	16	41
OBC	176	418	181	409	179	435	171	479
Differently abled	4	6	6	8	6	11	7	12
Minority	340	526	358	578	371	662	359	699
Total	543	1019	573	1049	580	1161	587	1245

24. Details on students 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	1524	308	-	-	-
Students from other states of India	3	-	-	-	-
NRI students	-	-	-	-	-
Foreign students	-	-	-	-	-
Total			-	-	-

25. Dropout rate in UG and PG (average of the last two batches) : 3.5%

26. Unit cost of education for the year 2013-2014

(a) Including the salary component: Rs. 43,032/-

(b) Excluding the salary component: Rs. 3,126/-

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

SI No	Name of the Programme/ Course	Ratio
UG		
1	B Sc. Mathematics	16:1
2	B Sc. Statistics	36:1
3	B Sc. Physics	24:1
4	B Sc. Chemistry	20:1
5	B Sc. Botany	24:1
6	B Sc. Zoology	36:1
7	B A English	34:1
8	B A Hindi	30:1
9	B A Economics	30:1
10	B A Sociology	40:1
11	B A History	35:1
12	B Com (Computer)	25:1
13	B Com (Tax : Procedure and Practice)	27:1
PG		
1	M Sc. Mathematics	4:1
2	M Sc. Physics	6:1
3	M Sc. Chemistry	5:1
4	M Sc Botany	3:1
5	M A Economics	7:1
6	M A English	7.5:1
7	M Com.	7.5:1
8	M. Sc Biotechnology	10:1
9	M. Sc Biochemistry	10:1
10	M. Sc Microbiology	10:1
11	M. Sc Zoology	6:1
12	M. Sc Actuarial Science	6:1
13	M. Sc. Statistics	6:1
14	M. A History	7:1
15	M. A Sociology	6:1
16	M. Com International Business	6:1

29. Is the college applying for Accreditation: Cycle 3

30. Date of accreditation

Cycle 1: 01/10/2002 Accreditation Result: A Grade with score 85  
 Cycle 2: 28/03/2010 Accreditation Result: A Grade with score 3.22  
 (Annexure VI).

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

32. Number of teaching days during the last academic year: 140

33. Date of establishment of Internal Quality Assurance Cell (IQAC):  
 07/02/2005

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

- AQAR 2010-11 submitted on 16-06-2011  
([www.macollege.in/userfiles/aqar\\_2010-11.pdf](http://www.macollege.in/userfiles/aqar_2010-11.pdf))
- AQAR 2011-12 submitted to NAAC online on 29th September 2012
- AQAR 2012-13 submitted on 16-06-2015  
([www.macollege.in/userfiles/aqar\\_2012-13.pdf](http://www.macollege.in/userfiles/aqar_2012-13.pdf))
- AQAR 2013-14 submitted on 16-06-2015  
([www.macollege.in/userfiles/aqar\\_2013-14.pdf](http://www.macollege.in/userfiles/aqar_2013-14.pdf))
- AQAR 2014-15 submitted on 16-06-2015  
([www.macollege.in/userfiles/aqar\\_2014-15.pdf](http://www.macollege.in/userfiles/aqar_2014-15.pdf))

## **CRITERION I: CURRICULAR ASPECTS**

### **1.1 Curriculum Planning and Implementation**

#### **1.1.1 The vision, mission and objectives of Mar Athanasius College**

##### **Vision**

To build up the community of people with character and integrity, courage and tenacity to promote the good and fight against the evil and to provide justice and fair play to all.

##### **Mission**

We are committed to prepare our students for life by imparting knowledge which focuses on academic competence, social skills and moral values.

##### **Goals**

Serve our neighborhood community through healthy practices in learning, research and extension.

##### **Objectives:**

- To make optimum use of infrastructure – existing as well as to be developed – for learning, research and extension.
- To provide student support programmes for the improvement of learners based on their individual capabilities.
- To inculcate research aptitude and attitude among members of the faculty and students.
- To introduce innovative and flexible curricular programmes.
- To introduce effective administrative and management policies for faculty recruitment and student enrollment.
- To evolve teaching, learning and evaluation methodologies which are responsive to social needs
- To undertake extensive academic and social activities among students and the local community with the aim of addressing the needs of the time.

#### **1.1.2 Development and deployment of action plans for effective implementation of the curriculum:**

The College is affiliated to the Mahatma Gandhi University, Kottayam and follows UGC norms and regulations strictly. Apart from that we publish academic calendar every year. Regular feedbacks are taken from the stakeholders. For maintaining discipline and curriculum framework, monitoring of class hours, strict class attendance on hourly basis, periodical teachers diary verification and individual teacher analysis by the College Management are

done. State, National and International level seminars and workshops are organized for the benefit of the teachers and students. The College invites eminent personalities from various fields to address and interact with faculty and students periodically. The College encourages faculty members to attend orientation/refresher/seminars/workshops from time to time to keep updated in their field of study. The College organizes factory and lab visits for students to give a firsthand exposure in their field of study.

#### 1.1.3 Procedural and practical support for the teachers to translate curriculum:

Syllabus oriented curriculum workshops are conducted by the University for the teachers. An academic calendar is published by the University and the College follows the same. University offers a web site and a live teacher's portal. The College also maintains a web site to enable effective curriculum transaction.

#### 1.1.4 Initiatives taken up by the Mar Athanasius College for effective curriculum delivery and transaction:

For effective curriculum delivery and transaction on the Curriculum, College ensures an academic calendar, teacher diary, e-learning initiatives, Academic Technology Centre (ATC), digital class rooms, Wi-Fi facility, Network Resource Centre, regular augmentation of library resources and smart class rooms.

#### 1.1.5 Institutional network and interaction with industry, research bodies and the Universities:

The College has Memorandum of understanding (MOU) with Kerala Agricultural University, Thrissur, Central Institute of Fisheries Technology, Kochi, Rajiv Gandhi Center for Bio-Technology (RGCB), Thiruvananthapuram to carry out various research activities.

The College has collaborated with Cochin University of Science and Technology, Kerala Forest Research Institute (KFRI), Thrissur, Cashew Export Promotion Council of India Laboratory (CEPC), Kollam and Central Tuber Crops Research Institute (CTCRI) Thiruvananthapuram to conduct different academic activities.

The College has liaison with Actuarial society of India, Zoological Society of Kerala, Kerala Mathematical Association, Kerala Botanical Society and Cochin Chamber of Commerce.

The College also provides consultancy services to various educational institutions and industrial units.

### 1.1.6 Contributions of the institution and its staff members to the development of the curriculum:

Institution gives full freedom for its members to participate in the curriculum development of the University.

Following teachers are part of Postgraduate (PG) Board of studies of Mahatma Gandhi University

- Dr. Rajesh K. Thumbakara- Mathematics
- Dr. Aby P. Varghese- Zoology
- Dr. Vijayakumary M. S.- Economics

Following teachers are part of UG Board of Studies of Mahatma Gandhi University

- Dr. Rajesh K. Thumbakara- Mathematics
- Dr. Aby P. Varghese- Zoology
- Dr. Vijayakumary M. S.- Economics
- Sri. Bince Mathew- History
- Smt. Shiny John- Statistics
- Smt. Valsamma Mathai- Sociology
- Smt. Nivya Mariam Paul- Biochemistry

Many teachers of the College have attended curriculum revision workshops at the University when it is conducted.

### 1.1.7 Curriculum developed by the College:

The College has prepared the scheme and syllabus of the Post Graduate programmes in Actuarial Science and International Business. The teachers of the College prepared syllabi for UGC sponsored Add-on courses.

### 1.1.8 Institutional strategy to analyze the outcome:

The College periodically carries out input and output analysis of each batch of students to understand the learning outcome on curriculum. The stated objectives of the College and curriculum are based on the regular feedback from the stakeholders and necessary remedial measures are taken.

## 1.2 Academic Flexibility

### 1.2.1 Skill development courses offered by the institution:

- Certificate course in Math Lab (UGC sponsored Add-on course)
- Certificate course in Taxation (UGC sponsored Add-on course)

### 1.2.2 Twinning /dual degree offered:

The College is exploring the possibility of twinning with other universities once the college gets academic autonomy.

### 1.2.3 Academic flexibility

Under the Choice Based Credit and Semester System (CBCSS) of UG programmes, the students can select an open course during their fifth semester. 14 open courses are offered by the College. In addition, the institution can choose an elective course for the final semester from a set of electives offered by the University. Also under the Credit and Semester System (CSS) of PG Programmes the institution can choose elective courses from a set of electives offered by the University.

### 1.2.4 Self-financing programmes offered by the institution

The admission, curriculum, fee structure, teacher qualification and salary of the Self financing courses are as per the M.G University / Government / UGC norms. In admission the College follows a pattern of 50 % on merit quota and 50 % on management quota as directed by the Government.

The College offers following self financing programmes

- M. Sc Biotechnology
- M. Sc Biochemistry
- M. Sc Microbiology
- M. Sc Zoology
- M. Sc Actuarial Science
- M. Sc. Statistics
- M. A History
- M. A Sociology
- M. Com International Business
- B Com Model III

### 1.2.5 Additional skill acquisition programmes offered by the College:

- Additional Skill Acquisition programme (ASAP) with the financial support of Kerala State Higher Education Council.
- Walk with Scholar programme (WWSP) with the financial support of Kerala State Higher Education Council.
- Scholar Support Programme (SSP) with the financial support of Kerala State Higher Education Council.
- NET/PSC/Entry in service coaching classes with the financial support of UGC
- Communication and Personality development programmes
- Career Orientation programmes
- A language lab functions in the College

### 1.2.6 Flexibility in combining the conventional face-to-face and distance mode of education offered by the University:

The Mahatma Gandhi University offers only conventional face to face programmes to its affiliated colleges.

## 1.3 Curriculum Enrichment

### 1.3.1 Efforts taken by the College to supplement the Curriculum:

- International, National, state level seminars and workshops
- Activities of Science forum
- Debate club
- Quiz club
- Research infrastructure development
- Digital and smart class rooms
- Wi-Fi campus
- ICT enabled learning spaces

### 1.3.2 The institutional activities for enhancing learning experiences:

The College organizes various activities for enhancing learning experiences to meet the needs of the employment market:

- An Entrepreneurship Development (ED) club functions in the College
- Organize industrial visits
- Communication Skill and personality development programmes
- Language lab
- Collaborative research activities for PG students
- Sophisticated Instrumentation Center, DST-FIST lab and other research facilities in the College
- Active Website of the College
- Automated and Digital Library
- Network resource center (NRC)

### 1.3.3 Efforts to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc:

The College has been in the forefront of conducting environment protection programmes since its existence. Recognitions such as *Palathully Award* (2007) of The Malayala Manorama Daily, *National Environmental Awareness Award* (2008) of Ghadi and Village Industries, New Delhi, *Bhoomimithra Award* (2009) of Aluva Paristhithy sangam, and the *Green Award* (2011) of the Kerala State Biodiversity Board were won by the College for its sincere efforts to conserve nature.

The College regularly conducts activities for environment protection in collaboration with various NGOs and institutions of Kothamangalam Taluk. A

tree park named as “M P Varghese Tree Park” was set up in the campus to conserve the rare and endangered trees of Western Ghats. A *Nakshatra Vanam* was also nurtured in the park. The College has carried out scientific studies on the ecology of the river “Kuroorthodu” in Kothamangalam and has initiated a number of programmes to rejuvenate the river.

The College conducts legal awareness programmes every year in association with the Taluk Legal Service Authority, Kothamangalam. A Legal Aid Clinic is functioning in the College.

The women cell of the college takes pro-active role in empowering the girl students. They conduct number of seminars, training programmes and workshops to enable them to cope with the changing family and social environment.

#### 1.3.4 Value-added programmes to ensure holistic development of students:

The activities of National Service Scheme (NSS), Social Service League National Cadet Corps (NCC) and Mar Gregorious Jacobite Student Movement (MGJSM) inculcate moral and ethical values in students. The College regularly conducts personality development programmes, debates, nature conservation programmes and outreach events to equip the students to meet challenges of time.

#### 1.3.5 Improvement based on feedback from stakeholders in enriching the curriculum:

- The college has introduced 7 new Post Graduate Programmes during 2010-15 considering the growing demand
- Started Digital and smart class rooms
- Purchased advanced Laboratory equipments
- Installed Broadband and Wi-Fi connectivity
- Upgraded the Library with Automated and Digital facilities

#### 1.3.6 Evaluation of the quality of enrichment programmes

A three tier mechanism exists in the College to monitor and evaluate the quality of various co-curricular and outreach programmes. The Manager, the Principal and the Internal Quality Assurance Cell (IQAC) monitor all the activities.

### 1.4 Feedback System

#### 1.4.1 Contributions of the institution in the design and development of the curriculum prepared by the University:

The teachers representing the UG and PG Board of Studies of Mahatma Gandhi University, Kottayam, communicate the feedback received on curriculum from the students and other stakeholders.



#### 1.4.2 Feedback mechanism from students and stakeholders:

A system for the assessment of the curriculum by students and stakeholders has been introduced in the College. The proforma prepared for this purpose is distributed among students and parents and the filled up forms are statistically analyzed.

#### 1.4.3 New programmes/courses introduced:

Seven Post Graduate programmes and two UGC sponsored Add-on certificate courses were started in the college considering the growing demand:

- M. Sc. Actuarial Science (2012)
- M. Sc. Zoology (2012)
- M. Sc. Botany (2014)
- M. Sc. Statistics (2014)
- M. A. History (2014)
- M. A. Sociology (2014)
- M. Com International Business (2014)
- Certificate course in Math Lab (UGC sponsored Add-on course)
- Certificate course in Taxation (UGC sponsored Add-on course)

## CRITERION II: TEACHING - LEARNING AND EVALUATION

### 2.1 Student Enrollment and Profile

#### 2.1.1 Publicity and transparency in the admission process:

The College has a website which encompasses all the details regarding the College including the courses offered and other facilities available in the College. The website is regularly updated. The admissions in merit quota for all the UG and PG programmes are carried out by the Mahatma Gandhi University, Kottayam through the Centralized allotment Process (CAP) since 2010. The College brings out prospectus at the beginning of every academic year which includes the course details, duration, fee structure etc. for the management and community quota admission. It is given to the applicants free of cost along with the application form. The College announces the admission procedure with regard to the courses through the newspapers. The rank lists of the applicants for various courses are published in the College notice board. The College brings forth the academic calendar every year. It contains all the information regarding the programmes and activities of the College.

#### 2.1.2 Criteria adopted and process of admission to various programmes of the Institution:

The admissions in merit quota for all the UG and PG programmes are carried out by the Mahatma Gandhi University, Kottayam through the Centralized Allotment Process (CAP) since 2010. The College Management fixes the minimum cut off marks for each programme under management quota and community quota admissions.

#### 2.1.3 Give the minimum and maximum index marks for admission at entry level for each of the programmes offered by the college during 2014-15

Programme	Minimum index marks	Maximum index marks
UG		
B. A English	1070	1578
B. A Hindi	1012	1421
B. A Economics	1035	1383
B. A History	898	1224
B. A Sociology	911	1416
B. Sc Chemistry	513	987
B. Sc Physics	583	964
B. Sc Mathematics	621	951
B. Sc Botany	643	902
B. Sc Zoology	518	926
B. Sc Statistics	442	887
B. Com Model I	720	933

B.Com Tax: Procedure and Practice	669	907
PG		
M. Sc Mathematics	562	950
M. Sc Physics	556	958
M. Sc Chemistry	683	936
M. Sc Botany	812	959
M.A English	440	943
M.A Economics	553	887
M.Com	587	932
M. Com International Business	535	848
M. Sc Biotechnology	599	887
M. Sc Biochemistry	602	858
M. Sc Microbiology	631	930
M. Sc Zoology	791	890
M. Sc Actuarial Science	664	837
M. Sc. Statistics	708	855
M. A History	607	769
M. A Sociology	620	922

#### 2.1.4 Review of the admission process and student profiles:

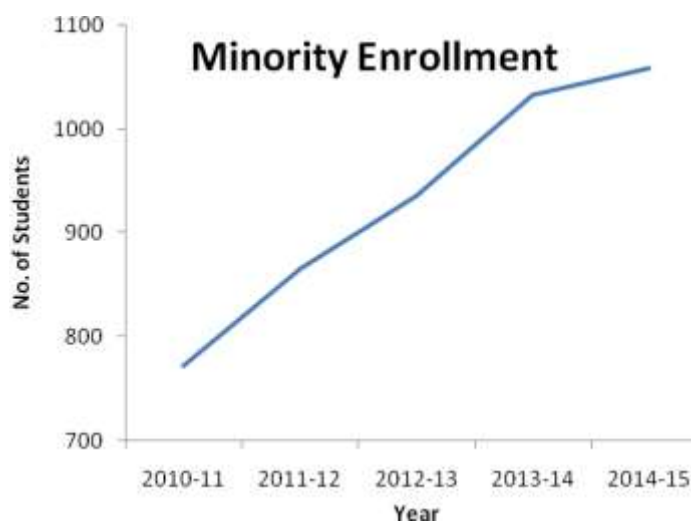
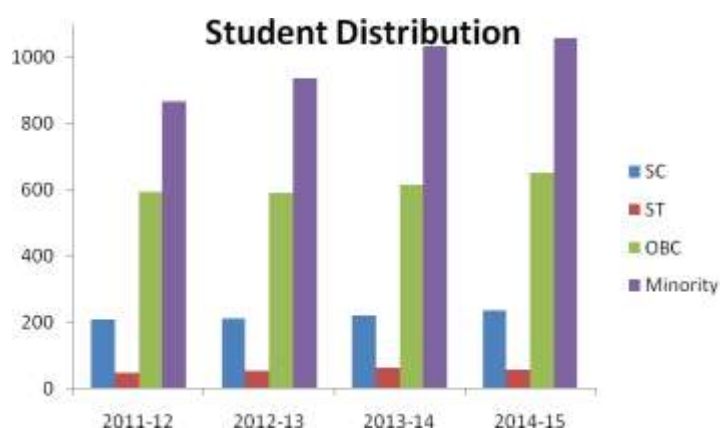
The students are admitted on the basis of the Centralised Allotment Process (CAP) of the Mahatma Gandhi University, Kottayam. Admitted students profiles are collected and reviewed to identify the capabilities and their social status. The students are reoriented on the basis of one's own needs such as curricular, co-curricular, Scholar Support Programme (SSP), Walk with Scholar Programme (WWSP), counseling, remedial coaching, mentoring, financial assistance etc. It reduces the dropout rates and helps to maintain general discipline of the campus.

#### 2.1.5 Strategies for inclusion:

- Students from disadvantaged community: 20% of the total seats are reserved for SC/ST candidates. Separate rank lists are prepared for them. Merit is the criterion for admission.
- 10% of the seats are filled from the rank lists prepared for the community quota.
- 20% of the seats are reserved for the management
- Women: There is no reservation for women. However, it is noteworthy that 68% of students are women.
- Differently-abled: One seat in each degree course to three sections of physically handicapped - blind, deaf and orthopedically handicapped with provision for inter-change of seats among them.
- Economically-weaker sections: Two seats of each degree course and one seat of each PG course are filled from candidates of socially and economically backward communities (SEBC) having annual income below Rupees 25,000/- for degree and Rupees 2.5 lakhs in post graduate courses.

- Sports quota: Two seats in each degree course (interchangeable) and one seat for every 20 seats in M.A, M Sc and M Com post-graduate courses are reserved for them.
- Meritorious arts performers: One seat for each degree course.
- Remaining seats are filled from open merit rank list.
- 50% seats in self financing PG courses are filled by the university.
- The analysis of student enrollment since 2010 reveals steady increase in the number of students belongs to minority community.

Category wise % of students admitted during the last five academic years										
Category	2010-2011		2011-2012		2012-2013		2013-2014		2014-15	
	Total	%	Total	%	Total	%	Total	%	Total	%
SC	235	14.4	208	13.3	212	13.1	220	12.6	235	12.8
ST	53	3.2	47	3.0	53	3.3	63	3.6	57	3.1
OBC	668	41.0	594	38.0	590	36.4	614	35.2	650	35.5
Women	1040	63.8	1019	65.2	1049	65.7	1161	66.7	1245	68.0
Men	591	36.2	543	34.8	573	34.3	580	33.3	587	32.0
Differently abled	10	0.61	10	0.64	14	0.86	17	0.98	19	1.0
Minority community	772	47.3	866	55.4	936	57.7	1033	59.3	1058	57.8



## 2.1.6 Number of applications and demand ratio for various programmes:

Number of applicants, students admitted and demand ratio for various UG Programmes

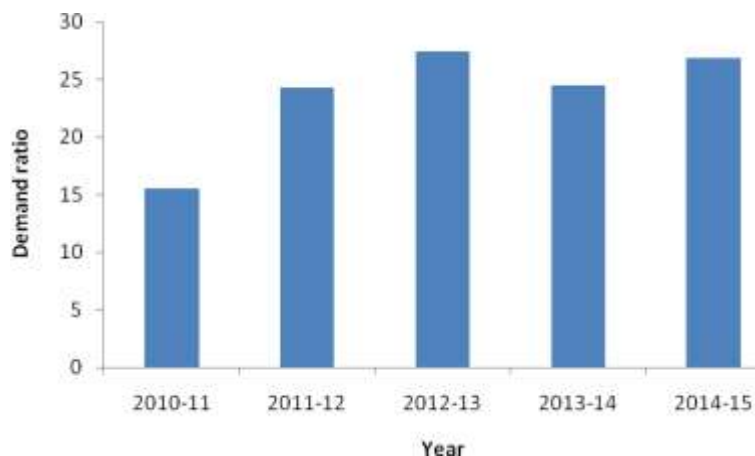
Programmes	2010-2011			2011-2012			2012-2013		
	No.*	A**	R***	No.	A	R	No.	A	R
Under Graduate Programmes									
B. A English	816	43	19	1106	45	25	1486	45	33
B. A Hindi	180	37	5	223	21	11	307	35	9
B. A Economics	980	43	23	989	42	24	1179	45	26
B. A History	472	48	10	614	42	15	836	49	17
B. A Sociology	497	47	11	594	41	14	832	47	18
B. Sc Chemistry	761	35	22	937	30	31	1595	37	43
B. Sc Physics	622	21	30	938	21	45	1175	32	37
B. Sc Mathematics	517	24	22	611	19	32	869	31	28
B. Sc Botany	439	33	13	658	33	20	1029	36	29
B. Sc Zoology	474	32	15	607	39	16	910	37	25
B. Sc Statistics	173	27	6	282	28	10	288	33	9
B. Com Model I	617	48	13	2396	49	49	2614	47	56
B. Com Tax: Procedure and Practice	479	38	13	931	39	24	1037	38	27

\*applications received, \*\*number of students admitted, \*\*\* demand ratio

Programmes	2013-2014			2014-2015		
	No.*	A**	R***	No.	A	R
Under Graduate Programmes						
B. A English	1486	51	29	1703	51	33
B. A Hindi	307	37	8	291	33	9
B. A Economics	1179	53	22	1069	49	22
B. A History	836	52	16	689	48	14
B. A Sociology	832	52	16	759	50	15
B. Sc Chemistry	1595	38	42	1699	40	42
B. Sc Physics	1175	40	29	1656	37	45
B. Sc Mathematics	869	39	22	1024	37	28
B. Sc Botany	1029	39	26	1113	40	28
B. Sc Zoology	910	42	22	1112	38	29
B. Sc Statistics	288	42	7	337	34	10
B. Com Model I	2614	50	52	2726	50	55
B. Com Tax: Procedure and Practice	1037	38	27	735	38	19

\*applications received, \*\*number of students admitted, \*\*\* demand ratio

### Average demand ratio for UG Programmes

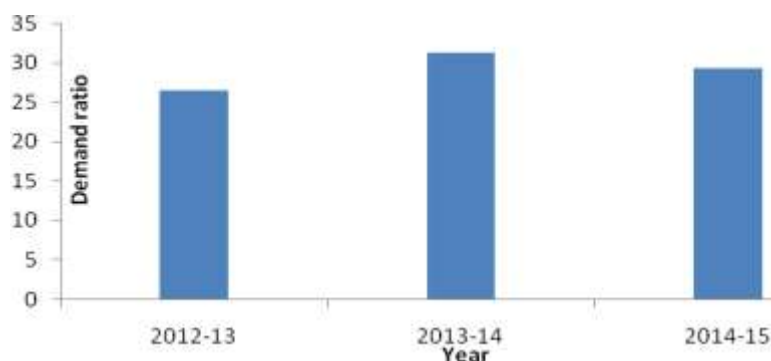


### Number of applicants, students admitted and demand ratio for various PG Programmes

Programmes	2012-13			2013-14			2014-15		
	No.	A	R	No.	A	R	No	A	R
Post Graduate Programmes									
M. A English	507	15	34	592	15	39	490	15	33
M. A Economics	299	15	20	265	12	22	258	14	18
M. Sc Chemistry	864	13	66	918	11	83	941	12	78
M. Sc Physics	825	14	59	917	15	61	911	14	65
M. Sc Mathematics	484	15	32	444	15	30	355	15	24
M. Sc Biotechnology	68	19	4	61	14	4	55	7	8
M. Sc Biochemistry	80	15	5	101	13	8	76	4	19
M. Sc Microbiology	96	19	5	139	13	11	102	13	8
M. Sc Zoology	88	12	7	169	12	14	181	10	18
M. Sc Actuarial Science	10	4	3	42	4	11	29	14	2
M. Com	853	15	57	874	14	62	754	15	50
M A History	Courses started during 2014-15						54	4	14
M A Sociology							100	5	20
M Com International Business							110	15	7
M Sc Statistics							72	9	8
M Sc Botany							604	10	60

\*applications received, \*\*number of students admitted, \*\*\* demand ratio

## Average demand ratio for PG Programmes



## 2.2 Catering to Student Diversity

### 2.2.1 Strategy to accommodate differently-abled students:

- Differently-abled: One seat in each degree course to three sections of Differently-abled - blind, deaf and orthopedically handicapped with provision for inter-change of seats among them.
- Created ramp and rails in the college: The College availed Rs.3.7 lakhs during 2011-13 from UGC for providing facilities like ramps, rails, special toilets and transportation facilities.
- Braille section in the library
- Various steps are taken by the College to ensure the safety and well-being of differently-abled students. The counseling cell of the College regularly monitors psychometric potential of the differently-abled students. The counseling procedure enables the students to balance the mental coherence and help them get involved in the day to day academic and co-curricular activities of the College.
- The College has an infirmary which provides a rest room and medical facilities in case of need.
- Provision for separate rooms during examination is made available.
- Separate toilet facility is made available to the students.
- In order to develop awareness on higher education and provide necessary guidance and counseling to students with disabilities, the College established a resource unit known as Enabling Unit. This unit will facilitate admission to various courses, provide guidance and counseling and create awareness about needs of other general issues of differently-abled students through awareness programmes.

### 2.2.2 Pre admission process:

- Departments have been conducting pre-admission counseling to applicants to give awareness about the course. Prospective students are also guided in the selection of subjects.

- Students are selected based on their academic performance in their qualifying examinations.
- All students have to submit a student data card that contains information regarding their previous academic performances and education/financial status of the family in order to analyze the educational and socio-economic background of the students.

### 2.2.3 Strategies to bridge the knowledge gap of the enrolled students:

- Knowledge gap is being filled by conducting orientation programmes, course awareness programmes and learning by doing activities.
- The college has introduced Scholar Support Programme (SSP) of Higher Education Department of Kerala to bridge the knowledge gap of students. Remedial coaching classes are also given to students who are socially and academically backward. There is a provision for in-semester re-test for slow learners.
- Communication and life skill development programmes are conducted periodically in the College.
- 58 % of students of the College belong to minority communities. 16% students belong to SC/ST and most of them are from financially weaker families. Intense remedial coaching is necessary to strengthen their knowledge and skills which enable them to come up to the level necessary for pursuing higher studies as well as job opportunities. Rs. 3.75 lakhs since 2010 received from UGC for conducting remedial coaching.

### 2.2.4 Measures to sensitize issues such as gender, inclusion, environment etc:

- Marks obtained in qualifying examinations and socio-economic backgrounds of the students are analyzed.
- Students who are weak in a particular subject are identified through their performance in continuous assessment tests such as written tests, seminars, assignments presentations and group discussions.
- Frequent absentees are traced and the parents are informed for taking further actions. These students are also directed to the student counsellor.
- Remedial academic measures are made available to the students by way of extra classes and special coaching for slow learners. Additional materials are distributed to the students and they are free to approach their teachers without inhibition at any time for clarifying their doubts and seeking advice.
- Tutorial system enables the slow learners to overcome deficiencies in learning.
- Mentoring system is introduced in the College to give personal care to students, minimise attendance shortage and to give counselling to minimise drop out.
- A Scholar Support Programme (SSP) introduced during 2014-2015 to support the slow learners of the College. SSP is financially supported by the Kerala State Higher Education Department.
- The College regularly conducts various environment conservation activities to make aware the students on environmental issues and conservation.



- The Women's Cell of the College takes a proactive role in imbibing gender issues such as women empowerment, participation etc.
- The College adopted a tribal village at Kuttampuzha Grama Panchayath to inculcate social commitment and responsibility among students.
- Students who are excellent in curricular and co curricular activities are encouraged by giving incentives

### 2.2.5 Facilities for advanced learners

- Marks obtained in qualifying examinations and socio-economic backgrounds of the students are analyzed.
- Advanced learners are identified and ample opportunities are made available to interact with scholar teachers under Walk with Scholar Programme (WWS) under the support of the Kerala State Higher Education Departments.
- Every year the management honors the University rank holders with gold medals.
- Scholarships are given to the University rank holders in their qualifying examinations who joined the institution for higher studies. An amount of Rs. 40,000/-, 20,000/- and 10,000/- have been given to the first, second and third rank holders respectively.
- The Career Guidance Cell and Placement Cell help students to plan their future and career.

In addition, all advanced learners are:

- Given more challenging assignments than the rest: Advanced learners are given topics for assignments, which are not directly connected with the syllabus. Teachers select a topic of current relevance and the students are directed to prepare assignments, using internet as well as books in the library. This serves the dual purpose of meeting course requirements for internal assessments and also to develop an interest in research among students.
- Made to lead group discussions: Group discussions are conducted in the class room under the able leadership of advanced learners. Apart from the training, the advanced learners serve as models to other students.
- Encouraged to take classes for the rest under teacher's supervision: Teaching ability is identified and those who exhibit teaching skills are advised to go for teaching profession. Exceptional PG students are given opportunities to take classes in the presence of teacher.
- Motivated to read current journals and present information thus collected before selected audience. Advanced learners are helped by providing extra reading materials and are encouraged to collect information from various reference materials and websites. Class teachers often encourage discussions during free hours.
- Allowed to represent the College in intercollegiate seminars, workshops, and quiz competitions. Students are given chances to participate in the seminars, workshops and symposia conducted by other Colleges and Universities. 13 UGC sponsored National Seminars were conducted in the College since 2010 and 13 state level seminars and 5 workshops funded by the College

Management. All the students of the concerned Department participated in it. Quiz Club of the College conducts a screening test for the selection of eligible candidates for participating in competitions.

- Encouraged to present papers in seminars. Post graduate students are sent to other Colleges to present papers in National and State level seminars and they bagged in Best paper/poster award.

#### 2.2.6 Efforts to reduce dropout rate:

The College regularly conducts socio-economic analysis of the admitted students to identify the students from disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. Continuous evaluation of student performance was carried out to identify the slow learners. Regular attendance and academic performance are also monitored.

### 2.3 Teaching-Learning Process

#### 2.3.1 Teaching, learning and evaluation process:

As per the instruction given by the University each academic year is divided into two semesters. At the beginning of every academic year the IQAC prepares and submits a plan of action and academic calendar to the Principal. The Principal convenes a meeting of all the Heads of Departments to plan the academic activities. In order to execute the plans of the academic calendar discussed in the College Council meeting, the Heads of Department conduct Departmental meeting to allocate the timetable and course content. The time table and work arrangements will be displayed in the Department notice board. The Head of the Department regularly monitors the progress. Examination schedules are published well in advance and students get enough time to prepare for the tests. Class test-papers, group discussions, presentations, assignments and project works are carried out as part of the continuous evaluation process.

Internal Evaluation examinations are conducted twice in a semester in tune with the University examination model for equipping the students to appear for the university examination. Parent- Teacher meetings are convened for assessing the progress of the students. The marks/grades obtained by the students in the examinations, attendance secured, remarks by the Teachers and the Principal are discussed during the PTA meetings.

The attendance of the students are taken hourly by the teacher and it is recorded in the College office with the help of a software. The students of the College have access to verify their attendance in the Department. 75% of attendance is mandatory for attending the University examinations. The percentage of attendance is published at the end of every month.

The consolidated in-semester marks of the students are published in the Department notice board before forwarding to the University. This system ensures transparency in evaluation and provides opportunity for the students to better their performance. Each Faculty maintains a teacher's handbook in which

the attendance of the students, internal marks, and all the necessary information regarding the students are recorded.

Performance of students in test papers, assignments and seminars along with the percentage of attendances are considered in each semester for the in-semester evaluation.

### 2.3.2 Contribution of IQAC to improve the teaching –learning process

IQAC evaluates the teaching-learning process and provides suggestions for improvements. These suggestions will be discussed and implemented and also non-compliances will be attended. IQAC actively monitors all the following activities.

- Preparation of academic calendar
- Preparation of activity calendar
- Augmentation of ICT infrastructure
- Augmentation of Physical infrastructure
- Student appraisal of teachers
- Implementation of Scholar Support Programme (SSP) and Walk with Scholar Programme (WWP).

### 2.3.3 Support structures and systems available for student centered learning:

Student centered approach is followed for the proper method of learning. The students get enough opportunity to interact among themselves and also with the teachers for the better enhancement of the learning processes. The College is conducting a number of co-curricular and extra-curricular activities for the acquisition of life skills. The following activities have been conducted for the effective enhancement of the life skills.

- Quiz Competitions: Quiz competitions enable the students to be the continuous learners in the subjects. It enhances acquisition of knowledge and develops healthy competition among students in the dissemination of knowledge. It also helps the students to update their knowledge in the subject. Every year, Quiz Club of the College conducts a screening test for the selection of eligible candidates for attending the inter-collegiate quiz competitions.
- Debates and Group Discussions: Debates and group discussions are conducted on topics of current relevance.
- Seminars, Symposia, Workshops and Exhibitions: Every year National / State level seminars / workshops are conducted by all the Departments.
- Interactive Sessions with Visiting Scholars: Eminent scholars are invited to present papers in the National/State level seminars and workshops. Students are given opportunity to interact with them.

- **Field Studies and Report Writing:** The students are given ample opportunity to delve deep into the various aspects of the ecosystem. The students have to record their observations in a field diary and finally they have to submit details of the field study. The departments of Zoology, Botany, Microbiology, Biotechnology and Biochemistry undertake the field study as part of their curriculum. The students are able to enhance their observation power and writing skills.
- **Industrial Visit:** The Entrepreneurial Development Club of the College undertakes industrial visit every year as part of their curriculum to develop the entrepreneurial skills of the students. It is highly beneficial to the students to know the latest developments in the field of entrepreneurship.
- **Community Survey:** Socio-economic surveys were conducted by the students under the leadership of the NSS of the College regularly. The students got first-hand knowledge about the local community.
- **Peer Teaching:** Peer teaching enables the students to clarify their doubts regarding the curricular aspects. The students get the benefit of developing their knowledge by sharing it with others. The teachers of the post-graduate departments encourage the students to carryout peer teaching during the zero hours.
- **Personality Development Training Programmes:** To equip the students to face the growing challenges of higher education, the College started personality development training programmes in collaboration with various agencies.
- **NET/SET/Entry in Services/PSC Coaching:** The College regularly organizes coaching classes in order to prepare the students for various competitive examinations by the financial support of UGC.

#### 2.3.4 Fostering scientific temper:

UG and PG students are involved in research projects so as to nurture scientific temper in them. There are various activities like Science Forum, Debate Club, Speakers Forum, Nature club, Entrepreneurship Club which helps the students in developing their personality. Also programmes like science exhibition, national/state level seminars sponsored by UGC, KSCSTE help students to interact with eminent persons in the scientific and industrial area.

#### 2.3.5 Technologies and facilities for teaching:

- **Seminar halls:** A library seminar hall of the College was opened to the staff and students during the academic year 2005-06. It is a fully air conditioned hall with a seating capacity of 107. The hall is well equipped with a permanent DLP projector and an automated screen. A 54" flat LCD T V has been fixed in the seminar hall for viewing

significant events like Republic Day Parade, Programmes related to National integration and screening documentaries and movies. The seminar hall of the College has turned out to be the nucleus of all academic discussions and was constructed at a cost of Rs. 10 lakhs. In addition three seminar halls with a seating capacity of 40 are also made available from 2014-15. They are equipped with DLP projectors, laptops, audio systems etc.

- Academic Technology Centre (ATC): The Academic Technology Centre (ATC) provides leadership in promoting excellence in teaching at the graduate and post graduate level through the technological enhancement of the faculty. The centre has 34 computers and broadband internet connection. The centre was constructed at a cost of 20 lakhs. The ATC is providing ample training on ICT in teaching, learning, presentation and communication needs of students, faculty and staff.
- Network Resource Centre: Network Resource Centre of Mar Athanasius College was established with the assistance of UGC in the academic year 2004-05. All the computers of NRC have been connected to broadband internet and it is kept open from 9.30 am to 4.30 pm. It is a fully air conditioned room with 7 terminals. A technician is in charge of the NRC to help students to download materials for their study. The internet accessibility is fully utilized by the students for the preparation of project works, assignments, seminar presentation etc. Unlimited downloading facility is provided for the students and staff of the College. There is adequate provision for getting soft and hard copies.
- Smart Class Rooms: 11 smart class rooms are introduced to augment the teaching learning process in the College.
- ICT enabled Class Rooms: There are a total of 46 DLP/LCD projectors in the college. All the Departments, final year Under Graduate and Post Graduate class rooms have broadband cable connectivity for aiding teaching process.
- Language laboratory: The College has a language laboratory in the Post Graduate Department of English for the enhancement of the language skills namely listening and speaking.
- College Website: The College has an active web site to enable e-learning or web based learning. The website provides options for posting lecture notes, teaching notes and power point presentations of teachers. Passwords are also made available to students and individual teachers to access the materials.
- OPAC: Online Public Access Catalogues (OPAC) terminals are available for staff and students for catalogue search. Title, Author and Keyword searches are possible in this software. Library users can reserve, renew and recommend the books using this facility. Title and author searches are also enabled in the college web site.

- UGC-INFONET: In addition to the print journals, the library subscribes to the electronic resources under the N-LIST (National Library and Information Services Infrastructure for Scholarly Content) programme of the UGC-INFONET. By utilizing this facility we can have access to more than 3000 full text journals and 97000 electronic books.
- Mathematics Laboratory: The Mathematics lab consists of 15 computers to train students in various mathematical and statistical software such as Matlab, SPSS, TEX, Equation Editor etc.
- Computational chemistry Lab: The facility consists of 7 computers, DLP projector, white board and 5kVA UPS. Softwares such as Gamess, Chemdraw, Chems sketch etc. are also installed to carry out computational analysis.

### 2.3.6 Exposure to advanced level of knowledge and skills for students and teachers:

Sl.No.	Activity	No.
1	Number of national seminars conducted	16
2	Number of state level seminars conducted	17
3	Number of workshops conducted	7
4	Number of teachers attended orientation programmes	17
5	Number of teachers attended refresher courses	13
6	Number of teachers attended international conferences	48
7	Number of teachers attended national conferences	106
8	Training programmes attended	2

### 2.3.7 Student counseling:

Full time student counselor was appointed to deal the academic and emotional problems and give remedial measures and suggestions which relieve their stress and strain. Class teachers can act as mentors by regular monitoring. They identify the weaker students and give them remedial coaching and moral support. Class teachers also motivate the brighter students for higher education according to their aptitude. Familiarization sessions, career oriented programmes and personality development training programmes by the experts to motivate the students. Entry in Service Coaching, Bank coaching and NET coaching were conducted with the financial support of UGC.

### 2.3.8 Innovations in teaching approaches/methods:

Lecture method, interactive method, project-based learning, computer-assisted learning, e- learning, web based learning, experiential learning, assignments and seminars are followed for the enhancement of the teaching-learning process. A number of innovative programmes under e-learning and

virtual learning have been undertaken by the students of the College. The students have been greatly benefited by the following innovative methods.

- Lecture Method: One of the important methods of teaching is delivering lectures.
- Interactive Method: In every class, students are given opportunity to interact with teachers for the effective learning. Group discussions are also conducted periodically.
- Project Based Learning: Undergraduate and Post Graduate students are having project work as part of their curriculum. The project works are guided by the teachers and the students have to make a report based on their findings. The University conducts a viva-voce examination based on the project work carried out by the students.
- Experiential learning: The College conducts science workshops for students and teachers regularly to familiarize with the sophisticated instruments.
- Power Point Presentations: Teachers are encouraged to use power point presentations in UG and PG classes for the better understanding of the subject.
- E-learning: The College has an active web site to enable e-learning or web based learning. The web site provides options for posting lecture notes, teaching notes and power point presentations of teachers. Passwords are also made available to students and individual teachers to access the materials.
- Digital classrooms: All post graduate and final year Under Graduate class rooms are equipped with DLP/LCD projectors and other ICT facilities. A total of 46 DLP projectors are installed. 11 class rooms are converted to smart class rooms.
- Broadband internet connection: All the Departments, final year PG and UG class rooms are connected with Broad band facility. The Women's hostels are also equipped with broad band connectivity.
- Wi-Fi connectivity: All staff members are authorized to access the broad band through Wi-Fi.
- Virtual learning: The Department of Chemistry prepared a number of virtual learning programmes in chemistry. The students can download and run the programme using student password.

### 2.3.9 Library resources used to augment the teaching- learning process:

M.P Varghese library, which was the first of its kind in Kerala to provide access to internet service as early as in 1996, is the first ever College library in Kerala to have complete automation. Housed in an area of 25,194.75 square feet and extended over five completed floors, the library has a collection of 12685 text books, 47251 other books, 92 journals and periodicals and 3617 reference books.

The various amenities provided at the Library are on a par with the best Colleges in the country and thus it is a major attraction in the College. The books and materials are catalogued in to a computer which in turn is linked to the ongoing computer catalogue of various libraries in India and abroad. The library can function in auto mode for computer literate members. At the OPAC terminals, operations such as search, issue, return, renewal, reservation, recommendation etc can be done by individual. The reading room of the library is spacious and aesthetically designed. Calm and hygienic atmosphere is provided in the entire block.

### 2.3.10 Challenges in completing the curriculum:

On an average 5% teaching days are lost per semester due to *harthals* and other kinds of strikes. The lost days are compensated by conducting special classes on weekends. Teachers also engage zero hour to complete the syllabus in time.

### 2.3.11 Monitoring and evaluation of the quality of teaching learning:

A system for the assessment of the performance of the teachers by students has been introduced in the College. The Pro forma prepared for this purpose is distributed among students and the filled up forms are statistically analyzed. The students evaluate the performance of teachers on various counts such as:

- Subject knowledge of the teacher
- Clarity of explanation
- Teaching efficiency
- Responsibility and commitment
- Class management
- Accessibility of the teacher in and out of the class
- Frequent evaluation
- Motivation for higher studies
- Communicative skills
- Willingness to help

Each teacher is assessed by the students of all classes engaged by the teacher. Through the process, teachers are able to understand their strengths as well as weaknesses. Teachers were personally informed of the score they have



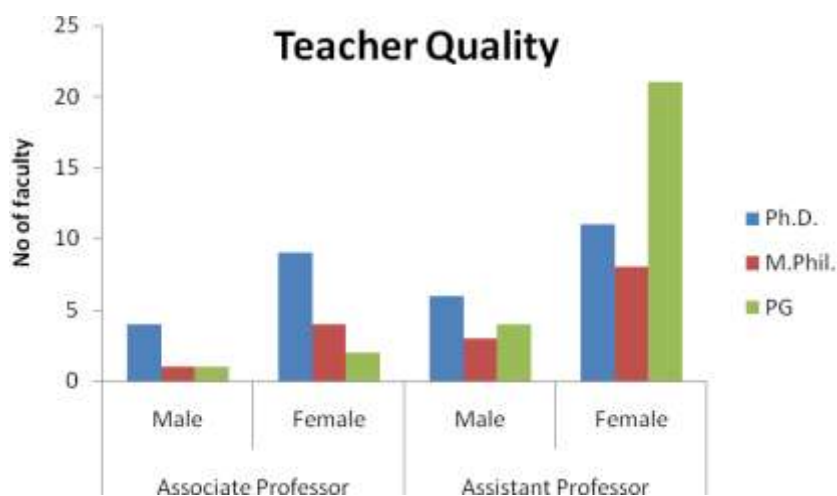
secured and this acts as a great motivating factor to improve their performance in the ensuing years. In addition to this, the Heads of the Departments evaluate the performance of individual teachers and the results of such evaluation are conveyed to the Principal and the Management through confidential reports.

## 2.4 Teacher Quality

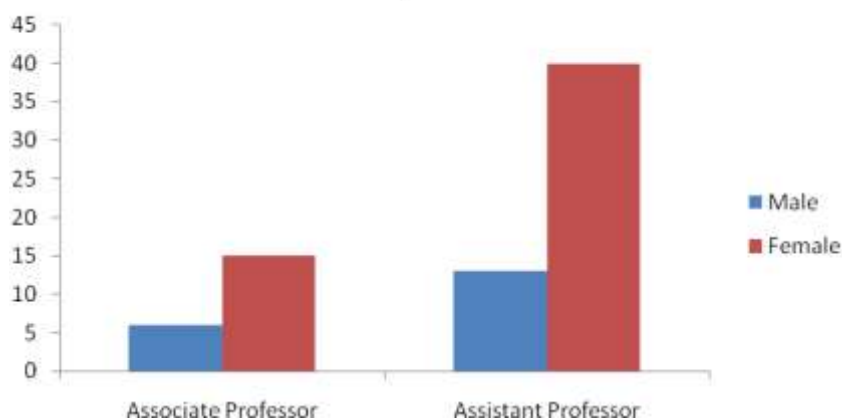
### 2.4.1 Recruitment and retention of faculty:

Teachers are recruited as per UGC norms, University Statutes, and Orders issued from time to time by the Government. Vacancies are advertised in two leading newspapers and one national daily besides the 'University News'. The interview for selection is conducted by a Board comprising one Subject Expert from the University, one Government Nominee not below the rank of the Joint Secretary / District Collector, two Nominees of the College Management and the Principal.

New teaching positions are created when vacancies arise in the Departments due to introduction of new courses or due to the retirement of faculty members. Temporary teaching positions arise when teachers in service avail long leave.



## Faculty Pattern



Major strength of the College is a team of highly qualified and resourceful teachers. 84 permanent teaching posts are sanctioned by the Government. Out of this, 74 teachers are presently working in the College. One third of the teaching faculty are University Rank holders. Thirty teachers have Ph D Degrees and 17 have M. Phil Degrees. Three teachers have already submitted their Ph D thesis and the research work of eleven teachers are in progress.

### *Teachers secured University Ranks/Awards*

SI No.	Name of Teacher	Department	Ranks Secured
1	Mr. Francis Xavier P.A.	Physics	M Sc I Rank, CUSAT
2	Dr. Riju C. Issac	Physics	M Sc I Rank, Mahatma Gandhi University
3	Mr. Krishnaprasad P.S.	Physics	M Phil II Rank, CUSAT
4	Ms. Jassi J.	Physics	M Sc II Rank, Calicut University
5	Dr. Shanti A Avirah	Chemistry	M Sc III Rank, Mahatma Gandhi University
6	Dr. K.B. Sherly	Chemistry	M Sc I Rank, CUSAT
7	Dr. Jayamma Francis	Chemistry	M Sc III Rank, Mahatma Gandhi University
8	Dr. Annu Anna Varghese	Chemistry	B Sc I Rank M Sc I Rank, Mahatma Gandhi University.
9	Dr. Binu Varghese	Chemistry	M Sc I Rank, Mahatma Gandhi University.
10	Dr. Manju Kurian	Chemistry	M Sc III Rank, Mahatma Gandhi University
11	Dr. Jose George	English	Full Bright Scholar
12	Ms. Aswathy Balachandran	English	M A III Rank, University of Kerala
13	Ms. Alphonsa C.A.	English	M A I Rank, Mahatma Gandhi University Higher Secondary I Rank (Humanities)
14	Ms. Jessy Varghese	English	B A II Rank, Mahatma Gandhi University
15	Ms. Justina George	English	B A II Rank, Mahatma Gandhi University

16	Dr. M.S. Vijayakumari	Economics	B A II Rank, Mahatma Gandhi University
17	Ms. Igy George	Economics	B A III Rank, Mahatma Gandhi University.
18	Ms. Puthuma Joy	Economics	M A III Rank, Calicut University
19	Dr Manjula K.	Economics	M A III Rank, Mahatma Gandhi University B A I Rank , Mahatma Gandhi University M Phil II Rank, Mahatma Gandhi University
20	Ms. Jani Chungath	History	B A III Rank, University of Calicut
21	Ms. Remia K.	History	M A II Rank, Kannur University
22	Dr. Mridula Venugopal S.	Sociology	M A I Rank, Calicut University
23	Ms. Diana Mathews	Sociology	M A I Rank, Calicut University M Phil I Rank, Mahatma Gandhi University
24	Ms. Diana Ann Issac	Commerce	M Com I Rank, Kerala University
25	Ms. Latha S Nair	Mathematics	M Sc I Rank, Mahatma Gandhi University
26	Ms. Aji Abraham	Botany	B Sc II Rank, Mahatma Gandhi University
27	Ms. Sudha V.	Statistics	M Sc IV Rank, Mahatma Gandhi University

#### 2.4.2 Efforts to recruits teachers in new programmes:

Seven Post Graduate programmes were started in the college which includes

- M.Sc. Actuarial Science (2012)
- M. Sc. Zoology (2012)
- M.Sc. Botany (2014)
- M.A. History (2014)
- M.Sc. Statistics (2014)
- M.A. Sociology (2014)
- M.Com International Business (2014)

M Sc Actuarial Science programme is first of its kind in Kerala. Campus interviews were conducted in the Bishop Heber College, Trichi to select the faculty. Newly recruited faculty members are encouraged to attend seminars and workshops conducted by the University on emerging areas when it is included in the revised curriculum.

### 2.4.3 Staff development programmes:

#### *Nomination to staff development programmes*

Academic Staff Development Programmes	Number of faculty Attended
Refresher courses	13
Orientation programmes	17
Staff training conducted by the university	4
Staff training conducted by other institutions	2
Summer / winter schools, workshops, etc.	1

#### *Faculty Training programmes organized by the institution*

The College organizes regular computer training programmes for the faculty members. The staff members are familiar with the internet, computer aided packages and the audio-visual aids available in the College. The Academic Technology Centre (ATC) is providing ample training on ICT in teaching, learning, presentation and communication needs of students, faculty and staff. The ICT training includes multimedia computing systems, special computing hardware and peripherals, software tools, video players, digital cameras, digital video cameras and support services to enable them to develop new computer.

#### *Faculty invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies*

Sl No.	Name of Teacher	Organization/event
1.	Riju C. Issac	<ol style="list-style-type: none"> <li>Invited Speaker - International School of Photonics, Cochin University of Science &amp; Technology (CUSAT), Kochi 682 022 - Annual Photonics Workshop (APW-2012) 27-28 February, 2012.</li> <li>Invited Speaker – Indian Institute of Space Science &amp; Technology, Government of India, Department of Space, Thiruvananthapuram – 695 547 – 20<sup>th</sup> National Conference on Atomic &amp; Molecular Physics (NCAMP – XX), 9-12 December 2014.</li> <li>Invited Speaker - International School of Photonics, Cochin University of Science &amp; Technology (CUSAT), Kochi 682 022 - Annual Photonics Workshop (APW-2015) – 27 February 2015</li> <li>Invited Speaker – St. Theresa’s College, Department of Physics, Ernakulam – International Conference on Photonics &amp; Solar Water Splitting – 12-13 March 2015.</li> <li>Invited Speaker – Mar Athanasius College, Kothamangalam – 7<sup>th</sup> International Conference on the Frontiers of Plasma Physics &amp; Technology (FPPT-7) Conference held at Hotel Le Meridian, Ernakulam, 13-17 April 2015.</li> </ol>
2.	Aby P. Varghese	Chaired a session in National Seminar held at Nirmala College, Muvattupuzha. 12-13 November, 2013
3.	P A Francis Xavier	Resource person – Career Guidance held at Govt. Higher

		Secondary School, Puthenthode, Kochi on 23 <sup>rd</sup> April 2015
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*Paper Presentation of Teachers in International Conferences (2010-2015)*

SI NO.	Year	Authors	Conference
1	2010-11	Boben Thomas	International Conference in Functional Polymers, National Institute of Technology (NIT), Calicut, Kerala, India, 28-30 January 2011.
2	2010-11	Deepa S.,	International Conference on Optoelectronic Materials and Thin Films for Advanced Technology.
3	2010-11	P. A Francis Xavier (Paper 1)	International Conference on Recent Trends in Materials Science and Technology (ICMST 2010), Trivandrum, 29-31 of October 2010
4	2010-11	P. A Francis Xavier (Paper 1)	International Symposium for Research Scholars (ISRS 2010), Chennai, 20-22 of December 2010
5	2010-11	P. A Francis Xavier (Paper 2)	International Symposium for Research Scholars (ISRS 2010), Chennai, 20-22 of December 2010
6	2010-11	P. A Francis Xavier (Paper 3)	International Symposium for Research Scholars (ISRS 2010), Chennai, 20-22 of December 2010
7	2010-11	P. A Francis Xavier (Paper 2)	International Conference on Recent Trends in Materials Science and Technology (ICMST 2010), Trivandrum, 29-31 of October 2010
8	2010-11	P. A Francis Xavier (Paper 4)	International Symposium for Research Scholars (ISRS 2010), Chennai, 20-22 of December 2010
9	2010-11	P. A Francis Xavier (Paper 3)	International Conference on Recent Trends in Materials Science and Technology (ICMST 2010), Trivandrum, 29-31 of October 2010
10	2010-11	P. A Francis Xavier (Paper 4)	International Conference on Recent Trends in Materials Science and Technology (ICMST 2010), Trivandrum, 29-31 of October 2010.
11	2010-11	K.B Sherly	International conference on Emerging trends in Electrical and Computer Technology, St. Xavier's Catholic College of Engineering, Nagercoil, March 23-24, 2011.
12	2010-11	Manju Kurian	International conference on Advanced Oxidation Processes (AOP 2010) held at M.G University, Kottayam on September 18-21, 2010
13	2010-11	Manju Kurian	International conference on Functional Polymers held at NIT, Calicut on January 28-30, 2011.
14	2010-11	Susy Paul	4 <sup>th</sup> International Conference on Micro Finance (27 – 29 Jan 2011) ISBN:978-81-8209-277-8
15	2010-11	Susy Paul	4 <sup>th</sup> International Conference on Micro Finance (27 – 29 Jan 2011) ISBN:978-81-8209-277-8
16	2010-11	Susy Paul	International conference on Micro-finance and empowerment held at SCMS campus, Cochin, Kerala (24 <sup>th</sup> July 2010)
17	2010-11	Diana Ann Issac	International Conference on Education, peace and Sustainable Development, M.G University, December, 2010
18	2010-11	Igy George	International Conference on Frontiers of Infrastructure finance. IIT Kharagpur, Dec 29-30, 2011

19	2010-11	Marymol Moothedan	International Conference on light. NIT Calicut. 23-25, May 2011
20	2010-11	Diana Ann Issac	International Seminar on Accounting Education and Research. Kerala University. 13-14 November 2010
21	2011-12	Smitha Thankachan	International Conference on Light 'Optics11', conducted by Department of Physics, NIT ,Calicut during May 23-25, 2011
22	2011-12	Smitha Thankachan	International conference on 'Advanced Nanomaterials and Nanotechnology (ICANN-2011)' conducted by IIT Guwahati on December 8-10, 2011
23	2011-12	Smitha Thankachan	International conference on 'Nanomaterials and nanotechnology' conducted by Delhi University on 18-21, December 2011
24	2011-12	Smitha Thankachan	Third International conference on Frontiers in Nano Science and Technology 'COCHIN NANO 2011' conducted by Department of Physics, Cochin University of Science and Technology during August 14-17, 2011
25	2011-12	P A Francis Xavier	3 <sup>rd</sup> International Conference on Frontiers in Nanoscience and Technology (Cochin Nano-2011), Cochin, 14-17 August 2011
26	2011-12	Manju Kurian	International Conference On Optical Nanomaterials (Optics11) Held At NIT, Calicut On May 23-27, 2011
27	2011-12	Manju Kurian	International Conference On Nanomaterials (Cochin Nano11) Held At CUSAT, Kochi On August 14-17, 2011.
28	2011-12	Marymol Mootheden	International Conference On Optical Nanomaterials (Optics11) Held At NIT, Calicut On May 23-27, 2011
29	2011-12	K.B Sherly	International Conference On Nanomaterials (Cochin Nano11) Held At CUSAT, Kochi On August 14-17, 2011
30	2011-12	P.R. Sreedevi	Aquaculture America 2012, held at Las Vegas, Nevada, USA, Feb 29-March 3 2012. Abstract No.452
31	2011-12	P.R. Sreedevi	Aquaculture America 2012, held at Las Vegas, Nevada, USA, Feb 29-March 3 2012. Abstract No.452
32	2011-12	Igy George	Frontiers of Infrastructure Finance (ICFIF 2011) held at IIT, Kharagpur on 28-30 December, 2011
33	2011-12	Sheeba Abraham	Seminar at Morning Star Home Science College, Ankamaly on 23-24, February, 2012.
34	2011-12	Anjaly Abraham	International Seminar Department of English, Govt. college for Women, Thiruvananthapuram, 6th March, 2012
35	2011-12	Jessy Varghese	International seminar on From Fiction to Film: an interdisciplinary approach. March 14-16, 2012
36	2012-13	Riju C Issac	AIP Conference Proceedings 1507 (2012) 672.
37	2012-13	Riju C Issac	Plasma Science (ICOPS), 2012 Abstracts IEEE International Conference Page 3P-42 (2012)
38	2012-13	Riju C Issac	Abstracts IEEE International Conference Page 5C-5 (2012)

39	2012-13	K.B Sherly	The Indo-Israel Meeting on Material science and Nano- science, IIMMN-2013, Organized by M.G University, Kottayam & JNCASR, Bengaluru, 31 <sup>st</sup> Jan & 1 <sup>st</sup> Feb 2013.
40	2012-13	K.B Sherly	Second international conference on Optoelectric Materials and Thin Films for Advanced Technology, CUSAT, 2-5, January, 2013.
41	2012-13	K.B Sherly	The Indo-Israel Meeting on Material science and Nano science, IIMMN-2013, Organized by M.G University, Kottayam & JNCASR, Bengaluru, 31 <sup>st</sup> Jan & 1 <sup>st</sup> Feb 2013.
42	2012-13	Marymol Mootheden	The Indo-Israel Meeting on Material science and Nano science, IIMMN-2013, Organized by M.G University, Kottayam & JNCASR, Bengaluru, 31 <sup>st</sup> Jan & 1 <sup>st</sup> Feb 2013.
43	2012-13	Marymol Mootheden	Second international conference on Optoelectronic Materials and Thin Films for Advanced Technology, OMTAT-2013 CUSAT, 2-5, January, 2013.
44	2012-13	Paul George	Second Indian biodiversity congress on biodiversity of the western Ghats: challenges and strategies for conservation and sustainable management on 9, 10, 11 December 2012.
45	2012-13	Ann Kocheriyil Joseph	Second Indian biodiversity congress on biodiversity of the western Ghats: challenges and strategies for conservation and sustainable management on 9, 10, 11 December 2012.
46	2012-13	M.S Vijayakumari	India And International Organizations: Towards Multilateralism Dept. of International Relations, Central University of Kerala, Kasargod. 20-22, March 2013
47	2012-13	Igy George	AIMS International Conference on Management. Indian Institute of Management Bangalore. January 6-9, 2013
48	2012-13	Marymol Moothedan	International Conference: OMTAT – 2013. Opto electronics materials and thin films for advanced technology. CUST Kochi. 3-5 January 2013
49	2014-15	Riju C Issac	7 <sup>th</sup> International Conference on the Frontiers of Plasma Physics & Technology (FPPT-7) Conference held at Hotel Le Meridian, Ernakulam, 13-17 April 2015.
50	2014-15	Riju C Issac	7 <sup>th</sup> International Conference on the Frontiers of Plasma Physics & Technology (FPPT-7) Conference held at Hotel Le Meridian, Ernakulam, 13-17 April 2015.
51	2014-15	Deepa S	7 <sup>th</sup> International Conference on the Frontiers of Plasma Physics & Technology (FPPT-7) Conference held at Hotel Le Meridian, Ernakulam, 13-17 April 2015.
52	2014-15	P S Krishnapasad	7 <sup>th</sup> International Conference on the Frontiers of Plasma Physics & Technology (FPPT-7) Conference held at Hotel Le Meridian, Ernakulam, 13-17 April 2015.
53	2014-15	Ms. Nivya Mariam Paul	International Seminar on Global Ayurveda Festival

*Paper Presentation of Teachers in National Conferences (2010-2015)*

Sl No.	Year	Authors	Conference
1	2010-11	Manjula.K	Women Empowerment, Dept of Economics, Vimala College, Trichur.13th And 14th January 2011
2	2010-11	M.S Vijayakumari	Seminar on Gender budgeting on Kerala held at Vimala College, Thrissur, 13-14 January, 2011
3	2010-11	Sheeba Abraham	National seminar at St. Dominic's College, Kanjirappilly on 25-26, November, 2010.
4	2010-11	Aswathy Balachandran	National Seminar On 'Aesthetics: Eastern And Western', Devamatha College, Kuruvalangad, July 29, 30 2010
5	2010-11	Jessy Varghese	National Seminar on GENDER AND DEVELOPMENT, School of Gandhian Thought and Development Studies, March 16, 2011
6	2010-11	Sibi M M	Seminar at Cochin University of Science and Technology on Indianness in Contemporary Hindi and Malayalam Drama on 3-5 March, 2011
7	2010-11	Boben Thomas	98 <sup>th</sup> Indian Science Congress Association (ISCA), SRM University, Chennai, Tamil Nadu, India, 3-7 January 2011
8	2010-11	Smitha Thankachan	National seminar on nanotechnology and its applications organized by Maharajas College, Ernakulam, February 1-3, 2011
9	2010-11	Binitha, R.N	Proc. Nat. Symp. Scientific Sec. Endocrine disruptors. SRBC, Trichy,2010
10	2010-11	Binitha, R.N	Proc. XX Swadesi Science Congress. Abstract No:Es-06-PP.33-34., CMFRI Cochin, 2010
11	2010-11	Binitha, R.N	Proc. I Women Science Congress. PP-144., St. Theresa's College, Ernakulam, 2010
12	2010-11	Ann Kocheriyil	UGC Sponsored National Seminar on "Clinical Applications of Molecular Biology", Mar Athanasius College, Kothamangalam, Kerala,2011, Proceedings Pg no.10
13	2010-11	Latha.S.Nair	UGC Sponsored National seminar on Recent Trends in Mathematical Modeling and Statistical Applications. at Deva Mata college Kuravilangad.,23-25 Nov 2010.
14	2010-11	Susy Paul	UGC Sponsored National Seminar India & Global Financial Crisis Recession to Resurgence held at Nirmala College Muvattupuzha 6,7, January 2011
15	2010-11	Diana Ann Issac	National Seminar on Global Financial Crisis- Policy Solutions and Future Options held at Christian College, Chengannur, August, 2010
16	2010-11	Diana Ann Issac	National Conference on Finance and Banking held at Saint Gits Institute of Management, Pathamuttam, Kerala, September, 2010
17	2010-11	Igy George	Role of women in protection and promotion of environment, Women's study centre, CUST. 8 <sup>th</sup> March 2011
18	2010-11	Sibi M M	Impact of Globalization on Hindi Literature. SSV College, Perumbavoor. 16-17 September,



			2010
19	2010-11	Aswathy Balachandran	National seminar on Aesthetics: Eastern and Western. 29-30 July 2010
20	2010-11	Jessey Varghese	National seminar on Gender and Development. At Mahatma Gandhi University Kottayam. March 15-17 2011
21	2011-12	Igy George	Technology for women empowerment – Issues and challenges September 16-17, 2011
22	2011-12	Igy George	Globalization and Agricultural labour market. Scott Christian College, Nagercoil. June 17-18, 2011
23	2011-12	Alphonsa C.A	National Seminar UC College, Aluva, 15-3-12
24	2011-12	Radhamani Amma P.L	Seminar conducted by Vikalp at Thrissur on 13 <sup>th</sup> August 2011.
25	2011-12	Mini Varghese	Seminar at Kerala Varma College, Thrissur, conducted by Vikalp on 11/6/2011
26	2011-12	Smitha Thankachan	National Symposium on ‘Nanoscience and Technology’ conducted by Nirmala College, Muvattupuzha on 2011
27	2011-12	Smitha Thankachan	National Symposium on ‘Nanoscience and Technology’ conducted by Nirmala College
28	2011-12	Anu Yamuna Joseph	National Conference on “Bio-prospecting of plant genetic resources of Western Ghats”, St. Thomas College, Pala. Kerala (2011).
29	2011-12	Anu Yamuna Joseph	National symposium on “Emerging Trends in Biotechnology”, CUSAT 2011, Book of Abstracts Pg no.92-93
30	2011-12	Anu Yamuna Joseph	National symposium on “Emerging Trends in Biotechnology”, CUSAT 2011 , Book of Abstracts Pg no.96-97
31	2011-12	Bino Sebastian	National Conference on Signal and Image Processing held at Gandhigram, Rural Institute, Dindigal.
32	2011-12	Aswathy Balachandran	National Seminar On Green Perceptions :Ecology And Texts T St Paul’s College Kalamassery On 15 <sup>th</sup> And 16 <sup>th</sup> September 2011
33	2011-12	Aswathy Balachandran	National Seminar On Indian Comparative Literature: New Trends And Perspectives At Sree Sankara University of Sanskrit, Kalady On 29 To 31 <sup>st</sup> March 2012
34	2011-12	Jose George	National Seminar on Women In Theatre, Newman College, Thodupuzha, ate- 13 December 2011
35	2011-12	Alphonsa C.A	Regional Seminar Baratha Matha College, Thrikkakara, 7-3-12
36	2011-12	Anjali Abraham	National Seminar on Scripting success. St Joseph’s college for women, Alappuzha. 23-24 January 2012
37	2011-12	Mohanan Pillai	National seminar on Contemporary trends in hindi short stories. Govt. Arts and Science college, Kozhikode. 16-17 January 2012
38	2011-12	Mohanan Pillai	National seminar on <i>Rachanakar Agyeya</i> . Sree Sankaracharya University of Sanskrit, Kaladay. 20 <sup>th</sup> January 2012
39	2011-12	Mohanan Pillai	National seminar on <i>Samakaleen hindi upanyas mein prathirodh ka swar</i> . Sree Sankaracharya University of Sanskrit, Regional Centre,

			Thrissur. 7-8 March 2012
40	2011-12	Mohanan Pillai	National Seminar in Connection with <i>G. Smaraka Gnanapeeta Puraskara prabhashanan parampara</i> . Maharaja's college, Ernakulam. 12-13, April 2012
41	2011-12	Mohanan Pillai	National Seminar on Contemporary issues in Contemporary hindi literature: A critical evaluation. Govt. Victoria college, Palakkad. 10-11 January 2012
42	2011-12	Diana Ann Issac	National seminar on Emerging trends in Banking and finance. 14-15 march 2012. MA College, Kothamangalam
43	2011-12	Diana Ann Issac	National Seminar on Insulation of Indian economy from Global financial crisis. MG University. 20-21 March 2011
44	2012-13	P.R. Sreedevi	Indian Science Congress held at Kolkata, West Bengal, 3-7 January 2013, Abstract No: ABF P -157
45	2012-13	Anu Yamuna Joseph	UGC Sponsored National Seminar on "Clinical Applications of Molecular Biology", Mar Athanasius College, Kothamangalam, Kerala,2012, Proceedings Pg no.22
46	2012-13	Anu Yamuna Joseph	UGC Sponsored National Seminar on "Clinical Applications of Molecular Biology", Mar Athanasius College, Kothamangalam, Kerala,2012, Proceedings, Pg no.29
47	2012-13	Anu Yamuna Joseph	UGC Sponsored National Seminar on "Clinical Applications of Molecular Biology", Mar Athanasius College, Kothamangalam, Kerala,2012, Proceedings, Pg no.33
48	2012-13	Shanti A Avirah	UGC Sponsored National Seminar on "Clinical Applications of Molecular Biology", Mar Athanasius College, Kothamangalam, Kerala,2012, Proceedings, Pg no.27-28
49	2012-13	Jayamma Francis	UGC Sponsored National Seminar on "Clinical Applications of Molecular Biology", Mar Athanasius College, Kothamangalam, Kerala,2012, Proceedings, Pg no. 30-31
50	2012-13	Densely Jose	UGC Sponsored National Seminar on "Clinical Applications of Molecular Biology", Mar Athanasius College, Kothamangalam, Kerala,2012, Proceedings Pg no.32
51	2012-13	Asha Gangadharan	UGC sponsored national conference cum workshop on "Nutraceuticals- perspectives prospects and challenges" organized by the Department of Chemistry & Botany, Mar Athanasius college, Kothamangalam on 12 and 13 of March 2013.
52	2012-13	Jayamma Francis	UGC sponsored national conference cum workshop on "Nutraceuticals- perspectives prospects and challenges" organized by the Department of Chemistry & Botany, Mar Athanasius college, Kothamangalam on 12 and 13 of March 2013.
53	2012-13	Densely Jose	UGC sponsored national conference cum workshop on "Nutraceuticals- perspectives prospects and challenges" organized by the Department of Chemistry & Botany, Mar

			Athanasius college, Kothamangalam on 12 and 13 of March 2013.
54	2012-13	Nivya Mariam Paul	UGC sponsored national conference cum workshop on “Nutraceuticals- perspectives prospects and challenges” organized by the Department of Chemistry & Botany, Mar Athanasius college, Kothamangalam on 12 and 13 of March 2013.
55	2012-13	Ann Kocheriyil Joseph	UGC sponsored two day national seminar on “Molecular Evolution and phylogeny” organized by the Department of Zoology, Mar Athanasius college, Kothamangalam on 1 & 2 March 2013.
56	2012-13	Julie Jacob	National symposium on Innovative approaches and Modern technology for Crop productivity, Food safety and Environmental sustainability, Thrissur, November 2012
57	2012-13	Julie Jacob	Second Indian Biodiversity Congress, IISc, Bengaluru, December 2012
58	2012-13	Latha.S.Nair	UGC sponsored National seminar on Actuarial Science, Cryptography and Geogebra at Mar Athanasius College Kothamangalam 14-15 Mar 2013.
59	2012-13	Sheeba Abraham	FDI in Multi- Brand Retail Sector in India- Issues and Challenges ahead, P G and Research Dept. of Economics, Mar Athanasius College, Kothamangalam. 7-8 March 2013
60	2012-13	Puthuma Joy	FDI in Multi- Brand Retail Sector in India- Issues and Challenges ahead, Dept. of Economics, Mar Athanasius College, Kothamangalam 7 -8 March 2013
61	2012-13	Deepa Abraham	FDI in Multi- Brand Retail Sector in India- Issues and Challenges ahead, Dept. of Economics, Mar Athanasius College, Kothamangalam 7 -8 March 2013
62	2012-13	Aswathy Balachandran	National Seminar on Literature and The Environment at Sree Sankaracharya University of Sanskrit, Kalady On 25 <sup>th</sup> To 27 <sup>th</sup> March 2013
63	2012-13	Alphonsa C.A	National Seminar St. Teresa’s College, Ernakulam, 28-6-12
64	2012-13	K.B Sherly	National Seminar –cum- Workshop on Computational Chemistry and its Applications, S.N.M College, Maliankara, 25 <sup>th</sup> & 26 <sup>th</sup> March, 2013.
65	2012-13	Densely Jose	National Seminar on “Clinical Application of Molecular Biology” held at M.A. College Kothamangalam.
66	2012-13	Densely Jose	National Seminar on Nutraceutical – Perspectives, Prospects and Challenges held at M.A. College Kothamangalam on 12 <sup>th</sup> and 13 <sup>th</sup> March 2013
67	2012-13	Manju Kurian	National Conference On Spectroscopy- A chemical and Biological Perspective Held At Newman College, Thodupuzha On 28 February- 1,2, March 2013
68	2012-13	Alphonsa C A	National workshop: Theory and appreciation – The dynamics of popular cinema. UC College Aluva, 15-16 March 2012

69	2012-13	Sini K S	National seminar on Woman in culture, consciousness and text at Govt. College Tripunithura. 6-7 December 2012
70	2012-13	Binitha R N	National Conference cum Workshop on Nutraceuticals: Perspectives, Prospects and Challenges. Mar Athanasius college, Kothamangalam. 12-13 March 2013
71	2012-13	Mini Varghese	National Seminar on <i>Stree vimarsh aur samakaleen hindi sahitya. Sree Sankaracharya</i> University of Sanskrit, Kaladay. 28 feb 01 March 2013
72	2012-13	Annu Anna Varghese	National Seminar CTriC 2013, CUSAT, Kochi. 22-13 March 2013
73	2012-13	Manjula K	Methods and techniques in social science research. Newman College, Thodupuzha. 12 December 2012
74	2012-13	Diana Mathews	National Seminar on Equity in search of sustainability: An ecological view. CMS College, Kottayam. 23-24 January 2013
75	2012-13	Diana Mathews	National seminar on Family as an Institution: Modern realities and trends in law. MG University. 28 Feb – 2 March 2013
76	2012-13	Mridula Venugopal	National seminar on Aging and society: A multi disciplinary approach. St. Teresa's college, Ernakulam. 4-5 October 2012
77	2013-14	Sheeba Abraham	Changing status of women in India – Its issues and challenges. Morning star Home science college, Angamaly. 25-26 July 2013
78	2013-14	Vijayakumari M S	National Seminar at St. Josephs college, Irinjalakuda 5 <sup>th</sup> August 2013
79	2013-14	Igy George	Changing status of women in India – Its issues and challenges. Morning star Home science college, Angamaly. 25-26 July 2013
80	2013-14	Diana Mathews	National Seminar on Understanding the tribal life in India: Issues, challenges and alternative approaches. MG University. 10-11 October 2013
81	2013-14	Sini K S	The pleasure principles: Theorizing popular texts. Bharat Matha college, Thrikkakara 5-6 December 2013
82	2013-14	Diana Mathews	National Seminar on Indian environmental issues – Lessons from history. St. Teresa's College, Ernakulam. 25-26 November 2013
83	2013-14	Aby P Varghese	National seminar on Invertebrate taxonomy – Current trends and future prospects. Nirmala College, Muvattupuzha. 12-13 November, 2013
84	2013-14	Aby P Varghese	National seminar on Invertebrate taxonomy – Current trends and future prospects. Nirmala College, Muvattupuzha. 12-13 November, 2013
85	2013-14	Jinu John	National Seminar on Child Characters in Hindi literature. MES Asmabi college, Kodungalloor. 19-20 July 2013
86	2013-14	Sini K S	The pleasure principles: Theorizing popular texts. Bharat Matha college, Thrikkakara 5-6 December 2013
87	2013-14	M. S. Vijayakumari	National Seminar on Domestic migrant labor force in Kerala: Issues and challenges ahead. St Joseph's college, Irinjalakuda. 5 August 2013

88	2014-15	Smt. Puthuma Joy	National Seminar Organised by the Dept. of Sociology, M.A. College, Kothamangalam
89	2014-15	Litha Mary Issac	Kuriakose Elias College, Mannanam on 30 & 31 October 2014
90	2014-15	Litha Mary Issac	“SHG bank Linkage Programme- An effective tool of financial inclusion” at Devamatha College , Kuravilangad on 4 & 5 February 2014
91	2014-15	Jessy Varghese	National Seminar organized by the Dept. of English, St. Paul's College , Kalamassery on June 2014
92	2014-15	Jessy Varghese	National Seminar organized by the Dept. of English, Newman College , Thodupuzha on October 2014
93	2014-15	Jessy Varghese	National Seminar at T.M.Jacob Memorial College, Manimalakunnu on December 2014
94	2014-15	Anjaly Abraham	National Seminar at Newman College, Thodupuzha.
95	2014-15	Aswathy Balachandran	National Seminar organized by the Dept. of English , Devamatha College, Kuruvilangad on February 2014
96	2014-15	Aswathy Balachandran	National Seminar organized by the Dept. of English, Newman College, Thodupuzha on October 2014
97	2014-15	Aswathy Balachandran	National Seminar organized by the Dept. of English, Newman College, Thodupuzha on January 2014
98	2014-15	Sini K.S.	National Seminar organized by the Dept. of English, S.N. College for Women on February 2014
99	2014-15	Sini K.S.	National Seminar organized by the Dept. of Sociology, M.A. College, Kothamangalam on August 2014
100	2014-15	Sini K.S.	National Seminar organized by the Dept. of English, Newman College, Thodupuzha on October 2014
101	2014-15	Anu Yamuna Joseph	Conference held at NIMHANS, Bangalore, on 17 <sup>th</sup> , 18 <sup>th</sup> and 19 <sup>th</sup> November, 2014.
102	2014-15	Anu Yamuna Joseph	UGC sponsored national seminar on New Vistas in Microbiology held at Mar Athanasius College, Kothamangalam on 16 <sup>th</sup> & 17 <sup>th</sup> October, 2014.
103	2014-15	Anu Yamuna Joseph	UGC sponsored national seminar on New Vistas in Microbiology held at Mar Athanasius College, Kothamangalam on 16 <sup>th</sup> & 17 <sup>th</sup> October, 2014.
104	2014-15	Ms Sajana C	CMS College of Science and Commerce, Coimbatore, 2014
105	2014-15	Smt. Remia K	National Seminar organized by Sociology Dept, M.A College
106	2014-15	Bince Mathew	National Seminar organised by the Sociology Dept., M.A College

#### 2.4.4 Faculty recharge:

The College Management motivates the teachers to avail various faculty improvement programmes such as FIP of UGC, major and minor research projects, paper presentations etc.

- Two teachers are awarded Ph.D under FIP of UGC
- Three teachers submitted their Ph. D thesis under FIP of UGC
- Five teachers are pursuing research for Ph. D under FIP of UGC
- Four teachers have applied for FIP in 2014
- 9 major and 50 minor research projects are sponsored by various funding agencies.
- The College Management offers incentives for paper publications.

#### 2.4.5 Awards and recognitions:

- The College was selected as the '*Best College in Sports*' in 2014 by the Sports Council of Kerala.
- The College has been awarded *Green Award* (2011) of the Kerala Biodiversity Board.
- Sri P I Babu has been selected as the '*Best teacher in sports*' by the Govt. of Kerala in 2014.
- Dr. Anu Yamuna Joseph, Department of Biotechnology has been selected for Post Doctoral Young Scientist Award of Kerala State Council for Science, Technology and Environment (KSCSTE) to carry out research on 'DNA Hypermethylation as a prognostic and predictive marker of breast cancer'.
- Dr. Riju C. Issac, Department of Physics, has been awarded a Patent for 'Focused gamma ray beam generating system'

#### 2.4.6 Evaluation of teachers by the students:

Student's feedback is obtained in a prescribed form at the end of the term, appraised and discussed with faculty members individually by the Principal. Suggestions for improvement are evaluated and implemented. Evaluation can help teachers to identify problems in their teaching and learning and hopefully provide ways to tackle them.

### 2.5 Evaluation Process and Reforms

#### 2.5.1 Evaluation processes:

At the commencement of every academic year/semester, special sessions are held for students and parents. The teachers-in-charge and heads of departments instruct students in detail of the evaluation methods followed and clarify their doubts, if any. A hand book is also published containing information on the evaluation methods. The time table for the terminal and University examinations is published in the College notice board.

Regular periodical class tests and terminal examinations are conducted by the College for evaluating the academic progress of the students. Progress reports are prepared by the class teachers and sent to parents for obtaining their remarks.

#### 2.5.2 Evaluation reforms of the University:

The Mahatma Gandhi University has introduced Choice Based Credit and Semester System (CBCSS) for the Under Graduate programmes in 2009 and Credit and Semester System (CSS) for Post Graduate Programmes in 2012. As an affiliated institution, the college is following the regulations and guidelines of the University.

#### 2.5.3 Effective implementation of the evaluation reforms of the University:

The college strictly adheres to the academic calendar of the University in conducting in-semester examinations, continuous evaluation, publishing results, redress grievances and timely submission of the internal marks to the University. The college also takes initiative to conduct the end-semester examination in strict compliance of the University norms. The Principal deposes teachers as examiners in centralized valuation camps as per the direction of the University.

#### 2.5.4 Formative and summative assessment:

Theory and practical papers are assessed periodically; Students are given feed back of the marks obtained in the formative evaluation. At the end of the semester the consolidated Internal assessment marks are forwarded to the University and final summative exam carry 20 % of total marks from the internal assessment. The summative exam is conducted by the University at the end of each semester and grades are offered.

#### 2.5.5 Ensuring rigor and transparency in the internal assessment:

The college ensures transparency in internal assessment by the following measures:

- Prior intimation of conducting in-semester examinations
- Valued answer scripts signed by the teachers are returned to the students.
- The answer scripts are to be signed by both the student and parent and collected back.
- Provision for re-tests.
- Entering internal marks in mark register.
- Mark registers are to be signed by the candidates.
- Publishing consolidated internal mark sheets in the department notice board
- Provision for grievance redress

Grace marks and weightages for co-curricular and extracurricular activities are awarded by the university along with the end-semester examination results.

### 2.5.6 Graduate attributes of the College”

The following are the Graduate Attributes of Mar Athanasius College:

- Character, Integrity and honesty
- Ethical and Moral values
- Courage and Tenacity
- Academic competence and Research aptitude
- Social and Life skill
- Healthy and Disciplined life

The graduate attributes are to be attained by:

- Effective curriculum transaction
- Exposure to modern trends in science and technology
- Value education programmes
- Extension and outreach programmes
- Co-curricular and Extra-curricular activities
- Best sports infrastructure and training

### 2.5.7 Grievance redressal mechanism:

The internal marks of the students are published in the Department notice board before forwarding to the University. This system ensures transparency in valuation and provides opportunity for the students to better their performance. A grievance redressal committee is functioning in the College. It reviews the complaints and takes necessary steps in solving the grievances of the students.

## 2.6. Student performance and Learning Outcomes

### 2.6.1 Stated learning outcomes:

The learning outcomes expected are in tune with Vision, Mission and Graduate Attributes set by the College. All the stakeholders are intimated through the College website, College handbook, and Display boards.

### 2.6.2 Monitoring student performance:

The College monitors the progress and performance of students by maintaining, Student Data Cards and Mark entry Registers. The performances of students are communicated to the parents through the answer scripts and periodic PTA meetings.



*University Rank holders since 2010*

Sl No.	Name	Position	Programme	Year
1	Ms. Shilpa Zacharia	I	B. Sc. Chemistry	2014
2	Ms. Soniya.K.N	III	B. Sc Mathematics	2014
3	Ann Gigi George	I	B. Sc Mathematics	2013
4	Akhil Raj P.	I	M. Sc. Biotechnology	2013
5	Aswathy Udayan	I	M. Sc. Microbiology	2013
6	Limi R. Viswanathan	II	M. Sc. Biochemistry	2013
7	Kshema Sabitha Augustin	III	M. Sc. Microbiology	2013
8	Neenu Jayan	III	M. Sc. Microbiology	2013
9	Sudheesh A. P.	I	M. Sc. Biotechnology	2012
10	Anne Mary Sajan	II	M. Sc. Biotechnology	2012
11	Deepthy R.	II	M. Sc. Biotechnology	2012
12	Vidya Pakideery	III	M. Sc. Biotechnology	2012
13	Sajith R.	I	M. Sc. Microbiology	2012
14	Sreedevi Menon	I	M. Sc. Microbiology	2012
15	Binshad B.	I	M. Sc. Biochemistry	2012
16	Vishnu KV	II	M. Sc. Biochemistry	2012
17	Shanavas Yoosuf	I	M. Sc Chemistry	2012
18	Rahanamol A M	III	M. Sc Chemistry	2012
19	Ann Gigi George	I	B. Sc Chemistry	2012
20	Jeena Balakrishnan	I	B. Sc Statistics	2011
21	Ajimol Soman	II	B. Sc Statistics	2011
22	Arija Rajeev	III	B. Sc Statistics	2011
23	Anjitha Manoharan	I	B. Com. Tax (Procedure & Practice)	2011
24	Aravind S	II	B. Com. Tax (Procedure & Practice)	2011
25	Akhil Mohan	III	B. Com. Tax (Procedure & Practice)	2011
26	Rakhy Paul	I	B. Com. Tax (Procedure & Practice)	2010
27	Sarath K Renjith	II	B. Com. Tax (Procedure & Practice)	2010
28	Bibin V Basheer	III	B. Com. Tax (Procedure & Practice)	2010
29	Sreeja P.S.	I	B. Sc. Statistics	2010
30	Jinse Jacob	II	B. Sc. Statistics	2010
31	Sethumol V.M.	II	B. A. Hindi	2010

### Results since 2010

Subject	2014	2013	2012	2011	2010
Under Graduate Courses					
Mathematics	88.9	95.65	100	60	92.8
Physics	85.0	82.35	90	81	72
Chemistry	93.0	88.23	87	69.2	80.65
Botany	85.7	100	93	59.5	96.5
Zoology	78.7	75	70	85.2	81.8
Statistics	80.8	92	96	88.5	96.43
Commerce Model I	95.83	93.61	96	89.3	86.95
Commerce Model III	94.87	94.73	100	81.5	86.84
English	89.2	88.23	81	75.8	78.9
Hindi	72.0	81.81	89	78.4	88.24
Economics	67.7	77.77	71	100	80
History	75.0	88.23	82	85.4	62.5
Sociology	67.0	62.16	65	86.5	57
Post Graduate Courses					
Mathematics	69.2	64.3	81	58.3	64
Physics	35.7	21	67	42.9	53.3
Chemistry	77.8	78	92	33.3	60
Commerce	100	92	71	66.7	85.7
English	83.3	75	85	91.6	66.6
Economics	66.7	67	82	78.9	65.5
Microbiology	94.7	94.74	83	71.4	92
Biotechnology	86.7	86.7	93	66.7	74
Biochemistry	100	100	88	66.7	56
Zoology*	91.7				
Actuarial Science*	100				

\*Courses started in 2012-13

#### 2.6.3 Teaching, learning and assessment strategies to achieve learning outcomes:

The entire teaching, learning and assessment strategies are prepared as per provision of course curriculum. Through interactive sessions, practical work, lab visits and project work, the students learn adequate behavioral and life skills. They learn to face the life challenges. Collectively, College tries overall development of the learner.

#### 2.6.4 Measures to enhance the social and economic relevance of the courses:

As an affiliated institution, the College follows the Syllabi and regulations of the University. The College offers wide spectrum of opportunities for the students to achieve their maximum through various Co-curricular and Extra-curricular activities. All the infrastructural facilities are on par with the national standards. The College also provides proper environment to nurture different

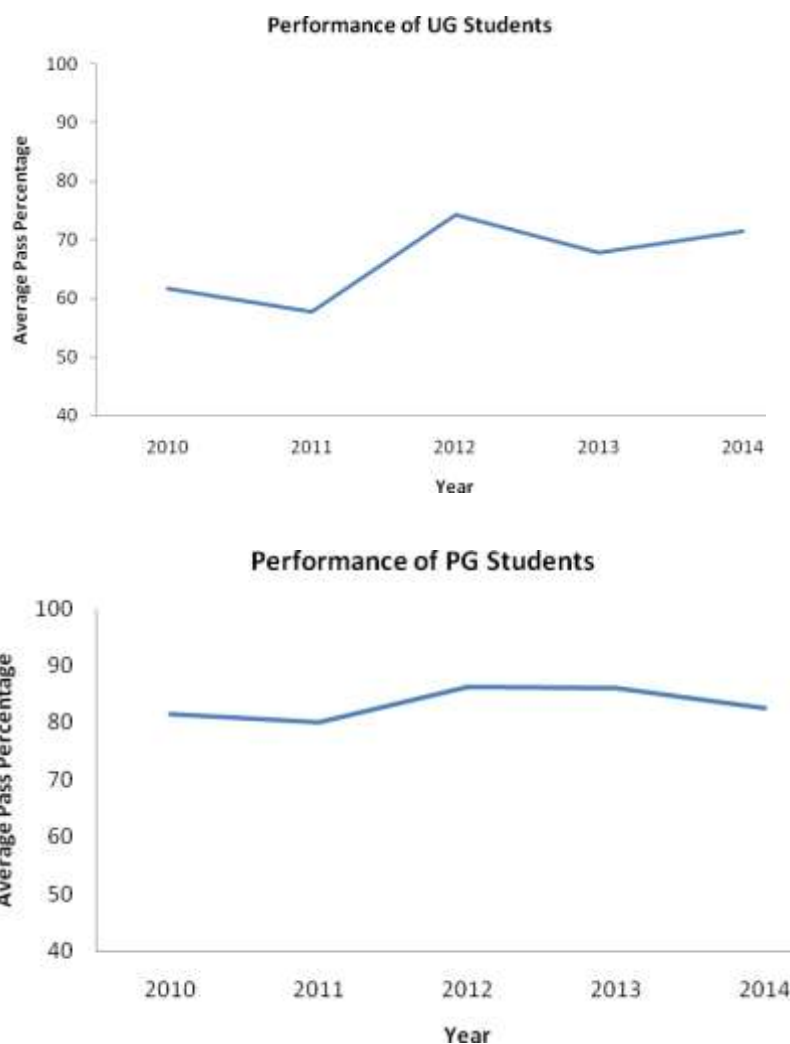
aptitudes of the students.

### 2.6.5 Analysis of student performance and learning outcomes:

The College records the progress and performance of students by maintaining Student Data Cards and Mark entry Registers. Class wise analyses of the data are carried out to assess the performance level of the students by comparing with their previous performances. Based on the analysis, students are categorized by the class teacher and assigned the slow learners to various remedial and tutorial classes.

### 2.6.6 Monitoring and ensuring learning outcomes:

- The College analyzes the University results regularly: The College performs statistical analysis of university results and tries to find the factors which affect academic performance and rectify them.



- Monitor the academic progression of the students: Class teacher continuously monitor student performance based on tests, assignments

and reports from other teachers. Class teacher can help the student to realize and overcome his/her weakness and capitalize on strengths.

- Feedback from the employers: Yearly feedback is collected from the employers about the industry needs.
- Student feedback on course and curriculum: Regular feedback is collected from the students about all aspects of the curriculum.
- Parent feed back on course and curriculum: The College have a strong Parent Teacher Association, which regularly collects feedback from the parents of the present and passed out students about curriculum.
- All the final year students are enrolled in Alumni Association

#### 2.6.7 Assessment and evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning:

- Formative and summative evaluation of results: The College conducts periodic assessments of each course in every semester and makes necessary corrective actions.
- Find out the merits and weakness: Each student is individually assessed and his /her strengths and weaknesses are identified and necessary support is provided.
- Invite suggestions: The College constantly invites suggestions from students alumni, industry and parents about all aspects of the functioning and these are considered when making amendments and policy decisions.
- Incorporate changes in the next academic year: The changes are incorporated every academic year considering the performance of the previous year.
- The College has supported every department by giving laptop, net book, and desktop computers. It enables the faculty members to prepare computer aided learning materials. College has also provided LCDs and Wi-Fi connectivity to the departments for effective use of computer aided learning materials.
- e-learning platform: E-learning is the use of electronic technology in teaching and learning, includes Information and Communication Technology (ICT), Computer-Aided Instruction (CAI) and Web Based Training (WBT)
- Digital library: is a focused collection of digital objects that can include text, visual material, audio material, video material, stored as electronic media formats.

## **CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION**

### **3.1 Promotion of Research**

#### 3.1.1 Recognized research centers in the College:

There are four regional research centers - two in Arts and Humanities (English and Economics) and two in Science subjects (Physics and Chemistry).

#### 3.1.2 Research committee and its function:

The Research Committee of the College consists of members of the faculty from Arts, Humanities and Science departments, with the Principal as the Chair person.

Research Committee evaluates the proposals prepared by the staff members, and if found eligible they are forwarded to the concerned funding agency for consideration.

In addition to the Research Committee, there are subject Research Committees in the four Research Centers. Each Committee includes the Principal as the Chairperson, one external subject expert, Head of the Department and Research Guides.

Research Committee encourages the faculty to attract funding through proposals. A total of 60 minor and 15 major research proposals were submitted since 2010. Out of these, 50 minor (Rs.53,47,000/-) and 9 major research projects (Rs.1,13,34,500/-) have been approved by various funding agencies. A total of Rs. 1,55,81,500/- ( An amount of one Crore fifty five lakh, eighty one thousand five hundred only) received for minor and major research projects together during 2010-2015.

The committee took a leading role in coordinating major research proposals like the CPE of the UGC. The College availed the CPE Phase I of UGC and purchased a number of sophisticated instruments such as uv-visible spectrophotometer (Perkin Elmer) (Rs 7,36,977/-), X-Ray Diffractometer (Rigaku)(Rs. 28,49,626/-), and Atomic Absorption Spectrophotometer (Perkin Elmer) (Rs. 21,31,043/-) to enhance the science research, and developed an instrumentation center in the College. The CPE Phase II was also awarded to the College up to 2019.

The committee also had submitted a proposal to Department of Science and Technology (DST) under FIST scheme and availed an amount of Rs. 79 lakhs to augment the research infrastructure facility of the College.

The committee has taken initiative in conducting the interview for selecting candidates for the Faculty Improvement Programme of UGC for the XI<sup>th</sup> and XII<sup>th</sup> plan period. Four members of the staff submitted applications for

FIP of UGC during 2013-2014. Sri. Mathews Jacob (Physical Education), Smt. Deepa.S. (Physics), Marymol Moothedan (Chemistry), Ms. Sheeba Abraham (Economics), Susan Ray Joseph (Mathematics) and Asha Mathai (Malayalam) have been accorded sanction to pursue research under the FIP of UGC. Smitha Thankachan (Physics), Latha S Nair (Mathematics), Bino Sebastian (Mathematics), Igy George (Economics) and Eldhose A. M (Economics) have completed their Ph. D under FIP of UGC.

### 3.1.3 Implementation of research schemes and projects:

#### *Autonomy to the Principal investigator*

The Principal Investigators have the freedom for selection of research topic, execution of proposed work, dissemination of data and publication of results.

#### *Timely availability or release of resources*

The basic amenities required for conducting the research work are provided by the College Management and funds are released as and when required by the Investigator.

#### *Adequate infrastructure and human resources*

Moreover, each research center is provided with adequate floor space having necessary infrastructure. The research scholars in the PG and Research Department of English have access to more than 8000 books and 20 journals on literature, language and literary theory maintained at the central library.

The Research Centre in Economics has 4000 books, 15 journals and 250 reference books for pursuing research in the respective field.

Equipments such as Catalytic reactors, Mechanical stirrers, Magnetic stirrers, Electronic Balance, Thermostat, Refrigerators, Muffle furnace, Microwave oven etc. are available in the Research Centre in Chemistry.

DLP Wireless data projector, Fluke 189 Logging Multimeter, Precision LCR Meter-1MHz, High vacuum deposition unit with multi source facility, Sensor characterization facility with different toxic gases, Electronic balances, Chemical bath deposition set up, Vacuum Measuring instruments, High temperature furnace, 1MHz Function Generator etc. are the major facilities provided to the research scholars in the Physics Research Centre.

The College has a Sophisticated Instrumentation Centre for the research requirements of the faculty, postgraduate students and research scholars. Major equipments in the Centre are X-Ray Diffractometer (Rigaku), Atomic Absorption Spectrophotometer (Perkin Elmer), Gas Chromatograph (Perkin Elmer), High Performance Liquid Chromatography, UV Visible Spectrometer (Perkin Elmer), Total Organic Carbon Analyser (Schimadzu), Impedance Analyser (Agilent), Gel Documentation, Stereomicroscope (Leica), Laminar

Airflow etc. Pressure Reactor, Digital Photoelectric Colorimeter, Air Oven, Muffle Furnace, Temperature Programmed Desorption Reactor, Microwave oven, Rotary Shaker, Surface Area Analyzer etc. The center is provided with uninterrupted power supply so as to ensure the maximum productivity.

*Time-off, reduced teaching load, special leave etc. to teachers*

Teachers can avail duty leaves for attending workshops, conferences, symposia, paper presentations etc. as per Government and Mahatma Gandhi University norms.

*Support in terms of technology and information needs*

In addition to the print journals, the library subscribes to the electronic resources under the N-LIST (National Library and Information Services Infrastructure for Scholarly Content) programme of the UGC-INFONET. By utilizing this facility we can have access to more than 3000 full text journals and 97000 electronic books.

The N-LIST programme includes full text e-resources from American Institute of Physics (USA), American Physical Society (USA), Cambridge University Press (UK), Oxford University Press (UK), Royal Society of Chemistry (UK), H.W. Wilson, JSTOR etc.

All the research centers are provided with ICT infrastructure like computers, broadband and Wi-Fi connectivity, DLP projectors and various softwares for data analysis.

*Facilitate timely auditing and submission of utilization certificate to the funding authorities*

The accounting and auditing of all the research funds are carried out by a qualified auditor appointed by the College Management. Also, project completion reports, annual reports, and audited utilization certificates are submitted to the funding agency in time.

#### 3.1.4 Nurturing scientific temper, research culture and aptitude

The college has conducted a number of activities to encourage the faculty, research scholars and the students to develop scientific temper and research culture.

- The Department of Physics organized an International Conference on 'Frontiers of Plasma Physics and Technology (FPPT 7)' in Kochi during 13-17 April 2015 in connection with the Diamond Jubilee Celebrations of the College. The Conference was organized in cooperation with International Atomic Energy Agency (IAEA), FAIR (Facility for Antiproton and Ion Research, Germany), Technical University of

Darmstadt, Germany, and TU WIEN (Technical University of Vienna, Austria). 150 delegates from 20 countries participated in the conference.

- 13 national seminars conducted during the last five years by the financial support of the UGC.
- Five state level workshops are conducted by the Bio science departments on 'Biological techniques'.
- 9 state level seminars were organized by the financial support of the College Management.
- Motivate the students to present research articles in the international and national Seminars.
- The College celebrates National Science Day every year.
- Research project work as per curriculum for both UG and PG students
- PG students have access to the sophisticated laboratory infrastructure to carry out experiments related to their project work.
- Industrial and R & D lab visit for firsthand experience.
- Science Exhibition in collaboration with Mar Athanasius College of Engineering, Kothamangalam in connection with Golden Jubilee celebrations.
- Celebrated International Year of Chemistry and Mathematics in 2011 and 2012 respectively.
- Organized annual summer school programme (*Manimala*) for school students giving awareness in the popularization of science since 2007 regularly.
- Water and soil analysis done for eighteen wards of Kothamangalam Municipality,
- Science orientation programme for school students (Tribal) – *Sasthrajalakam* 28 March 2015.
- The college has a medicinal plant garden in the campus.
- The college conducted biodiversity documentation work in Pinavoorkudy tribal village with active participation from students.



### 3.1.5 Faculty involvement in active research

#### *Research Guides in the College*

SI No.	Research Centre	Research Guides	
1	English	1	Dr. D. Radhakrishnan Nair
		2	Dr. V. Nithyanantha Bhatt
		3	Dr. Shibu Simon
		4	Dr. Jose George
2	Hindi	5	Dr. K. Mohanan Pillai
3	Economics	6	Dr. Sheela Varghese
		7	Dr. Leena George
		8	Dr. Manjula K.
		9	Dr. M. S. Vijayakumari
4	Chemistry	10	Dr. Winny Varghese
		11	Dr. M. M. Joseph
		12	Dr. Shanti A. Avirah
		13	Dr. K. B. Sherly
		14	Dr. Jayamma Francis
		15	Dr. Densely Jose
		16	Dr. Manju Kurian
5	Physics	17	Dr. Boben Thomas
		18	Dr. Mary Issac
		19	Dr. Benoy M. D.

#### *P h. D produced since 2010*

SI No.	Name of Research Scholar	Topic	Year
English			
Guide: Dr. V Nithyanantha Bhatt			
1	Jessy James	The image in the mirror: the Mother-Daughter bonding in selected post-independent Indian English fiction by women.	2012
2	Lima Antony	Gerald manly Hopkins and Indian Aesthetics	2012
Guide : Dr. D Radhakrishnan Nair			
3	Shima Mathew	Time, Shapes: Italo Calvino's If on a Winter's Night a Traveller and David Lodge's Small world.	2013
Guide: Dr. Shibu Simon			
4	Correya Blazy	Conception and reception: A symbiotic interface between Mahaswetha Devi and Gayatri Devi and Gayatri Chakravathy Spivak.	2011

5	Sarojini Sudha	From Oppression to Optimism through Self-spun Philosophy- A comparative reading of the fictional output of Maya Angelou and Bama.	2012
6	Sijo Varghese	Art and Activism: A Study of Arundhati Roy's Writings from a Subaltern Perspective.	2013
Physics: Dr. Boben Thoas			
7	Radha K	Preparation and Uses of Carboxy terminated Liquid Natural Rubber	2013
8	Benoy Skariah	Characterization of Semiconductor Oxide Films for Sensing Organic Gases	2015

*Research scholars registered for PhD*

English			
SI No.	Guide: Dr. V Nithyanantha Bhatt		
1	Rosa Juju Joseph C	Constructing the Female Subject: Women in the Works of Post- Independence Indian English Women Poets.	
2	Sreeja M	Translating Indulekha: The English Renderings in the Historical and Cultural Contexts: A Comparative Perspective	
3	Priya Jose K	Society in the 'Kathasaritsagara'.	
4	Rahul N	Mixing Memory and Desire: Dhvani and Lacanian Psychoanalysis in T.S Eliot's Poetry.	
5	Saumi Mary M	Charting the Cultures in Conflict: A Study of the Caribbean Culture as Reflected in Jean Rhy's 'Wide Sargasso Sea' and Phyllis Shand Allfrey's 'The Orchid House'.	
6	Ramesh K.G	Between the Indomitable East and the Irresistible West: A Critique on the Narration of Turkey's Cultural Ambivalence in the select Novels of Orhan Pamuk.	
7	Jisha John	Exploring the Facets of Globalization: A Reading of the Select Works of Hari Kunzru, Zadie Smith, Monica Ali and Chetan Bhagat.	
8	Alphonsa C.A.	Representational Politics In <i>Aithiyamala</i>	
Guide: Dr. D Radhakrishnan Nair			
9	Amitha.P.Mani	Comparative Narrativity In Daniel Defoe's "Robinson Crusoe" And J.M. Coetzee's <i>Foe</i>	
10	Seethal	Landscapes of Resonance And Resistance: An Eco-critical Reading of Select Novels of Sarah Joseph	
Guide: Dr. Shibu Simon			
11	Bindu Joseph	Politics of Gender and race: A study of the Works of Ruth Praver Jhabvala and Meena Alexander	
12	Mini M. Abraham	Perceiving the Missing Link: Strategies towards Developing Focused Listening Skills for Enhanced English Language Learning among Undergraduate Learners in Kerala	
13	Viju M.J	Application of ICT in Communicative Language Learning	
Guide: Dr. Jose George			
14	Vikas Paulose	Figures of Speech in Motion Pictures: A Reading of	

		Adoor Gopalakrishnan's Films
Chemistry		
Guide: Sherly.K. B		
15	Marymol Moothedan	Synthesis, Characterization and Catalytic Application of Nanolanthana and Its Mixed Oxides
16	Rakesh K	Synthesis, Characterization and Catalytic Application of sulphated Nanozirconia
Guide : Manju Kurien		
17	Divya.S. Nair	Development of Nanoferrite Catalysts for Abatement of Persistent Organic Pollutants in Water
18	Kavitha.S	Synthesis, Characterization and Green Chemical Applications of Transition Metal Pillared Clay Catalysts
19	Christy Kujachan	Synthesis, Surface Properties and Green Chemical Applications of Nanoceria Based Catalysts
Physics		
Guide: Dr. Boban Thomas		
20	Anisha Joseph	Gas Sensing Properties of Doped Tin Oxide Thin Films: Influence of Micro-Structural Features.
21	Deepa. S	Gas Sensing Properties of Non-Noble Metal Doped Tin Oxide Thin Films
22	K Prassanna Kumari	Microstructural Aspects In Gas Sensing Properties of Doped Tin Oxide Thin Films
Economics		
Guide: Dr. Sheela Varghese		
23	Eldhose AM (Submitted)	Health Insurance Among the Unorganized Workers-Need for the Insurance
Guide: Dr. Leena George		
24	Jayalakshmi K	An Economic Analysis of Quality of Higher - Education with Special Reference to Professional Colleges in Kerala
25	Jisha K.K	Over Dues Problems Of Farm Credit In Palakkadu District- Comparison Between Cultivators In Irrigated And Drought Prone Area
26	Sumitha Franklin	Industrial Clustering – A Case Study Of Brick Industry In Ernakulam District.
27	Ligi George	Implications of Health Tourism in Kerala
Guide:Dr. M.S.Vijayakumari		
28	Dannis Joy	Health Expenditure and its Impact on Health Status and Standard of Living : A study among the Marginalized Sector
29	Deepa Abraham	Health Insurance Measures of Unorganized Workers of Kerala. A Case Study of Pineapple Cultivation
30	Nimisha.C.Nair	Exchange Rate Volatility and the Role of RBI
31	Vincy Vijayan	Intermigrant Workers and Social Security Measures in Kerala: A Study on Construction Workers in Perumbavoor Municipality in Ernakulam District.
32	Sijitha P.B.	Impact of Sand Mining and the Livelihood of the local People-A Study of river Periyar in Kerala.
33	Renuka K.	Women Empowerment of Education: Comparison Between General Education and Professional Education
Guide: Dr. Manjula.K		
34	Suresh Babu	Public Works Programme and Rural Development in Kerala with special focus on NREGA

35	Meera.R	Impact of Chit funds on Households-A Study Based on Thrissur and Ernakulum Districts of Kerala.
36	ArunKumar.T.A	Impoverishment risks and the status of rehabilitation of the development –induced displaced in Kerala.
37	Soumya.V.S	Food Security and Food Grain Subsidy in Kerala
38	Rani S.Mohan	Financial Performance of KSEB. A Critical Analysis
39	Puthuma.Joy	Economics of Nutmeg Cultivation
40	Diya Phillip	Infrastructure Development of Kerala. An Impact Analysis of KSTP Project
41	Ligi Maliakkal	Casualisation and feminization of work in the unorganized tertiary sector – A Study among the women working in the shops and commercial establishments in Kerala.

### 3.1.6 Workshops and training programmes:

- Every year the Departments of Biotechnology, Microbiology and Biochemistry conduct a workshop on ‘Biological Techniques’ to familiarize the students on various methods in biological science.
- Celebrates the National Science Day every year with a number of science popularization programmes.
- Regular field visits are conducted for Botany and Zoology students.
- Regular industrial visits are organized for the students of Chemistry and Economics.
- Research Institution visits are organized for Botany and Zoology students.
- The College has adopted a tribal village at Kuttampuzha and prepared a Biodiversity Register of the area.
- A Campus Biodiversity Register was prepared and submitted to the Kerala State Biodiversity Board and published in the College website.
- M P Varghese Tree Park was established with a view to conserve the rare and endangered trees.
- 100 species of medicinal plants were potted and placed in the Verandah of the college for easy understanding.
- The Department of Chemistry conducted well water sample analysis of Kothamangalam Municipality.
- A Biodiversity plot and fruit garden was prepared at Thattekkad by the financial support of Kerala State Biodiversity Board.

### 3.1.7 Research expertise available with the Institution:

SI No	Departments	Research Areas	
1	English	1	English Language Teaching
		2	Theatre Performance
		3	Post-colonial Literatures
		4	Post Modernism
		5	Art and Activism
		6	Semiotics
		7	Literary Theory
2	Economics	1	Agricultural Economics
		2	Health Economics
		3	Labour Economics
		4	Decentralized Planning
3	Chemistry	1	Pollution Abatement
		2	Rubber Chemistry and Technology
		3	Chemical Kinetics
		4	Computational chemistry
		5	Organic Synthesis
		6	Nano Catalysis and Nano technology
4	Physics	1	Gas Sensors and Nano-technology
		2	Laser-matter interactions, Ultrafast Lasers
		3	Organic Electronics
		4	Transparent Conducting Oxides
5	Zoology	1	Biodiversity documentation- expertise to document birds, butterflies, dragonflies, damselflies and fishes
		2	Endocrine Disruption in Captive Fishes
		3	Microbiology and Toxicology
6	Mathematics	1	Fuzzy Mathematics
		2	Lattice Theory
		3	Mathematical Morphology
		4	Frame Theory
		5	Graph Theory
7	Botany	1	Cytology and Genetics
		2	Phytochemistry
8	Commerce	1	Micro Finance

### 3.1.8 Efforts in attracting eminent personalities to the institute:

The College conducts International, National and State level seminars, and workshops regularly. 120 delegates from 20 countries participated in the International Conference on 'Frontiers of Plasma Physics and Technology'

organized by the Department of Physics during 13-17 April 2015.

Dr. A.P.J. Abdul Kalam, the former President of India, visited the college on 6 June 2010 and addressed the students on 'Empowering the Youth towards Vision 2020'. Apart from these, scientists from Indian Institute of Science, Indian Institute of Technology, Raman Research Institute, Mahatma Gandhi University, Cochin University of Science and Technology (CUSAT), etc. have visited the college in various occasions.

### 3.1.9 Leave for research activities:

Teachers are availing FIP leave. Smitha Thankachan (Physics), Latha S Nair (Mathematics), Bino Sebastian (Mathematics), Igy George (Economics) and Eldhose A. M (Economics) have completed their PhD under FIP of UGC. Sri. Mathews Jacob (Physical Education), Smt. Deepa. S. (Physics), Marymol Moothedan (Chemistry), Ms. Sheeba Abraham (Economics), Susan Ray Joseph (Mathematics) and Asha Mathai (Malayalam) have been accorded sanction to pursue research under the FIP of UGC. Five members of the staff submitted applications for FIP of UGC during 2013-2014.

### 3.1.10 Community oriented research (lab to land).

- Kuroorthode rejuvenation programmes
- Biodiversity documentation studies
- Village adoption programme
- Preparation of Campus Biodiversity Register
- Socio economic survey
- Well water quality monitoring (heavy metal)
- Water quality monitoring and soil analysis

## 3.2 Resource Mobilization for Research

### 3.2.1 Financial allocation for research:

Out of Rs. 47,06,77,790/- allocated during the last five years, 5.4% of the funds are utilized for research.

Sl. No.	Head of Expenditure since 2010	Amount
1	Minor Research Project	53,47,000/-
2	Major research Project	1,13,34,500/-
3	DST-FIST	79,00,000/-
4	CPE Phase I	60,00,000/-
5	Promotion of Basic Scientific Research	66,00,000/-
Total Amount		<b>2,58,47,000/-</b>

### 3.2.2 Financial support of management for research:

- Seed money for sanctioned major research projects
- Travel assistance for project presentations
- Financial support for research lab augmentation and maintenance
- Salary for technical assistants appointed
- An incentive of Rs. 3000/- to the faculty members for publishing articles in foreign journals, Rs. 2000/- for publishing articles in accepted Indian journals, and Rs. 5000/- for publishing books.

### 3.2.3 Financial support for student research projects:

The Departments of Biotechnology, Biochemistry, Microbiology and Zoology are availing the student research project support of Kerala State Council for Science, Technology and Environment (KSCSTE) during the last five years.

### 3.2.4 Interdisciplinary research:

- The Department Chemistry and the Department of Computer Applications, Cochin University of Science and Technology (CUSAT) are being collaborated to carry out research on Computational Chemistry.
- The Departments of History and Sociology are jointly conducting a major research project titled ‘Muzziris heritage project – socio historic impact assessment’ sponsored by the ICSSR.
- Departments of Biotechnology and Chemistry are collaborated for three minor research projects.
- The Departments of Chemistry and Physics are collaborated for research on magnetic property of ferrites.

### 3.2.5 Effective utilization of equipments and research facilities:

- Principal Investigators and project fellows of Major (8 in Science) and Minor (21 in science) research projects are utilizing all the central laboratory facilities for their research work apart from equipment procured from their own grants.
- There are 10 research scholars working for PhD in various laboratories.
- Science UG and PG students are doing their research projects by using the facility.
- The facilities such as the Sophisticated Instrumentation Centre, DST-FIST Lab are open to students and research scholars of other institutions

to carry out various chemical analyses by charging a nominal fee. To facilitate this, a full time technician is assigned the job of operating sophisticated instruments.

- The Departments of Chemistry and Biotechnology offered consultancy services to various industries.
- The College has extended the lab facilities to analyze well water and soil samples from nearby villages as and when required.

### 3.2.6 Industrial support for research: Nil

### 3.2.7 Ongoing and completed research projects:

#### *Major research projects completed during 2010-2015*

Sl. No	Title	Principal Investigator	Amount allocated (Rs)	Duration	Funding agency
1	Synthesis, Characterization and Catalytic Activity of Sulphated Nano Zirconia	Dr. K.B. Sherly (Chemistry)	5,38,000	2010-13	UGC
2	Catalytic Wet Oxidations of Pesticides over Mixed Nanoferrites at Mild Temperatures: A Green Approach for Water Pollution Remediation	Dr. Manju Kurian (Chemistry)	15,18,000	2010-13	DST
3	'Study of grain growth and boundary states in non-noble metal doped SnO <sub>2</sub> gas sensor films'	Dr. Boben Thomas (Physics)	9,60,300	2010-13	UGC
4	Ecological Status of Publically Owned Water Resources of Kunnathunadu Taluk of Ernakulam District	Dr. Aji C. Panicker (Zoology)	4,51,000	2010-12	KSCSTE
5	Impact of Land Acquisition for Development of Displaced Land Owners in Kerala	Dr. Manjula.K (Economics)	8,23,600	2010-12	UGC
6	Electrical and Optical Characterization of Copper Indium Selenide, Copper Selenide and Cadmium Sulphide Thin Films for the Fabrication of Solar Cells	Dr. Benoy M.D (Physics)	5,23,000	2009-11	UGC
Total Amount Received			48,13,900		



*Major research projects sanctioned during 2010-2015*

Sl. No.	Title	Principal Investigator	Amount allocated (Rs)	Duration	Funding agency
1	Wet Oxidation process over nano ceria based catalysts as Green route for Water Pollution Remediation	Dr. Manju Kurian (Chemistry)	16,80,600	2014-17	KSCSTE
2	Potential health concern and endocrine disrupting properties of the commonly used antioxidant, Butylated hydroxy anisole (BHA)	Dr. Binitha R.N (Zoology)	22,78,000	2013-16	DST
3	Integrated biomarker response- Useful tool in environmental monitoring, an illustration using freshwater teleost- <i>Anabas testudineus</i> -	Dr. Aji C. Panicker (Zoology)	25,62,000	2014-18	DST
4	Muzziris Heritage Project- Socio-Historic impact assessment	Mridula. S. Venugopal (Sociology)	15,000,00	2015-17	ICSSR
Total Amount Received			65,20,600/-		

*Minor research projects completed during 2010-15*

Sl. No.	Year of Starting	Name of Principal Investigator	Project title	Amount sanctioned
1	2011-12	Minnu James	Visual/verbal space: a study of advertisements in Indian life style magazines	1,00,000
2	2011-12	Sheeba Abraham	Impact of Paddy Land Conversion In Kerala A Case Study	55,000
3	2011-12	Susan Ray Joseph	A study on solvable and super solvable groups	1,25,000
4	2011-12	Mary Elizebath Antony	Introduction of different topological concepts in the theory of frames	1,25,000
5	2011-12	Aswathy Balachandran	Echoing the ecological concerns in the Vedas: A study on A K Ramanujan's poetry	1,00,000
6	2011-12	Anu Yamuna Joseph	Evaluation of Carrier Frequency and Impact of W24X Mutation in the Connexin 26 Gene of Kerala Population.	1,35,000
7	2011-12	Marymol Moothedan,	Preparation characterization and catalytic application of nano Lanthana	1,50,000
8	2010-11	Densely Jose	Screening of Herbal Plants and	60,000

			Ascertaining the effect of their extracts on the Inhibition of Mammalian Hyaluronidase as well as Hyaluronidase Isolated From Pathogenic Bacterial Strains and Proposing Novel Potential Microbicides.	
9	2010-11	Jayamma Francis	Evaluating heavy metal abatement potential of selected Cynobacterial strains and assessing its application in pollution control	1,07,500
10	2010-11	Shanti A Avirah	Phytochemical Screening and Evaluation of the Antimicrobial Potential of Coleus Amboinicus.	82,500
11	2010-11	Rajesh Thumbakara	A generalized study of frames and application in information theory	1,35,000
12	2010-11	Selven S	Conservation of wet Lands- A Plot study on the Effect of pollution of The River 'Kuroorthodu', Kothamangalam, Kerala.	60,000
13	2010-11	Aby P. Varghese	Birds are sensitive environmental indicators - A Study on the Wetland Birds of Dr. Salim Ali Bird Sanctuary, Thattekkadu, Kerala	1,15,000
14	2010-11	Sijo Varghese,	Subalternity: An Overriding Concept in Indo-American Fiction.	75,000
15	2009-10	Susy Paul	A Comparative Study of Micro Enterprises Under Kudumbasree Mission and SGSY Programme in Ernakulam District, Kerala.	55,000
16	2009-10	Aji C. Panicker	Biodiversity and Ecological Status of Iringol Kavu.	60,000
17	2009-10	Manju Kurian	Synthesis, Characterization and Applications of Rare Earth Doped Nano Pillared Clay Catalysts.	75,000
18	2009-10	Ms. Binu Varghese	Synthesis, Spectral and Structural Studies of N(4)- Substituted Semicarbazones of Transition Metal Complexes.	55,000
Total Amount Received				16,70,000/-

*Minor research projects ongoing during 2010-15*

SI No.	Year of Starting	Name of Principal Investigator	Project title	Amount sanctioned
1	2012-13	Annu Anna Varghese	Preparation, Characterization and Catalytic Applications of Supported Transition Metal Complexes	1,20,000
2	2012-13	Deepa S	Micro Structural Studies in Spray Deposited Magnesium Doped SNO <sub>2</sub> thin Films FKOR Methane Sensing Applications	51,000
3	2012-13	P A. Francis Xavier.	Synthesis and Characterization of Metal Oxide/Polyaniline and Metal Oxide/Polypyrrole Hybrid Materials for Possible Gas Sensing	90,000

			Applications at Room Temperature.	
4	2012-13	Princy Jacob	Reconstructive Post Theory and Eco-Concerns.	1,00,000
5	2012-13	Alphonsa C A	The Gender Wand: Sexist Constructs In the Harry Porter Series.	1,00,000
6	2012-13	Mridula Venugopal	Migrant Workers Problem of Social Exclusion	80,000
7	2012-13	Asha Mathai	Ecofeminism in The Writings of P.Valsala	45,000
8	2012-13	Litha Mary Issac	Role of Microinsurance in Enhancing Risk Management Capacity and Savings of the Underprivileged in Kerala	1,20,000
9	2012-13	Mini Varghese	Morality Human Rights and Changing Concepts of values in the Hindi Novels of Post Independent Female Writing	60,000
10	2012-13	Sibi M.M	An Analytical Study of Social Aspects in the Novels of Krishna Sobti	60,000
11	2012-13	Anjaly Abraham	Political Expressions in the Novels of Bhagavaticharan Verma	1,00,000
12	2012-13	Ann Kocheriyil,	ISSR Primers Screening and Evaluation of Genetic Kdiversity in Different Varities of <i>Tabernaemontana Divaricata</i> .	2,00,000
13	2012-13	Julie Jacob	Identification and Characterization of Protenins Present in the Milk of Attapady Black Breed of Goats.	1,35,000
14	2012-13	Jessy Varghese	The decoding of gender and language in poetic discourses; an analysis of Tara Patels 'Single Women'	1,00,000
15	2013-14	Jani Chungathu	History in the Palms: A Snapshot from the Palm Leaves of the Churches in Kerala	1,00,000
16	2013-14	Remia K	Devakoothu: Women in Cultural History of North Malabar	95,000
17	2013-14	Puthuma Joy	Impact of new generation jobs on traditional agriculture:A case study of Ernakulam District	90,000
18	2013-14	Benny Jacob	Cytomorphological, Anatomical and Ethanomedicinal studies on Giant Fern ( <i>Angiopteris evecta</i> ) from Kerala	1,35,000
19	2013-14	Krishnaprasad P.S.	Development of Nanostructured Materials for Gas Sensor Applications	1,50,000
20	2013-14	Jassi J.	Natural Dyers as Light Harvesters in Dye Sansitized Solar Cells	1,31,000
21	2013-14	Anu George	Literature and Environment: An Ecocritical Reading of Mahasweta Devi's 'Arjun' UGC Minor Project	50,000
22	2013-14	Reeba Thomas	A Time Tunnel to Historical Rediscovery: Historiographic Metafiction in the novels of Margaret Atwood	50,000

23	2013-14	Nayomi John	Isolation, Identification and Characterization of Hydrocarbon Degrading Bacteria- A Bioremediation Tool	1,40,000
24	2013-14	Jinu John	Political Expressions in the Novels of Bhagavathicharan Verma.	1,20,000
25	2014-15	Aby P. Varghese	Odonate diversity of Natinal parks and wildlife sanctuaries in Idukki district, Kerala	75,000
26	2014-15	Siju Thomas T	Phytochemical Characterization of Justicia plumbaginifolia J JACQ and Desmodium Motorium L	3,65,000
27	2014-15	Jini Thomas	Role of Micro Entrepreneurs in Kerala	1,30,000
28	2014-15	Justina George	Exploring the Underlying Patterns of Human Mind: A Psychoanalytic Sudy of Alice Munro's Short Stories.	1,30,000
29	2014-15	Rajesh K. Thumbakara	A generalized graph and fuzzy graph structures	2,75,000
30	2014-15	Sini K S	Rising From Flames: A Panoramic View of Dalitayam In Indian Epics	1,45,000
31	2014-15	Diana Mathews	Changing Power Structure in Dual Career Nuclear Families- A Study in Ernakulam District, Kerala	75,000
32	2014-15	Seena John	Female Body and Its Narration in Malayalam Short Stories.	60,000
Total Amount received				36,77,000/-

### 3.3 Research Facilities

#### 3.3.1 Research facilities for students and research scholars:

- Automated and digital Library
- Sophisticated Instrumentation Centre
- DST-FIST Lab
- Academic Technology Centre
- Network Resource Centre
- Wi-Fi and Broadband connectivity
- Math lab and SPSS software packages

#### 3.3.2 Institutional strategies for upgrading infrastructural facilities:

The College is taking an earnest effort for the submission of proposals to avail research grants from various funding agencies. Sanctioning of grants under CPE Phase I and Phase II of UGC, General Development Assistance of UGC for Science Departments and UG, PG Assistance of UGC and research projects since 2010 are all evidences to that. An amount of Rs. 5.25 crore received for the same. The college administration, Research Committee, and IQAC will continue pursuing funding from the government and industries. All efforts have to be made to widen consulting services and to attract funding through consultancy.

### 3.3.3 Special financial support to create research infrastructure:

The College has been selected for the award of FIST of Department of Science and Technology. An amount of Rs. 79 lakhs has been received and utilized for the following:-

SI No.	Equipments/items purchased	Amount
1	Surface Area Analyser	12,40,527
2	TOC Analyser	10,26,736
3	High Speed Research Centrifuge	1,17,000
4	8x15ml Angle Roter head with lid	
5	Digital Camera	
6	KEMI Laminar Air Flow Cabinet	1,06,000
7	SHIMADZU Precision Electronic Balance, TX Series	
8	KEMI Serogical Water Bath	9,900
9	Precision Impedance Analyzer	20,39,344
10	Leica S8 Apo Trinocular Microscope	5,50,094
11	Gel Documentation System	3,88,000
12	Books	49,994
13	ICT	6,00,000
Total		79,00,000/-

### 3.3.4 Sharing of research facilities:

The facilities such as the Sophisticated Instrumentation Centre, DST- FIST Lab are open to students and research scholars of other institutions to carry out various chemical analysis. The college charges a nominal fee to cover expenses on the technician, water and electricity.

### 3.3.5 Library / other facilities for researchers:

The library opens from 9.30 am. to 4.30 pm. on all working days and Saturdays with open access facility in all sections. A reading Area with 12 individual reading carrels in the second floor are demarcated for the research scholars. The college is registered under the N-LIST (National Library & Information Services Infrastructure for scholarly Content) of the UGC – INFONET. We have been subscribing N-LIST e-resources since 2010. The N-LIST programme includes full text e-resources from American Institute of Physics (USA), American Physical Society (USA), Cambridge University Press (UK), Oxford University Press (UK), Royal Society of Chemistry (UK), H.W. Wilson, JSTOR etc. Research scholars utilize this facility to get access to more than 3000 full text journals and 97000 electronic books. The research scholars can also utilize the Network Resource Centre functioning in the Library building, with 14 computer terminals and broad band internet connectivity.

The College has purchased licensed softwares like Matlab and SPSS to carry out data analysis of various research works. Two trained technicians are appointed for the maintenance of laboratory equipment and computers.

### 3.3.6 Collaborative research facilities developed/created:

The facilities in the sophisticated instrumentation centre and the DST-FIST lab are created to enhance research collaboration with the Mar Athanasius College of Engineering (MACE). The environmental chemistry lab in the Civil Engineering Department of MACE is also shared for conducting various researches. The College Management has taken initiative to strengthen the collaborative research between the two institutions by adding new instruments such as HPLC, taking care of the maintenance, upkeep and providing trained technicians.

## 3.4 Research Publications and Awards

### 3.4.1 Major research achievements of the staff and students:

#### *Patents obtained*

Dr. Riju C. Issac of the Department of Physics has been awarded a Patent (Patent Number: WO2014006427-A1)

#### *Original research contributing to product improvement*

**Gas Sensors operating at room temperature:** Researchers in the Department of Physics have reported the sensitization of SnO<sub>2</sub> films by Cs, B, and Mg addition by spray deposition process. Solid state gas sensors based on semi conducting metal oxides offer efficient, durable, and low –cost systems for monitoring environmental pollutants such as Volatile Organic Compounds (VOC), CO<sub>2</sub> and NO<sub>2</sub>. They have reported tin oxide based sensors have operating temperature of nearly 280°C for liquid petroleum gas (LPG). Their research also shows that sensitivity is significantly improved by the addition of dopants which affects the preferential orientational growth of the films. The doped SnO<sub>2</sub> films show good stability along with sensing reproducibility. Recently, it was found by researchers in the physics department that the modification of the grain size and grain boundaries of SnO<sub>2</sub> thin films by varying the dopant concentration as well as deposition temperature, positively influence their gas sensing properties.

**Laser accelerated electrons for cancer treatment:** Researchers in the Department of Physics through collaborations with the University of Strathclyde in Glasgow, Scotland, UK are studying the feasibility of using ultrafast laser generated electron bunches for treatment of cancer. Initial results published are found to be promising.

*Research studies or surveys benefiting the community or improving the services*

Socio-economic surveys are conducted by the Department of Economics and NSS periodically at tribal villages of Kothamangalam Taluk.

*Research inputs contributing to new initiatives and social development*

- The Department of Zoology has conducted a study on the effect of pollution of the river *Kuroor thodu* which is flowing through the eastern boundary of the college with the financial support of UGC. The study suggested various measures to conserve the river.
- The Departments of Botany and Zoology jointly conducted a pilot study on drinking water quality of Pinavoorkudy tribal village in Kuttampuzha Grama Panchayath. The study analysed lead, chromium, cadmium, etc.
- The Department of Chemistry conducted an analysis of well water for heavy metal poisoning in the Kothamangalam Taluk.

3.4.2 **Research Journal:** No

3.4.3 **Publications by the faculty and students:**

*Total number of publications since 2010:* **122**

*Publication per faculty:* **1.65**

*Number of papers published by faculty and students in peer reviewed journals (national/international):* **101**

*Number of publications listed in International Database:* **60**

**Journal metric (2010-2015)**

Database	2010 –11	2011 –12	2012 –13	2013 –14	2014 – 15
SJR	0.191–2.186	0.033-17.174	0.308-1.768	0.218-1.471	0.033-2.021
SNIP	0.518- 4.099	0.094-6.310	0.444-1.68	0.464-1.273	0.094-1.714
h Index	4 - 20	2 - 20	4 - 20	1-20	1-20
Impact Factor	1.04-7.21	0.19-18.423	0.88-2.5	0.983 – 4.063	0.225-5.99

*Research Publications of Teachers 2010 -11*

No	Authors	Citation Index	Impact Factor	SJR	SNIP
1	M.D Benoy	Science and Society 8(1), 81-84, 2010	-	0.191	1.048
2	Riju C. Issac	Phys. Rev. Lett. 105, 215007 (2010)	7.621	2.18	4.099

3	Riju C. Issac	<i>Plasma Phys. Control. Fusion</i> 52 124032. (2010)	2.466	1.594	1.606
4	Densely Jose	Heteroatom chemistry, 2010	1.04	0.395	0.698
5	Annu Anna Varghese	Polyhedron 29,2010,3014-3020	2.0	0.664	1.023
6	Latha S Nair	Advances in Fuzzy Systems, Volume 2010, Article ID 781672	-	0.217	0.518
7	Rajesh K. Thumbakara	The Journal of Fuzzy Mathematics Vol.18, No.3, 2010			
8	Subramanian Selven	Aquaculture Research Volume 41, Issue 10, September 2010, Pages: e715–e718,	1.18	0.746	1.001
9	Leena George	Facts for you, Vol 31, No 7, (2011)	-		
10	Aswathy Balachandran	Explorations (Aesthetics: Eastern and Western), Dec 2010 vol.1 – issue 3 (ISSN 2229- 4783)	-		
11	Aswathy Balachandran	Research Lines (ISSN 0975-8941), Vol 4 no I-A , January – June 2011	-		
12	Susy Paul	<i>Science and Society</i> , NARP, Muvattupuzha			
13	Susy Paul	Inter Disciplinary Research Journal Devamatha college Kuravilangadu ISSN 0975-8941			
14	Diana Ann Issac	Inter Disciplinary Research Journal Devamatha college Kuravilangadu ISSN 0975-8941			
15	Diana Ann Issac	KEGEES Journal of Social Science from KuriakoseGregorios College, Kottayam ISSN0975-3621			
16	Diana Ann Issac	Acumen- Marian Journal of Commerce and Management ISSN 0975-6981			

#### Journal metrics (2010 -2011)

Impact Factor Range	1.04 – 7.21
Average Impact Factor	2.86
h-index	4 – 20      Average = 4.8
Nos in SCOPUS	7
SJR	0.191 – 2.186
SNIP	0.518 – 4.099



*Research Publications of Teachers 2011 -12*

No	Authors	Citation Index	Impact Factor	SJR	SNIP
1	Smitha Thankachan	AIP Conf. Proc. 1391, 89-91 (2011)	-	0.033	0.094
2	Smitha Thankachan	Phys. Scr. 84(2011)045702 (6pp)	1.204	0.370	0.53
3	Smitha Thankachan	Sci. & Soc. 9(2) 163-168, 2011	-	0.171	0.775
4	Smitha Thankachan	Sci. & Soc. 9(2) 169-174, 2011	-	0.171	0.775
5	P. A. Francis Xavier	Transactions of the Indian Institute of Metals, 64, 1-2, 133-136 (2011)	0.427	0.324	0.542
6	P. A. Francis Xavier	Transactions of the Indian Institute of Metals, 64, 1-2, 209-212 (2011)	0.427	0.324	0.542
7	P.S Krishnaprasad	Journal of Alloys and Compounds, 509 6561-6566, (2011)	2.1	1.303	1.612
8	Riju C. Issac	Nature Physics 7,867 (2011)	18.423	17.174	6.310
9	Riju C. Issac	Bulletin of the American Physical Society 56 (2011)	-		
10	Riju C. Issac	Rev. Sci. Instrum. 82, 096104 (2011)	1.598	0.926	1.147
11	Riju C. Issac	New Journal of Physics 13, 063042 (2011)	3.849	2.893	1.329
12	Riju C. Issac	Rev. Sci. Instrum. 82, 063505 (2011)	1.598	0.926	1.147
13	Manju Kurian,	Applied Clay Science,53, 227-235, 2011.	2.3	1.142	1.797
14	Binu Varghese	Polyhedron 30, 1, 70-78, 2011	2.0	0.644	0.995
15	Latha S Nair	International Journal of Fuzzy Systems and Rough Systems, 4(1), 57-62, (2011)	-	-	-
16	Latha S Nair	Advances in Theoretical and Applied Mathematics, 6, 3, 333-345 (2011)	-	-	-
17	Latha S Nair	International Mathematical Forum, Vol 6, No 27, 1327-1335, (2011)	-	-	-
18	Latha S Nair	Fuzzy Information and Engineering, Vol 3, No 3, 321-331 (2011)	-	-	-
19	Latha S Nair	International Journal of Mathematics and Applied Statistics Vol.2, no.2 July-Dec (2011) pp 95-113.	-	-	-
20	Binitha,R.N.	Journal of reproduction and endocrinology. (2011)	-	-	-
21	Binitha,R.N..	Journal of Biodiversity Utilization and Threats. PP-769-780 (2011)	-	-	-
22	Litha Mary Issac	Managing the future. Vol 1 (2), 2011, 235-238	-	-	-

23	Diana Ann Issac	Vikasvani Journal, March 2012. 51-60	-	-	-
24	P.R. Sreedevi	Aquaculture International, 19:789–796, (2011)	0.96	0.564	1.044
25	Selven. S	Aquaculture Research, Article first published online: 19 JAN 2012DOI: 10.1111/j.1365-2109.2011.03080.x	1.32	0.740	0.945
26	Binitha,R.N.	Journal of reproduction and endocrinology. (Paper accepted) (2011)	-	-	-
27	Riju C. Issac	Appl. Phys. Lett. 100, 014106 (2012).	3.84	2.275	1.519
28	Riju C. Issac	Journal of Applied Physics 111 (2012) 063302	2.064	1.127	1.100
29	Riju C. Issac	J. Plasma Physics (2012)	0.19	0.414	0.624
30	Riju C. Issac	Journal of Plasma Physics 78 (2012) 393	0.19	0.414	0.624

### Journal Metric (2011-2012)

Impact Factor Range	0.19 – 18.423
Average Impact Factor	2.64
h-index	2 – 20      Average = 7
Nos in SCOPUS	20
SJR	0.033 – 17.174
SNIP	0.094 – 6.310

### Research Publications of Teachers 2012 -13

No	Authors	Citation Index	Impact Factor	SJR	SNIP
1	Smitha Thankachan	Journal of Alloys and Compounds 541 (2012) 29–35	2.104	1.181	1.657
2	Smitha Thankachan	Journal of Basic and Applied Physics, Feb. 2013, Vol. 2 Iss. 1, PP. 105-108	-	-	-
3	Francis Xavier P A	Materials Chemistry and Physics, DOI-10.1016/j.matchemphys.2012.03.072	2.5	0.892	1.281
4	Riju C. Issac	Medical Physics 39 (2012) 3813	1.87	1.768	1.680
5	Manju Kurian	Journal of Porous Materials 19:633–640 (2012)	1.24	0.523	0.845
6	Manju Kurian,	International Journal of	1.7	0.558	1.036

		Environmental Research 6(3):669-676, (2012)			
7	Latha S Nair	International Journal of Fuzzy Mathematics Vol 20.no 3.(2012).	1.031	-	-
8	Latha S Nair	International Journal of Fuzzy Mathematics Vol 20.no 2.(2012)	1.031	-	-
9	Diana Ann Issac	Science and Society,10,1, 2012	-	0.492	1.418
10	Litha Mary Issac	ACUMEN – Marian Journal of Commerce and Management. Vol 5 (1), 2012, 37-41	-	-	-
11	Diana Ann Issac	Zenith – International Journal of Business Economics and Management Research (2012). Vol 2, 10, 38-63	-	-	-
12	Minnu James.	Indian Journal of Postcolonial Literatures. Vol.12.2. (dec 2012).	-	-	-
13	Selven Subramannian	Aquaculture International DOI:10.1007/s10499-011- 9492-2	0.88	0.611	0.783
14	Subramanian Selven	Journal of Asian Fisheries Science 25: 170-179	-	-	-
15	P.R. Sreedevi	International Research Journal of Pharmacy, 3(6):165-170, (2012)	0.12	-	-
16	Manju Kurian	Journal of Saudi Chemical Society(In press)	0	0.308	0.928
17	Smitha Thankachan	PhysicaScripta. 87 (2013) 025701 (7pp);	1.204	0.317	0.444
18	Smitha Thankachan	Journal of Experimental Nanoscience, 8, 3 (2013)347-357	1.011	0.332	0.514
19	Diana Ann Issac	Tradewind , 7 (2012)	-	-	-
20	Diana Ann Issac	Managing the future, 2 (2) 2012	-	-	-

#### Journal metric (2012-2013)

Impact Factor Range	0.88 – 2.5
Average Impact Factor	1.56
h-index	4 – 20      Average = 10
Nos in SCOPUS	10
SJR	0.308 – 1.768
SNIP	0.444 – 1.680

*Research Publications of Teachers 2013 -14*

No	Authors	Citation Index	Impact Factor	SJR	SNIP
1	Smitha Thankachan	Nanosystems physics chemistry and Mathematics	-	-	-
2	P. A. Francis Xavier	Polymer International	2.247	0.847	1.196
3	Manju Kurian	Journal of Environmental Chemical Engineering, (2013) 1, 86-91	-	-	-
4	Manju Kurian	Journal of Environmental Chemical Engineering, 1 (2013) 86-91	-	-	-
5	Manju Kurian	Journal of Environmental Chemical Engineering, (2013) 220 1-7	-	-	-
6	Manju Kurian	Reaction Kinetics, Mechanisms and Catalysis (2014) 111, p 591-604	0.983	0.459	0.775
7	Binu Varghese	Polyhedron	2.047	0.570	0.887
8	Latha. S. Nair	International journal of fuzzy mathematics,	1.031	-	-
9	Bino Sebastian	International Journal of Computer Science Engineering and Information Technology	2.93	-	-
10	P A Francis Xavier	Thin Solid Films	1.867	0.884	1.273
11	Manju Kurian	Polish Journal of Chemical Technology, 16, 3, 69-73	0.474	0.218	0.464
12	Smitha Thankachan,	International Journal of Engineering Science and Innovative Technology, 3, 4, 529-537 (2014)	-	-	-
13	Manju Kurian	Int. nanoLett. (2014) 4, 73-80	-	-	-
14	Manju Kurian	Journal of water process engineering, (2014)	-	-	-
15	Binitha R N,	Journal of Aquatic Biology and Fisheries 1, 2013, 68-76	-	-	-
16	Riju C Issac	Applied Physics Letters 103, 121106 (2013)	4.063	1.471	1.171
17	Riju C Issac	Physics of plasmas 20, 063102 (2013)	-	0.856	1.022
18	Diana Ann Issac	KEGEES Journal of Social Science, 6 (1) 2014	-	-	-

### Journal Metric (2013-2014)

Impact Factor Range	0.983 – 3.794
Average Impact Factor	2.14
h-index	1 – 20      Average = 6.8
Nos in SCOPUS	10
SJR	0.218 – 1.471
SNIP	0.464 – 1.273

### Research Publications of Teachers 2014 -15

SI No.	Authors	Citation index	Impact factor	SJR	SNIP
1	Riju C Issac	New Journal of Physics, 16, 103006 (2014)	4.063	2.021	1.047
2	Riju C Issac	Applied Physics Letters 104, 264102 (2014)	3.794	1.471	1.171
3	Riju C Issac	Physics in medicine and Biology, 59 (2014) 5811-5829	2.922	1.648	1.714
4	Manju Kurian	Journal of Chemical Sciences (in press)	1.224	0.415	0.692
5	Manju Kurian	Journal Water Process Engineering, doi:10.1016/j.jwpe.2014.10.011	-	-	-
6	Manju Kurian	Polish Journal of Chemical Technology 16, 3 (2014) 69-73	0.474	0.218	0.325
7	Manju Kurian	International Nanoletters, 4,4 (2014) 73-80	-	-	-
8	Manju Kurian	Journal of Environmental Chemical Engineering 2, 63-69. 2014	-	-	-
9	Manju Kurian	Reaction Kinetics, Mechanisms and Catalysis, 111, 2 (2014), 591-604.	0.983	0.459	0.775
10	Smitha Thankachan	International Journal of Engineering Science and Innovative Technology 3, 4 (2014) 529-537.	-	-	-
11	Shanti A Avirah	World Journal of Pharmaceutical Research, Vol.3, No. 2, 2811-2826, 2014.	5.99	-	-
12	K.B Sherly	American Institute of physics proc, 1576,128, 2014	-	0.033	0.094
13	Densely Jose	World Journal of Pharmacy and Pharmaceutical sciences, vol.3, 6, 751-761 2014	5.99	-	-
14	Eldhose A.M	International Business Review; Vol.4, Issue 4; ISSN 2249-5444, 2014	1.489	0.936	1.418
15	Eldose A.M	International Business Review;	1.489	0.936	1.418

		Vol.4; Issue 4; ISSN 2249-5444, 2014.			
16	Eldhose A.M	Academic Research in Science, Engineering Art and Management Vol.2 Issue I,ISSN 2349-4808, 07-18, 2015	-	-	-
17	EldhoseA. M	Academic Research in Science, Engineering Art and Management Vol.2 Issue 1, ISSN 2349-4808, 45-56, 2015	-	-	-
18	Eldhose A. M	IFRSA Business Review Vol.5, Issue I, ISSN, 2249-5444, 2015	1.489	0.936	1.418
19	Sheeba Abraham	IFRSA Business Review; Vol.5, Issue I	1.489	0.936	1.418
20	Aji Abraham	Journal of Pharmacognosy and Phytochemistry 2014; 3(2): 45-52	0.255	-	-
21	Deepa S.	AIP Conference Proceedings 1576, 49 (2014); doi: 10.1063/1.4861977	-	0.033	0.094
22	Boben Thomas	AIP Conference Proceedings 1620, 80 (2014); doi: 10.1063/1.4898223	-	0.033	0.094
23	Boben Thomas	Journal of Pure Applied and Industrial Physics, 2014, Vo.4(3):Pg 99-109	2.07	-	-
24	Rajesh K. Thumbakara	The Journal of Fuzzy Mathematics, Vol.22, No.3, 2014.	-	-	-
25	Rajesh K. Thumbakara	Gen. Math. Notes, Vol. 21, No. 2, April 2014, pp. 75-86	0.425	-	-
26	Bino Sebastian V	ISRN Discrete Mathematics. Volume 2014	-	-	-
27	Bino Sebastian V	Discrete applied mathematics Volume 2014	0.677	0.880	1.360
28	Latha S. Nair	The Journal of Fuzzy Mathematics. Vol.22.No.1,2014	-	-	
29	Anu Yamuna Joseph	International Journal of Advanced Biotechnology and Research (IJBR): 5 (3): 353-358 (2014).	1.506	-	-
30	Anu Yamuna Joseph	IOSR-JESTFT 8 (4): 1-08 (2014)	1.325	-	-
31	Leena George	(National Cooperative Perspective,Vol49 (1) - 2014	-	-	-
32	Diana Ann Issac	KEGEES Journal of Social Science, Vol – 6 No.1 Jan 2014	-	-	-
33	Diana Ann Issac	'Contemporary Commerce Review' ,(Volume 4,No. 1 August 2014, ISSN 2319 – 3638)	-	-	-
34	Diana Ann Issac	KEGEES Journal of Social Science, 6 (2) 2014	-	-	-

35	Litha Mary Issac	Indian Commerce Bulletin – Peer Reviewed Research Journal( ISSN -0972-6187) Vol 14 December 2014	-	-	-
36	Litha Mary Issac	EXPLORATIONS-Double Blind Peer Reviewed and Edited Journal (Vol V-1 ISSN 2229-4783 January 2015	-	-	-
37	Justina George	Research Scholar (ISSN 2249-6696), March Vol.4, No. 1, 2014	-	-	-

#### Journal metric (2014-2015)

Range	0.225 – 5.99
Average	2.19
h-index	1 – 20
Nos in SCOPUS	13
SJR	0.033 – 2.021
SNIP	0.094 – 1.714
IPP	0.464 – 3.130

#### 3.4.4 Research awards and recognition:

##### *Research awards received by the faculty*

Dr. Anu Yamuna Joseph, Department of Biotechnology has been conferred ‘Post Doctoral Young Scientist Award’ for conducting studies on “DNA Hypermethylation as a prognostic and predictive marker of Breast Cancer” by the Kerala State Council for Science, Technology and Environment (KSCSTE) in 2014.

##### *Recognition received by the faculty*

Dr. Riju C. Issac of the Department of Physics has been awarded a Patent (Patent Number: WO2014006427-A1) for Focused on Gamma Ray Beam Generating System.

### *Management incentives given to faculty for research contributions*

An incentive of Rs. 3000/- to the faculty members for publishing articles in foreign journals, Rs. 2000/- for publishing articles in accepted Indian journals, and Rs. 5000/- for publishing books.

## **3.5 Consultancy**

### 3.5.1 Institute-industry interface:

The college has taken proactive role to collaborate with various industries for providing consultancy services. A member representing industry has been included in the IQAC to strengthen institute-industry interface.

### 3.5.2 Consultancy policy:

The consultancy policy of the college is based on the following objectives;

- Optimum utilization of available research infrastructure
- Utilize the expertise of faculty and research scholars
- Generate income for maintenance and upkeep of instruments
- Provide exposure to students and research scholars
- Sharing of expertise and facilities

### 3.5.3 Encouragement to staff to utilize their expertise and available facilities for consultancy services:

The Management encourages the staff to involve in consultancy services by giving cash incentives. The Management also honours the staff during public meetings.

### 3.5.4 Major consultancy services provided:

- Soil and water quality analysis
- uv-visible spectrophotometer
- Atomic Absorption Spectrophotometer
- X-ray Diffractometer
- Microbiological analysis
- Molecular Biological analysis (PCR)
- Gas Chromatography

### 3.5.5 Utilization of income generated through consultancy:

Most of the instruments are sophisticated and costly, which require regular maintenance and upkeep. The chemical and standards used for analysis



are also costly. An experienced laboratory technician was appointed and paid by the college management. The amount generated through consultancy services is utilized to meet all the expenses.

### **3.6 Extension Activities and Institutional Social Responsibility (ISR)**

#### **3.6.1 Institution-neighborhood- community network:**

- Every year the College organizes a summer school training programme (*Manimala*) for school students of Kothamangalam Taluk.
- The College has adopted Pinavoorkkudy tribal village in Kuttampuzha Grama Panchayath.
- NSS, NCC and MGJSM volunteers have made several visits to orphanages.
- Member students of MGJSM and NSS volunteers regularly collect lunch packets from the students and teachers and distribute to the needy.
- A number of Blood donation camps are organized in the College under the leadership of NSS.
- A biodiversity plot was prepared by utilizing the financial support of Kerala State Biodiversity Board.
- Every year the NSS Unit distributes wheel chairs to the inmates of *Pratheesha Bhavan*, Nellimattom.
- NSS volunteers have participated in the construction of three houses for the poor.
- The college has organized number of road safety awareness programmes for students and the general public.
- The College conducted a series of programmes for protecting the river *Kuroorthodu*, which is flowing through the eastern boundary of the college.
- A proposal prepared by the college in consultation with the experts for the effective solid waste management of Kothamangalam and submitted to Kothamangalam Municipality.

### 3.6.2 Students' involvement in various social movements:

- Students are encouraged to enroll both in the NSS (200 students) and NCC (108 students).
- Mar Gregorios Jacobite Students Movement (MGJSM) institutes in the campus to volunteer charity work to impart ethical and moral values.
- A Nature club functions in the campus to nurture an attitude towards the nature conservation. More than 100 students are volunteers for the activities.
- The Social Service League of the College is instrumental in involving students in various social activities.
- Red Ribbon Club is an initiative of Kerala State Government to educate students on HIV, AIDS and other communicable diseases.
- Youth Red Cross functions with a view to extend a helping hand to the poorest of the poor.
- A Road Safety Club was formed in order to inculcate social awareness in road signs and safe driving.

### 3.6.3 Strengthen the stakeholder perception:

- Kothamangalam Pollution Control Club under the patronage of the Principal of the College. Most of the members are from different walks of life and are participating in all the events organized by the club.
- Ensure the participation of local self-government authorities of Kuttampuzha Grama Panchayat in the village adoption programme implementing at Pinavoorkkudy tribal village.
- Ensure participation of the Kothamangalam Municipal authorities in the implementation of Kuroorthode rejuvenation programme.
- Participation of the Kothamangalam *Vypary Vyavasayi Samithi* in the maintenance of *Academic garden* in the Bye Pass road, Kothamangalam.
- The members of Kothamangalam and Perumbavoor Legislative Assembly constituencies are shareholders and Governing Board members of Mar Athanasius College Association.
- The Kothamangalam Municipal Chairman is also a member of Governing Board of the Mar Athanasius College Management.

### 3.6.4 Extension and outreach programmes:

The College utilizes financial support from UGC, KSCSTE, Mahatma Gandhi University and the College Management for conducting extension and outreach programmes. The college spent an amount of Rs. 1,89,488/- from the CPE Phase I for conducting extension programmes. The college allocated Rs. 6,00,000/- for conducting environmental awareness, village adoption and other extension activities from CPE Phase II.

#### *CPE Phase I and II allocation for extension activities*

CPE Phase I		
No	Activity	Amount
1	Environment Protection Rally	39,704
2	Science Forum Activities	7,657
3	NSS Medical Camp	60,000
4	<i>Kuroorthodu</i> Rejuvenation Programme	42,639
5	Environment Awareness Programme	5,051
6	Training Programme for School Students	25,000
7	Organ Donation Campaign	9,437
Total Amount		1,89,488/-
CPE Phase II		
8	Environmental Awareness	1,00,000
9	Village adoption	3,00,000
10	Other Extension	2,00,000
Total Amount		6,00,000/-

#### Extension and outreach programmes conducted during the last five years

Category	Activities
<b>Road safety</b>	<ul style="list-style-type: none"> <li>• Road users Self satisfaction Survey on 9 October 2010</li> <li>• Seminar on 'Road safety and Trauma care' on 18 February 2011</li> <li>• Road Safety Awareness Class on 6 January 2012</li> <li>• Road Safety Inter- school Drawing Competition- <i>Nerkazhcha</i> on 17 February 2012</li> </ul>
<b>Organ Donation</b>	<ul style="list-style-type: none"> <li>• Eye Donation and Awareness Camp on 10 February 2012</li> <li>• Awareness on organ transplantation on 22 August 2012</li> <li>• Submission of Organ Donation Declaration Forms on 8 October 2012</li> </ul>

<b>Nature Conservation Activities</b>	<ul style="list-style-type: none"> <li>• NCC Cadets participated in the <i>Ashoka</i> tree planting programme on 17 July 2010</li> <li>• Tree sapling Plantation (Fruits and Vegetable) on 2 July 2010</li> <li>• <i>Vriksha Samarppanam</i> (Plantation of medicinal tree saplings along the PWD road sides) on 17 September 2010</li> <li>• Distribution of Vegetable Seeds and saplings among college students and staff for Vegetable Gardening (“Homely vegetables for healthy life campaign”) on 24 September 2010</li> <li>• Ahimsa to Nature (Caring and plantation of medicinal tree saplings along the PWD road sides on 19 August 2011</li> <li>• Biodiversity project-Ahimsa to nature a Fish farming Project on 17 September 2011</li> <li>• Gandhi Jayanthi -“clean campus- clean city” on 2 October 2011</li> <li>• A biodiversity plot at Thattekkad with 100 varieties of plants which includes rare fruit trees and medicinal plants</li> <li>• Distribution of vegetable seeds and saplings among college students and staff for vegetable gardening by Sri. Ganesh Kumar K B, Minister of Sports and Film) on 7 October 2011</li> <li>• ‘Clean Home Clean City’ on 16 October 2012</li> <li>• Homely vegetable Healthy vegetable programmes on 4 October 2013</li> <li>• Cycle rally of NCC cadets to Thattekkad bird sanctuary on the Forest Day, 22 March 2014</li> <li>• World Environment Day celebrations - 5 June 2014</li> <li>• An essay writing competition on the topic ‘Environmental Conservation’ on 11 June 2014.</li> <li>• Conducted ‘Green Campus, Clean Campus’ Programme. NSS volunteers were engaged in campus cleaning and vegetable gardening on 25 October 2014.</li> <li>• Planted Bamboo trees in the campus in association with Kerala Bamboo Corporation on 6 December 2014.</li> </ul>
<b>Community Health</b>	<ul style="list-style-type: none"> <li>• Cancer Awareness Programme on 4, February 2011</li> <li>• Aids Day on 1 December 2011</li> <li>• Dental Check up Camp on 20 December 2011</li> <li>• Medical Camp at the Tribal Settlement, Kunchippara on 25 February 2012</li> <li>• Giving Out Medicines to Primary Health Centre, Pallarimangalam on 14 March 2012</li> <li>• Positive talk on HIV on 20 June 2012</li> <li>• Adolescent education on 22 December 2012</li> <li>• Anti-drug and anti -suicide campaign 4 November 2013</li> </ul>

<b>Blood Donation</b>	<ul style="list-style-type: none"> <li>• Blood Group Identification Camp for Degree Students on 1,2 July 2010</li> <li>• Blood Donation Camp on 6 October 2010</li> <li>• Blood Group Identification Camp for making Pindimana Panchayath residence blood group record on 27 December 2010</li> <li>• Blood donation camp in association with IMA Aluva on 12 January 2011</li> <li>• Blood Donation camp on 8 July 2011</li> <li>• Blood Group Identification Camp for Degree Students on 13,14 July 2011</li> <li>• Second Blood Donation Camp on 1 September 2011</li> <li>• Blood Donation Camp and Youth Day Celebrations on 20 January 2012</li> <li>• Blood donation camp organized on 20 June 2012</li> <li>• Blood donation camp organized on 10 September 2012</li> <li>• Blood donation camp organized on 14 March 2013</li> <li>• Blood donation camp organized on 2014</li> </ul>
<b>Village Adoption</b>	<ul style="list-style-type: none"> <li>• A Seven day special camping was conducted by NSS Unit at Kuttampuzha tribal village from 20 to 26 December 2012</li> <li>• Special camping programme at Pinavoorkudi tribal settlement from 23 to 29, December 2013.</li> <li>• New copy of library Books worth Rs 8000/ and old copy of library books (200 No.) collected by students were donated to Govt. High School Pinavoorkudy under the joint auspices of YWCA Kothamangalam and Women's Cell on 15 December 2014.</li> <li>• Play things (Football and Badminton Set) and Book Rack were donated to Govt.High School Pinvoorkudy on 15 December 2014.</li> <li>• The members of the Women's Cell interacted with the girl students of Govt.High School Pinavoorkudy on 29 June 14.</li> <li>• Unarthupattu, a gender awareness program by Mallika V. Sarabhai was screened at Govt. High School, Pinavoorkudy on 29 June 2014.</li> <li>• <i>Sasthra jalakam</i> for the tribal students 28 March 2015</li> </ul>

<b>Social Service</b>	<ul style="list-style-type: none"> <li>• Rice distribution of MGJSM 2010</li> <li>• <i>Sadbhavana Day</i> with inmates of an old age home on 30 August 2011</li> <li>• Lunch packets are collected and distributed to various orphanages on every Friday by the volunteers of MGJSM</li> <li>• Handing over Wheel Chairs to <i>Patheeksha Rehabilitation Centre</i> on 14 March 2012</li> <li>• Handing over Wheelchairs to an Old Age Home on 17 March 2012</li> <li>• World Elders Day with old aged people on 1 October 2011</li> <li>• Tuition Classes for the Students of Orphanages on 10, 11 March 2012</li> <li>• <i>Pusthakathottil</i> Programme on 14 March 2012</li> <li>• The Social Service League visited the St. Paul's Mission old age home at Odakkali on 05 March 2013</li> <li>• An orientation on 'Pain and Palliative Care' on 24 July 2013.</li> <li>• Palliative rally at Muvattupuzha 11 October 2013</li> <li>• Students visited the inmates of Palliative Care Unit of Govt. Hospital Kothamangalam in connection with the Palliative Care Day on 17 January 2014</li> <li>• One -day Palliative Care Training</li> <li>• A day with god's own people- orphanage visit and dress distribution on 04 February 2014.</li> <li>• Documentary on entitled "Notice the Unnoticed" on Child Labour 12 June 2014.</li> <li>• College level debate '<i>Madhya nirodhanamo, niyanthranamo</i>' organised by the Speakers Forum on 19 September 2014.</li> <li>• Conducted Annual Seven Day Camp at Sankar Memorial LP School, Mamalakandam on 18 24 December 2014.</li> <li>• Run Kerala Run 20 January 2015.</li> </ul>
<b>Water Conservation</b>	<ul style="list-style-type: none"> <li>• Special Camp at Pindimana Panchayath for the 'Rejuvenation of 'Kuroorthodu'-A River Stream of Kothamangalam' on 23 to 29 December 2010</li> <li>• Water Conservation Programme on 22 March 2011</li> <li>• Conducted a seven- day camp based on the rejuvenation of River Stream Kuroorthodu, Kothamangalam on 22 - 28 December 2011</li> <li>• Periyar River protection – Bhoothathankettu Reservoir cleaning on 21 December 2013</li> <li>• Kuroorthode rejuvenation- Installation of sign boards</li> </ul>

### 3.6.5 Participation of students in extension activities:

The students of NCC are eligible for 15% Grace Mark in the University Examinations as a compensation for the time they spend and the effort they make. They are also eligible for refreshment of Rs.90/- per day for a total of 20

parades. In addition they are eligible for reservation in armed forces recruitments. The students are also eligible for duty leave for attending various activities on working days.

The NSS volunteers are eligible for 10% Grace marks in the University Examinations. The students are also eligible for duty leave for attending various activities on working days. Several orientation programmes are organizing to educate the students through community service and enrich their personality and deepen the understanding of the social environment in which they live.

### 3.6.6 Extension work to ensure social justice and empower students from under-privileged and vulnerable sections of society:

- The College has adopted Pinavoorkudy tribal village in Kuttampuzha Grama Panchayath and conducted the following activities:

Remedial classes for tribal students on English, Hindi and Mathematics  
Social surveys  
Well water quality monitoring  
Agro biodiversity documentation  
Tribal School library upgrading  
Various skill development programmes

- NSS, NCC and MGJSM volunteers have made several visits to orphanages.
- Member students of MGJSM and NSS volunteers regularly collect lunch packets from the students and teachers and distribute to the needy.
- A number of Blood donation camps are organized in the College under the leadership of NSS.
- Every year the NSS Unit distributes wheel chairs to the inmates of *Pratheesha Bhavan*, Nellimattom.
- NSS volunteers have participated in the construction of three houses for the poor.
- The college has organized number of road safety awareness programmes for students and the general public.

### 3.6.7 Values and skills inculcated through the extension programmes:

All the extension programs conducted by the college are aimed at dual beneficiaries and in par with the stated vision and mission of the College. First, the students themselves and second the one who benefits the outcome. Through these activities the students are trained to live responsible and safe lives while at

the same time be considerate to fellow beings who are often less privileged. Some of these programmes such as blood and organ donations, road safety, charity, social service and village adoption have direct and immediate impacts on the students as well as on the receptors. The following values and skills inculcated.

- Enhance leadership qualities
- Reminder of their role in Nation Building
- Induce the feeling of kindness
- Enforce social responsibility and commitment in to the young minds of students.
- Improve abilities to work as a team.
- Awareness on Organ Donation
- Concern for Environment conservation
- Social justice
- Palliative caring

#### 3.6.8 Community participation in extension activities:

- The College has prepared an action plan for the solid waste management of Kothamangalam Taluk in consultation with the experts from Central Water Resources Development and Management (CWRDM), Suchithwa Mission, Government of Kerala and Pollution Control Board (PCB) and the Centre for Earth Science Studies (CESS). The detailed plan was submitted to the Kothamangalam Municipality.
- The College has adopted the river, *Kuroorthodu*, flowing through the eastern boundary of the College campus. A number of awareness programmes such as rallies, street plays, distribution of leaflets, installation of sign boards, seminars and workshops have been conducted since 2008. A mass memorandum was prepared by the College to conserve the Kuroorthode and submitted to the Government of Kerala.
- A seven day camp was conducted by the NSS Unit of the College in various localities of Kothamangalam Taluk to carry out community related activities every year. Three houses are newly constructed by the NSS unit in the locality since 2010.

#### 3.6.9 Collaboration for outreach and extension activities:

- The College Collaborates with the Pollution Control Club, Kothamangalam for conducting all kinds of nature conservation activities and summer school programme (*Manimala*) for school students during the last five years.
- The College organized the *Ashoka* Tree plantation programme along the



Kothamangalam Bypass road in 2010 in association with the YMCA/YWCA/Lions Club/ Red Cross Society.

- Every year the College conducts legal awareness programme in association with Legal Service Authority, Kothamangalam.
- The students of Mar Athanasius International School and Mar Athanasius College of Engineering participates in programmes organized by the College such as *Ashoka* Tree plantation programme, M P. Varghese tree park, International Year of Chemistry celebrations etc.
- The College adopted a tribal village at Kuttampuzha Grama Panchayat during 2013 and conducted a number of community uplift programmes.
- 76 educational institutions of Kothamangalam Taluk participated in the *Ashoka* tree plantation programme.

#### 3.6.10 Awards received:

The College has been awarded the ‘Green Award 2011’ of Kerala State Biodiversity Board for the environment conservation initiatives of the college.

### 3.7 Collaboration

#### 3.7.1 Collaborative research:

- Collaborative research between Dr. Riju C Issac, Department of Physics and Prof. A V Jaroszynski and Dr. S Cippiccia of the Department of Physics, University of Strathclyde in Glasgow, Scotland, UK has resulted in a patent on ‘Focused gamma ray beam generating system. Patent Number: WO2014006427-A1.
- The Department of Physics collaborates with Department of Physics, University of Strathclyde in Glasgow, Scotland, UK and other collaborators from the UK and the USA on the application of ultrafast laser generated electrons for cancer treatment.
- The Department of Chemistry has published 5 research papers in collaboration with various institutions.
- The Department of Physics has published 8 research papers in collaboration with various institutions.
- The College has research collaboration with the Mar Athanasius College of Engineering (MACE). The environmental chemistry lab in the Civil Engineering Department of MACE and the research facilities in the

College are mutually shared for conducting various researches.

### 3.7.2 MOUs and collaborative arrangements:

- An MOU signed with Arjuna Natural Extracts Ltd, Aluva for monitoring the effluent discharge regularly.
- The College has Memorandum of understanding (MOU) with Kerala Agriculture University, Thrissur, Central Institute of Fisheries Technology, Kochi, Rajiv Gandhi Center for Bio-Technology (RGCB), Thiruvananthapuram to carry out various research activities.
- The College has collaborated with Cochin University of Science and Technology, Kerala forest research institute (KFRI), Thrissur, Cashew Export Promotion Council of India Laboratory (CEPC), Kollam and Central Tuber Crops Research Institute (CTCRI) Thiruvananthapuram to conduct different academic activities.

### 3.7.3 Facilities created through collaborative programmes:

- A multipurpose synthetic court was created by the financial support of Sports Council of Kerala
- An Indoor Net facility was created by the Kerala Cricket Association.
- Sports Authority of India recognized the college as its extension training centre.
- A plastic shredding unit was installed in collaboration with Pollution Control club, Kothamangalam.
- The College has collaborated with the Kerala State Higher Education Council to conduct Additional Skill Acquisition Programme (ASAP)

### 3.7.4 Scientists /eminent personalities visited the campus:

- His Holiness Moran Mor Ignatius Aphrem-II, the Patriarch of Antioch and All the East and the supreme head of Universal Syrian Jacobite Church
- Dr. A P. J Abdul Kalam, the former President of India visited the college on 6 June 2010.
- Mohammad Hamid Ansari, the Vice President of India
- Sri. Oommen Chandy, the Honorable Chief Minister of Kerala

- Padmabhooshan Prof. B Sinha, Variable Energy Cyclotron Centre, Kolkata
- Sri. K M Mani, Finance Minister of Kerala
- Sri. P J Joseph, Minister for Water Resources, Kerala
- Sri. Abdu Rabb, Minister for Education, Kerala
- Sri. K B Ganesh Kumar, Former Minister for Sports
- Dr. R Sharama, Head, Department of Biotechnology, North Eastern Hill University
- Dr. M C Dileepkumar, Vice chancellor, SSUSK, Kalady
- Dr. Babu Sebastian, Vice Chancellor, Mahatma Gandhi University, Kottayam.
- Dr. Sheena Shukoor, Pro-vice chancellor, Mahatma Gandhi University, Kottayam.
- Dr. C.P Chandrasekharan, Professor, Centre for Economic Studies and Planning, Jawaharlal Nehru University, New Delhi.
- Dr. Thampi Durai Sudha, Department of Economics, Annamalai University, Tamil Nadu
- Dr. H Krishnaprasad, Professor, AIIMS, New Delhi.
- Dr. H.H. Krishnan, Scientist, CCMB, Hyderabad.
- Dr. Reji Philip, Raman Research Institute, Bangalore
- Dr. V P N Nampoori, Cochin University of Science & Technology, Kochi.
- Prof. T Desai, International Atomic Energy Agency (IAEA), Vienna.
- Dr. Vijayamohanan K. Pillai, Director CECRI, Karaikudi, India
- Dr. R. S. Swathi, IISER, Trivandrum, Kerala
- Dr. Vinesh Vijayan, IISER, Trivandrum, Kerala
- Dr. Y. Adithya Lakshmana, IISER, Trivandrum, Kerala

- Dr. K. Veluthambi, Head, Department of Plant Biotechnology, Madurai Kamaraj University, Tamilnadu
- Dr. G. M. Nair, School of Biological Sciences, Central University of Kerala, Kasargod
- Dr. Dinesh A. Nagegowda, CSIR-CIMAP Research Centre, Bangaluru
- P Asthana, Department of Science and Technology
- D. Bora, Department of Science and Technology
- Dr. M. Nethaji, Department of Inorganic and Physical Chemistry, IISc. Bangalore
- Dr. P. A. Joy, CSIR-National Chemical Laboratory Pune 41100
- Dr. R. Nandini Devi, CSIR-National Chemical Laboratory Pune 41100
- Dr.C.Sudarsanakumar, Professor, School of Pure and Applied Physics, Mahatma Gandhi University
- Dr. C.P Chandrasekhar, JNU Delhi

*International Conference conducted*

The Department of Physics organized an International Conference on ‘Frontiers of Plasma Physics and Technology (FPPT 7)’ in Kochi during 13-17 April 2015 in connection with the Diamond Jubilee Celebrations of the College. The Conference was organized in cooperation with International Atomic Energy Agency (IAEA), FAIR (Facility for Antiproton and Ion Research, Germany), Technical University of Darmstadt, Germany, and TU WIEN (Technical University of Vienna, Austria). 150 delegates from 20 countries participated in the conference.

*National seminars conducted with the financial support of UGC*

Sl No.	Topic	Department	Year of Conduct
1	Emerging Trends in Business and Finance	Commerce	14-15 March 2012
2	Municipal Solid Waste Management-Issues and Prospects	Zoology	2-3 March 2012
3	Clinical Applications of Molecular Biology	Biotechnology	3-4 February 2012
4	Fundamentals of Powder Diffraction and Micro structural of Materials	Physics,	6-7 February 2012

5	Good and Service Tax- A Threat to the Autonomy of State	Economics	8- 9 February 2012
6	FDI in Multi-Brand retail sector in India – Issues and challenges ahead	Economics	7-8 March 2013
7	Molecular Evolution and Phylogeny	Zoology	1-2 March 2013
8	Actuarial Science, Cryptography & Geo Gebra	Mathematics	14 – 15 March 2013
9	Nutraceuticals-Perspectives, Prospects and challenges	Chemistry & Botany	12 – 13 March 2013
10	New Frontiers in Molecular Biology	Biochemistry	12-13 December 2013
11	New Trend in Accounting and Transaction	Commerce	6-7 March 2014
12	Recent Advances in Spectroscopy	Chemistry	31 July - 1 August 2014
13	Chinese Trade Network and Trade Mercantilism in Malabar during Medieval Period	History	25-26 September 2014
14	Emerging Youth Culture in the Era of Globalization	Sociology	21 & 22 August 2014
15	Swami Vivekananda's Message of Community Service for the Youth of India	NSS	29-30 August 2014
16	New Vistas in Microbial Sciences	Microbiology	16-17 October 2014

*State Level Seminars conducted with financial support of Management*

- Department of History organized a seminar on ‘Anti Colonial Struggle in Kerala’ on 1 December 2010.
- Department sociology organized a seminar on ‘Social Stratification’ on 3 December 2010.
- Department of Zoology and Biosciences jointly organized a seminar on ‘Brain Awareness’ on 18 March 2011 in collaboration with European DANA Alliance for Brain, London and National Brain Research Centre, Manser.
- The Women Cell of the college organized a seminar on ‘Women and Health’ on 11 March 2011.
- Department of Malayalam organized a seminar on ‘Women Empowerment’ in collaboration with the Department of Student Services, MG University on 14-15, September 2012.
- Department of Biosciences organized a seminar on ‘Current Applications in Neuroscience and Prospects of Antimicrobial Peptide as Future Medicine’ on 9-11 January 2013.
- Department of Physics organized a seminar on ‘Astro Physics’ on 3 December 2014.

- Department of Statistics organized a seminar on ‘Data Analysis Using R-Programming’ on 15 October 2014.
- Department of Physical Education organized a seminar on ‘Sports Psychology for Peak performance’ on 29 November 2014.
- Department of English organized a Seminar on ‘Text, Translation and Transcreation’ on 17 December 2014
- Department of Economics organized a Seminar on ‘Scope for Urban Agriculture in Kerala – A Move Towards Food Sustainability’ on 23 September 2014
- Department of Botany organized a Seminar on ‘Biodiversity of Cryptogams in South India’ on 15 November 2014.
- Department of Commerce organized a Seminar on ‘Emerging Trends in Research’ on 5 December 2014.
- Department of Mathematics organized a Seminar titled ‘Mathematical Insights’ on 19 September 2014.
- Department of Zoology organized a Seminar on ‘Environmental Degradation in different Oceanic Eco zones- A General Outlook’ on 27 August 2014.
- Department of Malayalam organized a Seminar on ‘*Malayalathinte Pattuvazhi: Arangilum Aniyarayilum*’ on 30 December 2014.
- Department of Hindi organized a Seminar on ‘Contemporary Trends in Hindi Literature’ on 05 January 2015.

### 3.7.5 Linkages/collaborations actually resulted:

#### a. Curriculum development/enrichment

- The College has developed a curriculum for M Sc Actuarial Science in collaboration with Bishop Heber college, Trichy

#### b. Internship/On-the-job training

- The College has collaborated with Cochin University of Science and Technology, Kerala forest research institute (KFRI), Thrissur, Cashew export promotion council of India Laboratory (CEPC), Kollam and Central Tuber Crops Research Institute (CTCRI) Thiruvananthapuram to conduct different academic activities.

#### c. Summer placement

- Every year the College encourages the students of Post Graduate Departments to apply for Summer Fellowships in the Indian Institute of

Science (IISc), Bangaluru.

d. Faculty exchange and professional development

- Diana Ann Issac of the Department of Commerce has been selected for the FLAIR programme of Higher Education Department, Govt. of Kerala.

e. Research

- The College has Memorandum of understanding (MOU) with Kerala Agricultural University, Thrissur, Central Institute of fisheries Technology, Kochi, Rajiv Gandhi Center for Bio-Technology (RGCB), Thiruvananthapuram to carry out various research activities.

f. Consultancy

- An MOU was signed with Arjuna Natural Extracts Ltd, Aluva for monitoring the affluent discharge regularly.

g. Extension

- The College sought expertise from Central Water Resources and Management (CWRDM), Pollution Control Board (PCB), *Suchithwa* Mission, Govt. of Kerala and the Centre for Earth Science Studies (CESS) to prepare an action plan for the solid waste management of Kothamangalam Taluk.

h. Student Placement

- The firms such as Wipro (2 times), Infosys (1 time), South Indian Bank (2 times), ICICI Bank (1 time), TCS (2 times), Luminous (1 time), Kites Corporate Solutions (1 time) and Federal Bank (3 times) have conducted placement programmes in the campus since 2010.

i. Twinning programmes

- The College proposes to conduct twinning programmes once the autonomy is granted by the UGC.

### 3.7.6 Systemic efforts in planning, establishing and implementing the initiatives of the linkages/collaborations:

The college and its administration believe in the benefits from national and international collaborations. The college also promotes inter-departmental and inter-collegiate collaborations for faculty.

## CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 Physical Facilities

#### 4.1.1 Policy of the Institution for creation and enhancement of infrastructure:

The College has excellent infrastructure and learning resources. The College always aims at infrastructural development in order to meet the new challenges in curriculum and research. The infrastructural amenities are timely upgraded and properly maintained in the College. The College also takes initiative to submit proposals to various agencies for funding and thereby necessary infrastructural facilities are developed and maintained.



Mar Athanasius College Campus

#### 4.1.2 Details of the facilities:

##### *Curricular and co-curricular activities*

##### **Classrooms**

- 34 Under Graduate and 32 Post Graduate Class Rooms
- All classrooms are sufficiently spacious and ventilated
- Well- equipped with necessary amenities like electric lights, fan, speaker, white/ blackboards, chair, desks, benches etc.
- 11 Smart Class Rooms
- A total of 46 DLP/LCD projectors installed in the Class Rooms
- All PG classrooms are fully furnished and are provided with modern student- friendly furniture.
- All final year Under Graduate and all Post Graduate Class Rooms have broad band connectivity and desktop/laptop computers.



### **Technology- enabled learning spaces**

- The entire campus is Wi- Fi enabled with high speed internet connectivity.
- Three computer labs (Academic Technology Centre - 34 computers, Chemistry lab - 7 computers, Mathematics lab - 12 computers).
- Network Resource Centre (NRC - 7 computers).
- The Department of English has a language laboratory (20 terminals) which is meant for enhancing the language and communication skills of the students.
- All language departments are provided with portable speakers as teaching aid.
- A LED TV is installed in the Department of English to enable students in Media/ Film Studies.
- The library is fully computerized and can be accessed through the College website and through OPAC terminals.
- All final year Under Graduate and all Post Graduate Class Rooms have broad band connectivity and desktop/laptop computers.
- 11 Class Rooms are converted to Smart Class Rooms in 2015
- A total of 46 DLP/LCD projectors installed in the Class Rooms

### **Seminar Halls**

- One air- conditioned Seminar Hall having 107 seating capacity with all state-of-the-art facilities.
- Three seminar halls with 40 seating capacity and ICT facilities
- Non- residents Students' centre having a seating capacity of 200.
- A multi-purpose stadium cum auditorium (Baselios Paulose Indoor Stadium) having an area of 10,000 Sq. Ft with a capacity to accommodate more than thousand students.

### **Tutorial Spaces**

Tutorial classes are conducted in the respective classrooms.

## Laboratories

There are 20 science labs in the College functioning under the Departments of Chemistry, Physics, Botany, Zoology and Bio- Sciences. All are full- fledged labs keeping in tune with the modern specifications and the requirements of the new curriculum. All these have necessary instruments, proper lighting facilities and washing points. Each lab is furnished with ceramic floor tiles and granite table tops and is fitted with exhaust fans, fume cupboards, first aid boxes and fire extinguishers. In addition there are five research laboratories to carry out research in science. The college also has four computer labs.

Science Labs	Computer Labs	Research Labs
1. B Sc. Chemistry lab	1. Academic Technology Centre	1. Sophisticated Instrumentation Centre
2. M Sc. Organic & Inorganic lab	2. Network Resource Centre	2. DST FIST lab
3. M Sc. Physical chemistry lab	3. Mathematics lab	3. Chemistry research Lab
4. B Sc. Physics lab	4. Computational Chemistry lab	4. Physics research lab
5. M Sc. Physics lab	5. Language lab	5. Zoology research lab
6. M Sc. Electronics lab		
7. M Sc. Spectroscopy lab		
8. B Sc. Zoology lab		
9. M Sc. Zoology Previous lab		
10. M Sc. Zoology Final lab		
11. B Sc. Botany lab		
12. M Sc Botany Previous lab		
13. Phytochemistry lab		
14. Biochemistry lab		
15. Bacteriology lab		
16. Molecular Biology and Environment Monitoring Centre		
17. Tissue Culture lab		
18. Inoculation room		
19. Mycology and Virology lab		
20. Enzymology lab		



Language Lab

## Academic Technology Centre

Academic Technology Centre was established in the year 2004-2005. The center is equipped with 34 computers with broadband internet connection. It ensures excellence in teaching–learning process through ICT. ATC offers training in multimedia computing system, special computing, hardware and peripherals software tools, video cameras, video players, digital cameras and support service. It also encourages the teachers, research scholars and students to

develop their own software in various subjects which can be used for teaching as well as research.



Academic Technology Centre

### **Network Resource Centre**

A Network Resource Centre was established in the College in the academic year 2004-2005 with the financial assistance of UGC. All the computers of NRC are connected to broadband internet and are kept open from 9.30 am to 4.30 pm. It is functioning well in a dust free air conditioned room in the library building with 7 terminals. A technician is in charge of the NRC to help the students to download their study materials. Unlimited downloading facility is provided for the students and staff of the College. The internet accessibility is fully utilized by the students for the preparation of project works, assignments, seminar presentation etc. There is an adequate provision for getting soft and hard copies.

### **Mathematics Lab**

The lab consist of 12 computers to train students in various Mathematical and Statistical software's such as Math lab, SPSS, TEX, Equation editor etc.

### **Research Centers**

The Department of English, Economics, Physics and Chemistry have research centers. Each research center is provided with a research room having necessary facilities.

The research scholars in the PG and Research Department of English have access to more than 8000 books and 20 journals on literature, language and literary theory maintained at the central library. The Research Centre in Economics has 4000 books, 15 journals and 250 reference books for pursuing research in the respective field.

Equipments such as Photo chemical reactors, Catalytic reactors, Mechanical stirrers, Magnetic stirrers, Electronic Balance, Thermostat, Refrigerators, Muffle furnace, Microwave oven etc. are available in the Research Centre in Chemistry. DLP Wireless data projector, Fluke 189 Logging Multimeter, Precision LCR Meter-1MHz, High vacuum deposition unit with multi source facility, Sensor characterization facility with different toxic gases, Electronic balances, Chemical bath deposition set up, Vacuum Measuring instruments, High temperature furnace, 1MHz Function Generator etc are the major facilities provided to the research scholars in the Physics Research Centre.

### **Sophisticated Instrumentation Centre**

The College has a sophisticated Instrumentation Centre for the research requirements of the faculty, postgraduate students and research scholars. Major equipments in the Centre are X ray Diffractometer (Rigaku), Atomic Absorption Spectrophotometer (Perkin Elmer), Gas Chromatograph (Perkin Elmer), High Performance Liquid Chromatograph, UV Visible Spectrometer (Perkin Elmer), Pressure Reactor, Digital Photoelectric Colorimeter, Air Oven, Muffle Furnace, Temperature Programmed Desorption Reactor, Microwave oven, Rotary Shaker, etc. The center is provided with uninterrupted power supply so as to ensure the maximum efficiency of the center.



Sophisticated Instrumentation Centre

### **DST-FIST Lab**

The College has been selected by DST under the FIST programme. The major equipments procured in this scheme are Surface Area Analyzer (Micromeritics), Total Organic Carbon Analyzer (Schimadzu), Impedence Analyzer (Agilent), Gel Documentation, Stereomicroscope (Leica), Laminar Airflow etc.



DST-FIST Lab

*Facilities for extracurricular activities*

The details of sports infrastructure available in the college as follows:

Sl. No.	Facility	No
1	Football Field 110 x75 m	1
2	Volleyball Court (including Wooden, Mud and Synthetic Multipurpose Stadium)	3
3	Basketball Court (including Wooden, Concrete and Synthetic Multipurpose Stadium)	3
4	Badminton Court (wooden)	3
5	320 m Training Track with 2 Jumping Pits, High Jump Mat and all Throwing Sectors with Fencing and floodlit facility	1
6	Multi- purpose Indoor Stadium – 11,000 sq. ft.	1
7	Indoor Shooting Range 30 x 20 x 4m	1
8	Olympic size Swimming Pool with dimension of 50 x 25 x 2m	1
9	Fitness Centre and Weight Training Hall <ul style="list-style-type: none"> <li>• Medicine Balls – 25 nos</li> <li>• Lifting Barbells – 08 os</li> <li>• Swiss Balls – 20 nos</li> <li>• More than 1000 kg weight plates</li> <li>• Barbell Sets</li> <li>• Core Balancing Bars</li> <li>• Horizontal bars, Wall Bars, Parallel Bars etc.</li> <li>• Gymnastic mats</li> <li>• Yoga Mats</li> <li>• Video analysis facilities</li> <li>• Facilities for recreation games</li> <li>• Facilities for Tennis and Chess</li> </ul>	1
10	Cricket Field	1
11	Cricket Indoor Nets	2
12	Handball Court	1
13	Hills for Training	2
14	Boys and Girls Warm-up Area	1

## **Outdoor Stadium**

In order to nurture the extra-curricular activities of the students, an outdoor stadium is inevitable. The college maintains an athletic track constructed at a cost of Rs. 30 lakh for conducting the entire track and field activities. It is located within the campus so as to provide easy access to the students. A fully furnished Health Club is set up along with the stadium. It provides facilities like fitness center, gymnasium, dressing rooms, bathrooms and rest rooms.



## **Volleyball Court**

The volley ball court has been renovated and it has been raised to national standards. The pitch of the volleyball ground has been strengthened with filtered mud. The surface of the volley ball court is made smooth, rejuvenating the spirit of the players.

## **Concrete Basketball court**

In order to nurture the young budding talents of the students of the college, a new basketball court has been constructed in the campus. It is constructed as per the specification of the latest international rules and standard regulations.

## **Indoor Shooting Range**

The Shooting Range of Mar Athanasius College is the first state-of-the-art shooting range within an educational institution in Kerala. The Shooting range is built with the financial assistance of UGC at a cost of about 82 lakh during 2013-14. It spreads over an area of 7000 sq. ft. It provides facilities for training and competition in the sporting events, 10 mtr Air Rifle and Air Pistol. Presently, the facilities are accessible to 12 shooters at a time and the same will be extended up to 22 shooters in the near future. Well-trained instructors have been made available to make the students specialized in these shooting sports.



### **M A College Athletic Academy**

The Academy nurtures the school and the college students by giving advanced scientific training in athletics under experienced coaches. The academy provides residential facilities to the students. The facilities of the Academy are also open to other various organizations functioning for the development of sports.

### **M A College Cricket Academy**

The college started a Cricket Academy in collaboration with the Ernakulam District Cricket Association. The Academy conducts cricket camps for the budding youth of the college. An indoor cricket facility is provided to give intensive and continuous coaching, even during adverse weather. The Academy aims to produce future international players.

### **Swimming Pool**

An Olympic Size Swimming Pool (50× 25 ×2m) is constructed at a cost of 2.5 Cr. with the financial support of 1 Cr. from the UGC.



### **Multi Gymnasium**

A multi gymnasium is established in the campus at a cost of Rs.4, 48,730/- under the supervision of the Department of Physical Education. It is well equipped with all modern instruments which include Hack Squat, Pull over Machine, Vibrator Massager, Roman Bench, Hamstring Curl Machine, Bench

Press, Squat Machine, Lateral Pulley, Calf Raiser, Biceps Curl, Pro Butterfly Machine, Quadriceps Curl, Parallel Bar, Wall Bar, Horizontal Bar, Weight Lifting Bar, Free Weights, Dump Bells, Swiss Ball (Gym Ball), etc.



Multi gymnasium

### **Baselios Paulose Indoor Stadium**



It is a multipurpose stadium cum auditorium having an area of 10,000 Sq. ft. with a capacity to accommodate thousand students. It is a specially designed indoor stadium in which the total surface of the floor is paneled with teak wood. It is being ventilated from all sides to provide proper aeration and lighting. The construction is specially designed to minimize energy consumption of artificial lighting. As a part of modernization of the multi- purpose indoor stadium-cum-auditorium a new sound and acoustic control systems were procured. This facilitates the duality of the stadium as a large meeting place as well as a sporting venue. New sports equipments are also provided and metal halogen lights are fitted in the sports arena. As it is used for staging plays, concerts, other cultural events etc., green rooms have been built adjacent to the main stage. Toilet and drinking water facilities have been made available to the performers and the audience. It is used for playing indoor games like Basketball, Volleyball,



Badminton, Table Tennis etc. A ramp is constructed to facilitate the needs of the physically challenged students.

### **Students' Centre**

The Non-resident Students' Centre of the college has a seating capacity of 200. It comprises a stage, green rooms, toilet facilities, adequate lights, fans, chairs and tables. It is utilized as recreational room for the day scholars.

### **NSS & NCC**

Separate rooms are provided to the NCC and NSS for the better coordination of their activities.

### **Health and Hygiene**

The College is an environment friendly campus. Steps are taken to ensure that the premises are always kept neat and tidy. Four water filters and water coolers are installed to provide pure drinking water to the students and the staff. Number of black boards is replaced with white boards to reduce the dust in the class rooms. A fitness center is established adjacent to the outdoor stadium of the college. Adequate number of toilets for boys and girls are built in the campus. The College has ladies waiting room caters to the needs of the girl students of the College to rest and relax during lunch intervals. Sufficient seating arrangements, water purifier cum cooler, coin phone, attached toilet etc. are the facilities available there. The waiting room is kept neat and tidy for providing a hygienic atmosphere.

Waste bins are kept at specific locations to ensure a litter free environment. The College has a Bio-Gas Plant as part of the Waste management programme. A Waste Water Treatment Plant has been set up in the ladies hostel for proper management of waste water. The laboratories of the College have first aid kit and fire extinguishing unit. The Fire and Rescue station of the Kothamangalam Municipality is at a distance of 100m from the College.

### **Musical garden**

Mar Athanasius College is the first in India to setup a musical campus, spreading over 70 acres of land. This facility covers the entire educational institutions and student hostels. The musical garden consists of 90 powerful garden speakers and is installed to render musical thought to the campus. Music is played in the live campus when there are no running class sessions. The speakers are functional in all weather conditions.

#### **4.1.3 Infrastructure development:**

The Management has appointed Dr. Elson John, Asst. Prof. in Civil Engineering, Mar Athanasius College of Engineering to plan, sketch, supervise

and monitor all the construction and building works of the College. The Civil Engineering Department of Mar Athanasius College of Engineering, a sister concern of the College, is also extending the technical know-how and their innovations in the civil engineering field to ensure the effective utilization of available funds.

#### Infrastructure existing and created since 2010

Facility	Existing	Facility newly created (in m <sup>2</sup> )				
		2010-11	2012-13	2013-14	2014-15	Total
Campus area	25 ha	-	-	-	-	25 ha
Class rooms	7361.53	417.35	-	541.05	-	8319.88
Laboratories	2302	228.7	-	337.65	-	2868.35
Seminar Halls	695.5	-	-	-	120	815.5
Library	2340.59	-	-	-	-	2340.59
Veranda, staff room and toilets	1151	503.54	-	443.3	-	2097.84
St Mary's Women's Hostel	1028.60	-	-	-	-	1028.60
Mar Athanasius Women's Hostel	-	2173.75	-	-	-	2173.75
Multipurpose synthetic court	-	-	576	-	-	576
Indoor Shooting range	-	-	-	-	649.26	649.26
Indoor stadium	1026.16	-	-	-	-	1026.16
Students' centre	242.93	-	-	-	-	242.93
Canteen + Annex	399.47	-	-	-	-	399.47
Outdoor stadium	7200	-	-	-	-	7200
Basket ball court	2400	-	-	-	-	2400
Swimming Pool	-	-	-	-	1250	1250
Clock Tower	-	-	-	-	319.21	319.21
Health club	-	299.41	-	-	-	299.41
Chapel	228.72	-	-	-	-	228.72
Students parking	-	-	-	-	270.74	270.74

#### Maintenance

The College has a works superintendent to supervise all the maintenance and repair activities of the College. The College avails contractors and workers for major maintenance and repairs. An electrician is appointed for taking care of the electrical works of the College.

#### Optimal Utility

The College ensures optimum use of its infrastructure through a number of measures.

- Presence of students in the class and laboratory is ensured by taking hourly attendance which is computerized and published monthly.

- A register is kept in the Net Work Resource Centre for monitoring the usage of computer terminals.
- A software is incorporated with the library automation programme to monitor the number of books issued to a student/staff.
- The library is kept open on all working days.
- The seminar halls are being utilized for conducting various co-curricular activities like state level and national seminars/workshops/symposia/conferences and screening movies.
- Non-resident Students' Centre is mainly used for NSS/NCC/Nature Club/YRC/ College Union, staff meetings and conducting university examinations.
- The indoor stadium is mainly used for coaching camps of indoor games like Basket ball, Volley ball, Badminton, Table Tennis, Caroms and Chess. In addition College Day celebrations, admission procedures, moral/value education, alumni day celebrations etc. are conducted in the stadium.
- Sports facility is optimally utilized by conducting intensive training by appointing national coaches, and daily morning and evening practice. The College conducts summer athletic coaching camps to train and select best athletes.
- Indoor cricket coaching facility is effectively utilized by the students of the College.
- Academic Training Centre is made maximum use of by the staff and students.
- Instrumentation Centre and FIST Lab are regularly utilized to carry out research, consultancy and extension activities.
- Shares the infrastructural facilities for the benefit of the local community by providing the facilities for conducting General Election (Training, distribution and collection center), PSC examinations, Conducting National and Annual camps of NCC and NSS, Wheel Chair Basketball championships, sports events of neighboring schools, sports events of Uniform Forces, Karate Championships, Coaching camps of Renji Cricket team and State Volley ball teams, University sports championships etc.
- Lab visits are arranged for the school students of neighboring villages regularly.

## **Future Plans for Development**

- Research centers in Mathematics, Botany, Zoology and Biosciences
- Customization of Moodle e- learning programme
- Completion of Management Information System process
- Semester wise online student feedback mechanism
- Advanced Equipments for Indoor Shooting range
- Fitness center with UGC assistance of 2.4 Cr.
- 400 m. Synthetic Track
- Extension of St Mary's ladies hostel with UGC assistance of 80 lakhs
- Men's hostel with UGC assistance of 1 Cr.

### **4.1.4 Facilities for students with physical disabilities:**

A separate room with toilet facility is made available for the differently-abled students. A ramp is constructed in the indoor stadium which enables the disabled students to access the main stage, green rooms, and toilets. Rails are constructed in all the staircases in the college by utilizing the UGC assistance. A lift is provided for the differently-abled students to reach the library.

### **4.1.5 Residential facility:**

#### **St. Mary's Hostel for Women**

It is constructed in 2002 at a cost of Rs. 42 lakh out of which Rs. 15 lakh was given by the UGC. The hostel accommodates 70 students. A waste water treatment plant is also installed at an expense of 6 lakh in the ladies hostels.

#### **Mar Athanasius Women's Hostel**

The UGC has sanctioned Rs.85 lakh for another ladies hostel. The hostel has a plinth area of 2173.75 m<sup>2</sup>. It accommodates 140 students. It is the first among the college hostels in Kerala with Steam Cooking System and was completed during 2010-11.

The hostels are provided with recreational facilities like common room with audio-visual equipments and library facility. Wi-Fi internet connection is available in the Mar Athanasius Women's Hostel. All the hostels are provided with constant supply of safe drinking water. A Steam Cooking Facility is installed in the Mar Athanasius Women's Hostel to minimize the energy consumption for cooking.

## **Faculty Guest House**

Personalities from different walks of life grace the activities of the institution. Cordial reception is a requisite. Housed in the fourth floor of the Library building, the Guest Rooms provide boarding and lodging facilities for the guests of honour. It has three executive Suits maintaining all requirements-air-conditioners, TV, telephone and Wi-Fi facilities. It was constructed in the year 2008-2009 at a cost of Rs. 8.95 lakhs. A lift was also installed at a cost of Rs. 10 lakh to access the guest rooms.

### **4.1.6 Health care on the campus and off the campus:**

The College students and staff can avail the medical facilities in Kothamangalam Taluk Hospital and two private hospitals with five hundred beds located at Kothamangalam town, which is 1 km. away from the campus. A part time consulting physician was appointed for the sports students of the College. An infirmary is also available in the College to meet the emergencies.

All the enrolled students of the College are insured under 'Student Safety Insurance Policy' of Mahatma Gandhi University, Kottayam with a premium of Rs.1 per student per annum. The scheme covers an annual insurance coverage of Rs. 1 lakh for death due to accident. In addition to this, up to a coverage amount up to Rs. 50,000/- is provided for the inpatient medical expenses due to accident to a student with a premium of Rs. 10/- per student per annum.

### **4.1.7 Common facilities available in the campus:**

#### **IQAC**

A fully furnished spacious room was allocated for the functioning of the IQAC. It is equipped with tables, chairs, shelves, broad band connection, Wi-Fi, laptops, desktops, printer, DLP etc.

#### **Student Counsellor**

The Mar Athanasius College, Kothamangalam realized the significance of students' counselling and took a leading step by appointing a full time Students Counsellor to nurture and support the students and to solve their problems. A separate and fully furnished counselling room was constructed so as to ensure confidence and privacy to the students to approach the Counsellor at any time. The Counsellor maintains an up-to-date confidential record to monitor the effectiveness of the psychological approach. The Counsellor also visits all classes at regular intervals every month and caters to the needs of the students.

#### **Placement Cell**

The world is now in a transitional period where more people seek private sector jobs than government jobs. To facilitate the growing need and aspiration of the students, a Placement Cell is functioning in the library building.

## **Career Guidance Cell**

To open new avenues in the realm of Science and Technology, Literature, Management Studies etc. a career guidance cell has been constituted in the campus. Display Boards have been fixed for projecting notices, brochures, job sites, etc. to disseminate the message rapidly, widely and effectively. The reference books for various competitive examinations like CAT, MAT, NET, JRF/AL, UGC, JRF, SLET, and Civil Service have been kept separately in the library. The Student Counsellor is in charge of Career Guidance Cell and effectively guides the students to appear for competitive examinations. Comfortable seating arrangements have been made available to facilitate the growing needs of the students.

## **Multi Gymnasium**

A multi gymnasium is established in the campus at a cost of Rs.4, 48,730/- under the supervision of the Department of Physical Education. It is well equipped with all modern instruments which include Hack Squat, Pull over Machine, Vibrator Massager, Roman Bench, Hamstring Curl Machine, Bench Press, Squat Machine, Lateral Pulley, Calf Raiser, Biceps Curl, Pro Butterfly Machine, Quadriceps Curl, Parallel Bar, Wall Bar, Horizontal Bar, Weight Lifting Bar, Free Weights, Dump Bells, Swiss Ball (Gym Ball), etc.

## **Vehicle Parking Facility**

A car parking facility, having the capacity to accommodate 30 four wheelers, is provided to the staff of the College. It is rectangular in structure; each chamber has a dimension of 18 feet by 8.5 feet with permanent roofing and compound walls with gate at a cost of Rs. 5.28 lakhs.

A parking facility for two wheelers for students is also provided in the campus near the outdoor stadium for the students.

## **Post office**

A branch of the Central Post and Telegraph Office is situated in the campus and the post office is known as Kothamangalam College Post Office with the Pin: 686 666.

## **Substation**

A substation of 315KVA is established in the College for energy conservation at a cost of Rs. 16.29 lakhs in the year 2008-2009. The substation has a transformer which distributes 400V, 3 phase line to the College. About Rs. 250000/- per year can be saved from the exorbitant electricity bill. It provides continuous stabilized power supply.

## **Canteen**

The College canteen was renovated in the year 2005-2006. As a first step in modernizing the entire canteen, the kitchen and store room were well furnished with modern equipments. The floor and kitchen slabs are paved with granite. Two toilets have been provided within the canteen premises. A bio-gas plant, constructed at a cost of Rs. 3.00 lakhs, is functioning adjacent to the canteen for re-cycling the organic waste from the canteen and to utilize the bio-gas for cooking. A Waste Water Treatment Plant is set up near the canteen for the effective management of waste water.

A Canteen Annexe was constructed to offer dining facilities for day-scholars. It is furnished with tables, chairs, fans, water cooler and washing points. The Canteen and Canteen Annexe has been constructed at a cost of about Rs. 7.00 lakhs.

## **St. James Chapel**

Mar Athanasius College constructed the new Chapel at a cost of Rs. 28 lakhs. A piece of architectural beauty, the chapel building stands as a monument of God's blessings on this hillock. The chapel was formally consecrated on 29 June 2002 by His Beatitude Baselios Thomas I, the Catholicos of the East, in the presence of a large gathering of devotees. The Management has appointed a chaplain who leads masses on Sundays and on special occasions like Mar Athanasius Day on 25 January.

## **Co-Operative store and Credit Society**

A co-operative store, registered under the co-operative Societies Act of the Government of Kerala is functioning in the campus. It provides text books and note books and all stationery items at concessional rate. Groceries are also available in the store.

A Staff Credit Society is also functioning in the College to promote the saving habit of the staff and to grant loans to them for useful purposes with an ultimate aim of improving the living standard of the members.

## **Rain water harvesting system**

In order to spread the wide and clear message regarding the significance of water conservation, a rain water harvesting unit was setup in the campus in the year 2008-2009 at a cost of Rs. 270934/-. The rain water reservoir has the capacity of 1053630 L ( $16.30 \times 12.80 \times 5.05 = 1053.63\text{m}^3$ ).

## **Water Filters and Water Coolers**

Three Water filters and water coolers are installed to provide pure drinking water to the students and staff.

## 4.2 Library as a Learning Resource

### 4.2.1 Library Advisory Committee:

Library Committee functions as the coordinating and policy making body. It acts as an advisory committee regarding matters concerning general library development, library policy and allocation of funds. The committee takes the initiative for infrastructure development, print and online collection development, appointment of Librarian Trainees and other library staff on contract basis. The library committee consists of the Principal, Librarian, a faculty member as convener, and three Heads of Departments. Library committee renders all the support to keep the library attractive, easy to use and a place which welcomes to use the resources.

### 4.2.2 Library facility:

*Total Area:* 2340.67 Sq. meters (25,194.75 Square feet)

#### *Seating Capacity*

Seminar Hall	-	107 Nos.
Career Guidance & Placement Cell	-	28 Nos.
Periodical	-	104 Nos.
II <sup>nd</sup> floor	-	50 Nos.
III <sup>rd</sup> floor	-	16 Nos.
Total	-	<hr/> 328 Nos.

#### *Working hours*

From 9.30 am. to 4.30 pm. on all working days and Saturdays with open access facility in all sections of the library.







M. P. Varghese Library

*Layout (Annexure IX)*

Ground floor	Seminar Hall Reprographic Center Property Counter
First floor	Periodical Section Reading Area
First floor balcony	Career Guidance & Placement Cell Network Resource Center (NRC)
Second floor	Circulation Counter Librarian's Cabin OPAC Stack Area (Science, Commerce & Economics) Exhibition Area New Arrivals Display Reading Area with 48 individual reading carrels Reference Section Special collections (Motivation, Competitive Exam, Alumni repository, Inter-library Loan)
Third Floor	Reading Area with 12 individual reading carrels Stack Area (Arts & Humanities)

### 4.2.3 Purchase and use of resources

#### Library subscription and purchase

Library holdings	2010-11		2011-12		2012-13		2013-14		2014-15	
	No.	*TC	No.	TC	No.	TC	No.	TC	No.	TC
Text Books	501	131457	478	152213	39	3504	284	92264	305	142382
Reference Books	40	32093	51	37936	9	10235	28	16765	27	24725
Other books	2004	525828	1913	525828	154	14018	1135	369055	1227	544804
e-Books	-	-	-	-	-	-	42809	-	3191	-
Journals/ Periodicals	-	77745	-	76751	1	85901	-	76673	-	-
e-Journals	-	-	-	-	-	-	2037	-	1863	-
Digital Database	-	5000	-	5000	2	5200	-	5200	-	5000
CD & Video	99	18044	57	-	38	4800	42	-	-	-
Others (Newspapers)	Nil	19842	3	17872	-	24740	-	27357	-	30305
Total		810009		815600	-	148398		587314	-	-

\*TC: Total cost in Rs.

### 4.2.4 ICT and other tools deployed in the library:

#### **OPAC**

Five Online Public Access Catalogues (OPAC) terminals are available for staff and students for catalogue search. Title, Author and Keyword searches are possible in this software. Library users can reserve, renew and recommend the books using this facility.

#### **Electronic Resource Management Package for e-journals**

In addition to the print journals, the library subscribes to the electronic resources under the N-LIST (National Library and Information Services Infrastructure for Scholarly Content) programme of the UGC-INFONET. By utilizing this facility we can have access to more than 3000 full text journals and 97000 electronic books.

The N-LIST programme includes full text e-resources from American Institute of Physics (USA), American Physical Society (USA), Cambridge University Press (UK), Oxford University Press (UK), Royal Society of Chemistry (UK), H.W. Wilson, JSTOR etc.

**Federated Searching Tools:** Yes

**Library Website:** Library book search is incorporated in the College website

**In-house/Remote access to e-publications:**

In house/ remote access to electronic database is provided to the authorized users by giving login ID and password.

**Library Automation:**

M.P. Varghese Library of the college is the first ever college library in Kerala to have complete automation. The library is also the first in the state to provide internet facility to a college campus. Since 1996, e-mail and web browsing facilities are being offered to staff and students of the college.

Every aspect of library functioning is managed by the indigenously developed multi-user, multi-platform library software LCP (Library Control Programme). Important library functions like books selection, accessioning, cataloguing, classification, search, retrieval, circulation, membership management etc. are controlled by LCP.

Members can search, reserve, review and recommend books in the OPAC terminals provided in the library. Secured Wi-Fi internet facility also is available in the library.

**Printers for public access:** 1 Nos.

**Internet band width/speed:** 8 mbps

**Institutional Repository:** Yes

**Content Management System:** Yes

**Resource sharing networks / Consortia:**

The college is registered under the N-LIST (National Library & Information Services Infrastructure for scholarly Content) of the UGC – INFONET. We have been subscribing N-LIST e-resources since 2010. By utilizing this facility the authorized users can access e-resources and download articles required by them.

4.2.5 [Provide details on the following items:](#)

**Average Number of Walk-ins:** 31445 per year

**Average number of books issued:** 17592 per year

**Average number of books returned:** 17174 per year

**Ratio of library books to students:** 1: 34.8

**Average number of books added during last 3 years:** 1364

**Average number of login to e-resources:** Information not available

**Average number of login to e-resources downloaded or printed:** 326 / year

#### **Number of Information literacy trainings organized**

Five training sessions for first year UG students and two training sessions for first PG students to promote the optimum utilization of resources. Individual trainings are organized for the newly appointed staff of the college to access information from vast array of sources.

#### **“Weeding Out” of books and other materials**

Outdated, unused and obsolete books are weeded out regularly. 6065 books are already written off in accordance with the government norms. 3679 books are damaged and these books are kept in a separate room.

#### **4.2.6 Specialized services provided by the library:**

##### **Manuscripts**

Manuscripts including handwritten magazines are kept in the reference collection of the library.

##### **Reference**

A very comprehensive reference section with 1881 books is maintained. The collection includes various dictionaries, encyclopedias, yearbooks, biographical and geographical sources, directories, bibliographies etc. The Oxford English dictionary in 20 volumes, Encyclopedia Britannica, Encyclopedia Americana, World book encyclopedia etc. are the highlights of the collection.

General instruction in the use of the library, provision of general and specific information, assistance in the searching of documents, Readers advisory service, holding of library exhibitions, display of new additions, maintenance of clippings etc. are some of the reference services provided.

##### **Reprography**

Photocopier is installed in the ground floor of the library to take copies of the both from inside and outside the library at nominal rates, subject to copyright regulations. In addition to this scanners are used to take copies of documents kept in the reference collection.

## **ILL (Inter Library Loan Service)**

Inter library loan is a service which helps the members to obtain books or receive photocopies that are unavailable in the college library. Resources of the M P Varghese Library, Mar Athanasius Engineering College Library and Mar Athanasius International School Library are shared under this scheme. The library on specific request from staff and students gets books on ILL from these libraries.

## **Information deployment and notification**

Information deployment and notifications are carried out by using notice boards in the library and reading notices in the class rooms and through central announcements. General information on the library is given in the user education classes. New additions lists are prepared regularly and displayed in the library to make users aware of the latest collection. Telephone and e-mail communications are also used for notifications and conference alerts.

## **Download**

All types of digital documents like PDF, XLS, e-books, audio-video visual files, open source softwares can be downloaded to CDs and pen drives.

## **Printing**

Members can print all type of printable digital materials at nominal rates.

## **Reading list / Bibliography compilation**

Bibliographies are prepared for the projects, assignments and seminars of students on request. Bibliographies are compiled on various subjects after consulting the library catalogue and web resources. Reading lists on general topics and fiction are provided to those who are interested.

## **In-house and remote access to e- resources**

In-house access to e-resources is provided in the network resource center of the library. Remote access to e-resources is provided to authorized users by using login-ID and password.

## **User Orientation and awareness**

User orientation is given to the newly joined staff and students at the beginning of every academic year. A formal training session is organized to introduce them to various resources and services available in the library. Giving general instructions on the use of the library, training in OPAC and providing web searching tips etc. are the salient features of the orientation programme. The members are taken around the library to familiarize them with the lay out and collection of the library.

### **Assistance in database searching**

Tips for searching library database and online databases are given to the members. Searches like Title, Author, Key Word and Advance searches etc. are taught. In addition to this staff-in-charge of OPAC and Network Resources Centre is ready to help the members while they face any difficulty in searching databases.

### **INFLIBNET/IUC facilities**

In addition to the N-LIST e-journals, we have access to INFLIBNET/IUC facilities like Shodh Ganga, the repository of theses, Ind Cat, the union catalogue of Indian Universities, e-pathshala, the subject gateway to PG Courses etc. through internet.

#### **4.2.7 Support provided by the Library staff to the students and teachers of the college:**

Library plays an important role in supporting the teaching and learning process by providing the relevant information resources and associated services. Staff and students are given instructions to identify and locate the required information from the vast resources of knowledge. The library encourages the members to contact the library staff if they need any help in using the library resources effectively.

#### **4.2.8 Special facilities offered by the library to the visually/physically challenged persons:**

- In order to make the library differently abled friendly, a lift facility is available in the library.
- Braille materials are kept in the library for the visually challenged users.
- In addition to this library staff provide all assistance to the visually challenged students in searching the net resources. They help the students to use different magnifying options like lens, zoom and dock in various search engines for easy retrieval of information.

#### **4.2.9 Feedback:**

The library encourages the members to give suggestions and report complaints if any directly to the librarian. Library welcomes general suggestions and feedback regarding its resources, services etc. We collect the feedback through questionnaires and book recommendation provision in the library software. Library staff is keen to respond properly by resolving problems and incorporate improvements in to working practice.

## 4.3 IT Infrastructure

### 4.3.1. Computing facility (hardware and software):

*Number of computers with Exact Configuration*

DESK TOP COMPUTERS /LAPTOP/NET BOOK								
Academic Technology Centre								
Si No.	Particulars	No	Processor	Ram	Mother board	Hard disk	Os	Antivirus
1	Desk Top	1	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
2	Desk Top	2	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
3	Desk Top	3	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
4	Desk Top	4	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
5	Desk Top	5	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
6	Desk Top	6	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
7	Desk Top	7	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
8	Desk Top	8	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
9	Desk Top	9	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
10	Desk Top	10	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
11	Desk Top	11	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
12	Desk Top	12	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
13	Desk Top	13	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
14	Desk Top	14	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
15	Desk Top	15	Intel core i3	4 GB	Intel DH61WW	500 GB	Win XP	Kaspersky
16	Desk Top	16	Intel core i3	2 GB	Intel MSI H61M-P21	250 GB	Win XP	Kaspersky
17	Desk Top	17	Intel core 2 DUO	1 GB	Foxconn G31MX	160 GB	Win XP	Kaspersky
18	Desk Top	18	Intel core 2 DUO	1 GB	Foxconn AG31-M2	160 GB	Win XP	Kaspersky
19	Desk Top	19	Intel core i3	2 GB	Intel DH55PJ	500 GB	Win XP	Kaspersky
20	Desk Top	20	Intel core i3	2 GB	Intel DH55TC	250 GB	Win XP	Kaspersky
21	Desk Top	21	Intel core i3	2 GB	ASUS P8H61	250 GB	Win XP	Kaspersky
22	Desk Top	22	Intel Pentium Dual	1 GB	Foxconn 45GMX	80 GB	Win XP	Kaspersky

23	Desk Top	23	Intel Pentium Dual	1 GB	Foxconn 45GMX	160 GB	Win XP	Kaspersky
24	Desk Top	24	Intel core i3	2 GB	MSI H61M-P20	250 GB	Win XP	Kaspersky
25	Desk Top	25	Intel Pentium Dual	1 GB	Foxconn 45GMX	80 GB	Win XP	Kaspersky
26	Desk Top	26	Intel Pentium Dual	1 GB	Foxconn 45GMX	80 GB	Win XP	Kaspersky
27	Desk Top	27	Intel Pentium Dual	1 GB	Foxconn 45GMX	80 GB	Win XP	Kaspersky
28	Desk Top	28	Intel Pentium Dual	1 GB	Foxconn 45GMX	80 GB	Win XP	Kaspersky
29	Desk Top	29	Intel Pentium Dual	1 GB	Foxconn 45GMX	80 GB	Win XP	Kaspersky
30	Desk Top	30	Intel Pentium Dual	1 GB	Intel DG31GL	80 GB	Win XP	Kaspersky
31	Desk Top	31	Intel core i3	2 GB	MSI H61M-P20	250 GB	Linux	Nil
32	Desk Top	32	Intel core i3	2 GB	Intel DH55PJ	500 GB	Windows 7 ulti	Kaspersky
33	Desk Top	33	Intel core i7	8 GB	ASUS H97-Pro	1 TB	Windows 7 ulti	Kaspersky
34	Net Book Samsung	34	Intel atom	1 GB	Samsung NC210	350 GB	Windows 7 starter	Kaspersky
Department of Zoology (B. Sc)								
35	Desk Top	1	Intel core i3	4 GB	Intel DH61WW	500 GB	Windows 7 ulti	Avast
36	Desk Top	2	Intel core i3	2 GB	Intel DH55PJ	500 GB	Windows XP Pro	Nil
37	Desk Top	3	Intel Pentium	1 GB	ASUS P5KPL	250 GB	Windows XP pro	Avira
38	Lap Top Toshiba	4	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	Avast
39	Net Book ASUS	5	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	Avast
Department of Zoology (M. Sc)								
40	Desk Top	1	Intel core i3	4 GB	Intel DH61WW	500 GB	Windows 7 ulti	Avast
41	Desk Top	2	Intel pentium	1 GB	ASROCK G31M-VS2	160 GB	Windows 7 ulti	Avast
42	Desk Top	3	Intel core i5	4 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
43	Desk Top	4	Intel core i5	4 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
44	Lap Top	5	Intel Core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky



	HP							
45	Lap Top HP	6	Intel Core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky
46	Lap Top Toshiba	7	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	Avast
Zoology Research Centre								
47	Desk Top	1	Intel core i3	4 GB	Intel DH61BF	500 GB	Windows 7 ulti	Avast
N R C								
48	Desk Top	1	Intel celeron	512 MB	Intel D865GSA	50 GB	Win XP	Avast
49	Desk Top	2	Intel celeron	512 MB	Intel 845GL	50 GB	Win XP	Avast
50	Desk Top	3	Intel celeron	512 MB	Intel D865GSA	50 GB	Win XP	Avast
51	Desk Top	4	Intel celeron	512 MB	Intel 810	50 GB	Win XP	Avast
52	Desk Top	5	Intel celeron	240 MB	Intel D865GSA	50 GB	Win XP	Avast
53	Desk Top	6	Intel celeron	1 GB	Intel D865GSA	80 GB	Win XP	Avast
54	Desk Top	7	Intel core i3	8 GB	ASUS B85MG	500 GB	Win XP	Avast
Department of Chemistry								
55	Desk Top	1	Intel Pentium E5300	1 GB	Foxconn G31MX	160 GB	Windows 7 ulti	Kaspersky
56	Lap Top HP	2	Intel core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky
57	Lap Top HP	3	Intel core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky
58	Net Book Samsung	4	Intel atom	1 GB	Samsung NC210	350 GB	Windows 7 starter	Kaspersky
59	Net Book ASUS	5	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	MaCfee
60	Lap Top Toshiba	6	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	Kaspersky
Chemistry B Sc Lab								
61	Desk Top	1	Intel core i3	4 GB	Intel DH61BF	500 GB	Windows 7 pro	AVG
62	Desk Top	2	Intel Pentium	2 GB	MSI G41M-P26	250 GB	Windows 7 ulti	Avira
63	Desk Top	3	Intel core i3	4 GB	Intel DH61BF	500 GB	Windows 7 pro	AVG
64	Desk Top	4	Intel core i3	4 GB	Intel DH61BF	500 GB	Windows 7 pro	AVG

65	Desk Top	5	Intel core i3	4 GB	Intel DH61BF	500 GB	Windows 7 pro	AVG
66	Desk Top	6	Intel core i3	4 GB	Intel DH61BF	500 GB	Windows 7 pro	AVG
67	Desk Top	7	Intel core i3	4 GB	Intel DH61BF	500 GB	Windows 7 pro	AVG
Chemistry Research Lab								
68	Desk Top	1	Intel core i3	2 GB	Intel DH55PJ	500 GB	Windows XP Pro	Kaspersky
69	Desk Top	2	Intel core i3	4 GB	Intel DH61BF	500 GB	Windows 7 pro	AVG
Department of Botany								
70	Desk top	1	Intel core i3	2 GB	Intel DH55PJ	500 GB	Windows XP pro	Nil
71	Desk top	2	Intel Celeron	250 MB	Biostal M6TWL	20 GB	Windows 2000 pro	Nil
72	Desk top	3	Intel Celeron	64 MB	Biostal M6TWL	80 GB	Windows 2000 pro	Nil
73	Desk top	4	Intel core 2	1 GB	Foxconn G31MX	150 GB	Windows 7 ulti	Avast
74	Desk top	5	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Avast
75	Lap Top Toshiba	6	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	Avast
76	Lap Top Toshiba	7	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	Avast
77	Lap Top HP	8	Intel core i3	4 GB	HP220D	500 GB	Windows 8.1	Kaspersky
78	Net Book ASUS	9	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	Kaspersky
Department of bioscience								
79	Desk top	1	Intel core i3	2 GB	Intel dh55PJ	500GB	Windows 7 ulti	kaspersky
80	Lap top Dell	2	Intel mobile core 2 duo	1 GB	DELL OK138P	298 GB	Windows 7 ulti	Kaspersky
81	Lap top Toshiba	3	Intel core i3	2GB	Toshiba	500 GB	Windows 7 ulti	kaspersky
82	Net book Samsung	4	Intel atom	1GB	Samsung nc210	298 GB	Windows 7 starter	kaspersky
83	Net book HP	5	Intel atom	1 GB	HP 110-3000ea (XL644ea)	160 GB	Ubuntu	Nil
84	Net book HP	6		1 GB	HP 110-3000ea (XL644ea)	160 GB	Ubuntu	Nil
B.com(Taxation)								

85	Desk top	1	Intel core i5	2 GB	IntelDH%% PJ	250GB	Windows 7 ulti	Kaspersky
86	Lap top Toshiba	1	Intel core i3	2GB	Toshiba	500GB	Windows 7 ulti	Kaspersky
87	NET book Samsung	1	Intel atom	1 GB	Samsung 110	500 GB	Windows 7 starter	Nil
Department of Actuarial science								
88	Lap top Sony	1	Intel core i3	4 GB	Sony	300GB	Widows 7 home basic	AVG
89	Lap top Toshiba	2	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	Avast
90	Net book Samsung	3	Intel atom	1 GB	Samsung NC210	298 GB	Windows 7 starter	kaspersky
Department of Commerce								
91	Desk Top	1	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 Pro	Avast
92	Desk Top	2	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 Pro	K 7
93	Desk Top	3	Intel Pentium	1 GB	Foxconn G31MX	150 GB	Windows 7 Home	K7
94	Lap TOP HP	4	Intel core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky
95	Lap TOP HP	5	Intel core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky
96	Lap Top Toshiba	6	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	Kaspersky
97	Net Book Samsung	7	Intel atom	1 GB	Samsung NC210	250 GB	Windows 7 starter	Avast
98	Net Book ASUS	8	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	Kaspersky
Department of Economics								
99	Desk Top	1	Intel core i3	2 GB	Intel DH55DJ	500 GB	Windows 7 ulti	Kaspersky
100	Desk Top	2	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 Pro	Kaspersky
101	Lap Top HP	3	Intel core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky
102	Lap Top HP	4	Intel core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky

103	Lap Top Toshiba	5	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	Kaspersky
104	Lap Top Toshiba	6	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	Kaspersky
105	Net Book ASUS	7	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	Kaspersky
106	Net Book Samsung	8	Intel atom	1 GB	Samsung NC210	350 GB	Windows 7 starter	Kaspersky
Economics Research Centre								
107	Desk Top	1	Intel core i7	4 GB	Intel DH67BL	500 GB	Windows 7 Pro	Kaspersky
108	Desk Top	2	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 Pro	Kaspersky
109	Desk Top	3	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 Pro	Kaspersky
110	Desk Top	4	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 Pro	Kaspersky
111	Desk Top	5	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 Pro	Kaspersky
Department of English								
112	Desk Top	1	Intel core i3	2 GB	Intel DH55PJ	500 GB	Windows 7 ulti	MaCfee
113	Lap Top HP	2	Intel core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky
114	Lap Top HP	3	Intel core i3	4 GB	HP220D	500 GB	Windows 8.1	Kaspersky
115	Net Book ASUS	4	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	Nil
English Language Lab								
116	Desk Top	1	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Nil
117	Desk Top	2	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Nil
118	Desk Top	3	Intel core 2 DUO	2 GB	Intel DG41RQ	250 GB	Windows 7 home basic	ESET
119	Desk Top	4	Intel core i3	4 GB	DELL OT1D10	500 GB	Windows 8.1	MaCfee
Department of Hindi								
120	desktop	1	Intel core i3	4 GB	ASUS P8H61M	500 GB	Windows 7 ulti	Avast
121	Lapto p Toshiba	2	Intel core i3	2 GB	Toshiba	500GB	Windows 7 ulti	nil
122	Net book Samsung	3	Intel atom	1 GB	Samsung NC210	250 GB	Windows 7 starter	Avast

	ng							
123	Net Book ASUS	4	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	Nil
Department of History								
124	Net Book ASUS	1	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	Kaspersky
125	Desk top	2	Intel core i3	2 GB	Intel DH55PJ	500 GB	Windows 7 ulti	Kaspersky
Department of Malayalam								
126	Desk top	1	Intel core i5	8 GB	Asus B85MG	500GB	Windows 7 ulti	Nil
Department of Mathematics								
127	Desk Top	1	Intel core i3	2 GB	DELL OC2KJT	500 GB	Windows 7 ulti	Avast
128	Desk Top	2	Intel core i3	2 GB	Intel DH55PJ	500 GB	Windows 7 ulti	Avast
129	Desk Top	3	Intel core 2	1 GB	Foxconn G31MX	160 GB	Windows XP Pro	Avast
130	Desk Top	4	Intel core i3	2 GB	MSI H61-M	250 GB	Windows 7 ulti	Avira
131	Lap Top Toshiba	5	Intel core i3	3 GB	Toshiba	298 GB	Windows 7 ulti	Avast
132	Lap Top DELL	6	Intel core i3	3 GB	DELL O50VP6	298 GB	Windows 7 ulti	Avast
133	Lap TOP HP	7	Intel core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky
134	Lap TOP HP	8	Intel core i3	4 GB	HP 220D	500 GB	Windows 8.1	Kaspersky
135	Net Book ASUS	9	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	Kaspersky
136	Desk top Apple	10	1.4 GHz Intel core i5	8 GB	1600MHz DDR3	500GB	OSX 10.9.4	-
Mathematics Computer Lab								
137	Desk Top	1	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
138	Desk Top	2	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
139	Desk Top	3	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
140	Desk Top	4	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
141	Desk Top	5	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
142	Desk Top	6	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
143	Desk Top	7	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky

144	Desk Top	8	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
145	Desk Top	9	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
146	Desk Top	10	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
147	Desk Top	11	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
148	Desk Top	12	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
149	Desk Top	13	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
150	Desk Top	14	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
151	Desk Top	15	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 pro	Kaspersky
Department of Physics								
152	Desk Top	1	Intel core i3	4 GB	DELL OT1D10	500 GB	Windows 8.1	MaCfee
153	Desk Top	2	Intel core i3	4 GB	DELL OT1D10	500 GB	Windows 8.1	MaCfee
154	Desk Top	3	Intel core i3	4 GB	DELL OT1D10	500 GB	Windows 8.1	MaCfee
155	Lap Top Toshiba	4	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	AVG
156	Lap Top HP	5	Intel core i3	4 GB	HP220D	500 GB	Windows 8.1	Kaspersky
157	Lap Top HP	6	Intel core i3	4 GB	HP220D	500 GB	Windows 8.1	Kaspersky
158	Net Book ASUS	7	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	Kaspersky
Physics Research Lab								
159	Desk Top	1	Intel core i5	2 GB	Intel DB75EL	500 GB	Windows 7 ulti	Kaspersky
160	Desk Top	2	Intel Pentium	1 GB	Intel D945GCPE	80 GB	Windows XP Pro	Nil
161	Desk Top	3	Intel core i3	2 GB	Intel DH55PJ	500 GB	Windows XP Pro	Kaspersky
162	Desk Top	4	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 Pro	Nil
Department of Sociology								
163	Desk Top	1	Intel core i3	2 GB	Intel DH55PJ	500 GB	Windows XP Pro	Kaspersky
164	Desk Top	2	Intel pentium	1 GB	Foxconn G31MX	160 GB	Windows 7 ulti	Nil
165	Lap top Toshiba	3	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 ulti	Avast
166	Net Book ASUS	4	Intel pentium	2GB	ASUSX200 MA	500GB	Windows 8.1	kaspersky
Department of Statistics								

167	Desk Top	1	Intel core i3	2 GB	Intel DH55PJ	500 GB	Windows XP Pro	Kaspersky
168	Lap Top Toshiba	2	Intel core i3	2 GB	Toshiba	500 GB	Windows 7 Ulti	Kaspersky
169	Net Book ASUS	3	Intel Pentium	2 GB	ASUS X200MA	500 GB	Windows 8.1	Kaspersky
Instrumentation								
170	Desk top	1	Intel core i3	2 GB	Intel DH55PC	500 GB	Windows 7 Pro	Nil
171	Desk top	2	Intel core i3	2 GB	Intel DH55PC	500 GB	Windows 7 Pro	Nil
172	Desk top	3	Intel core i3	2 GB	Intel DH55PC	500 GB	Windows 7 Pro	Nil
173	Desk top	4	Intel Pentium 4	1 GB	Intel PI02GGC2	80 GB	Windows XP Pro	Nil
174	Lap Top HP	5	Intel core i3	2 GB	HP 2000	500 GB	Windows 7 Pro	Kaspersky
DST-FIST Instrumentation								
175	Desk top	1	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 Pro	Nil
176	Desk top	2	Intel core i3	4 GB	Intel DH61BF	500 GB	Windows 7 Pro	AVG
177	Desk top	3	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 Pro	Nil
178	Desk top	4	Intel core i3	8 GB	ASUS H61MC	500 GB	Windows 7 ulti	Nil
179	Desk top	5	Intel core i3	8 GB	ASUS H61MC	500 GB	Windows 7 ulti	Nil
Library								
180	Desk Top	1	Intel core i3	4 GB	Intel DH61WW	500 GB	Nil	Samsung
181	Desk Top	2	Intel core i5	8 GB	ASUS B85M	500 GB	LG	Samsung
182	Desk Top	3	Intel core i5	8 GB	ASUS B85M	500 GB	LG	Samsung
183	Desk Top	4	Intel core i3	8 GB	ASUS B85M	500 GB	LG	Samsung
184	Desk Top	5	Intel Pentium	2 GB	Intel SE12216A1 F	500 GB	Nil	Samsung
PG hostel								
185	Desk top	1	Intel core i5	4 GB	Asus B85MG	500GB	Windows 7 ulti	Nil
UG hostel								
186	Desk top	1	Intel core i5	4GB	Asus B85MG	500GB	Windows 7 ulti	Nil
Office								
187	Desk top	1	Intel core i3	8 GB	ASUS B85MG	500 GB	Windows 7 ulti	Kaspersky
188	Desk top	2	Intel core i3	2 GB	ASUS P8H61M	500 GB	Windows 7 ulti	Kaspersky
189	Desk	3	Intel core	4 GB	Intel	500 GB	Windows	Kaspersky

	top		i5		DH77KC		7 ulti	
190	Desk top	4	Intel core i5	2 GB	IntelDH61W W	500 GB	Windows 7 ulti	Kaspersky
191	Desk top	5	Intel core i5	4 GB	ASUSP8H6 7	500 GB	Windows 7 ulti	Kaspersky
192	Desk top	6	Intel core i5	8 GB	ASUSB85M G	500 GB	Windows 7 pro	Kaspersky
193	Desk top	7	Intel core i3	2 GB	MSI H61M-P21	250 GB	Windows XP Pro	Kaspersky
194	Desk top	8	Intel core i5	2 GB	Intel DH67CL	500 GB	Windows 7 ulti	Kaspersky
195	Desk top	9	Intel core i3	8 GB	ASUS B85MG	500 GB	Windows 7 ulti	Kaspersky
196	Desk top	10	Intel core i5	8 GB	ASUS B85MG	500 GB	Windows 7 ulti	Kaspersky
Exam office								
197	Desk top	1	Intel core DUO	1 GB	Foxconn G31MX	150 GB	Windows XP pro	Kaspersky
Conference Hall								
198	Desk top	1	Intel celerol	256 MB	Intel DI01GGC	80 GB	Windows XP pro	Avast
199	Desk top	2	Intel core i7	4 GB	Intel DH77KC	1 TB	Windows 7 ulti	Avast
200	Desk top	3	Intel core i5	4 GB	Intel DH55TC	1 TB	Windows 7 ulti	Avast

*Computer-student ratio: 1:9*

#### *Stand alone facility*

A server room with two Dell Power Edge R410 (300 GB) servers and one Dell Power Vault NX3100 (1 TB) server are installed to enable intranet and internet facility in the college. A D-link KVM 440 PS2/USB 8 port Combo KVM Switch was provided for the local remote management of PCs through intranet. All departments, computer labs, office, seminar halls and final year class rooms are provided with OFC cable connectivity.

**Wi-Fi facility:** The entire campus is Wi-Fi enabled.

#### *Licensed software:*

FortiGuard security software was purchased and installed in the server to enable comprehensive security of the intranet. Genuine and licensed softwares are installed in all the newly purchased Desktop, Laptop and Net book PCs. In addition, a number of licensed antivirus softwares are also being installed on computers. A new SPSS version was purchased and installed in the research centre of Economics.

*Number of nodes/ computers with Internet facility: 200*



#### 4.3.2 Computer and internet facility for faculty and students:

- Sufficient number of Desk top PCs and Laptops/Netbooks (200 Nos.) in all the Departments.
- A Network Resource Centre with 7 terminals.
- An Academic Technology Centre with 34 terminals.
- Broad band connectivity in all the PG and final year UG class rooms.
- Wi-Fi enabled campus.
- Teachers are provided with password protected log in facility in the College website for uploading teacher notes, e-books and other articles.
- Students can access the College website for downloading study materials using passwords.
- Library book search is enabled through the College website.

#### 4.3.3 Plans and strategies for ICT development and up gradation:

##### Future plans

- Parent log-in for student attendance and exam performance.
- To convert all class rooms to smart
- Customization of Moodle programme
- Preparation and usage of virtual labs

##### Strategies

- Preparation and submission of proposals to various funding agencies to avail maximum grant
- Additional financial support from management for deficiency of contingency fund

#### 4.3.4 ICT – Purchase and Up gradation:

An amount of 82.40 lakhs has been spent for the purchase, upgradation and maintenance of ICT facilities in the College campus.

##### ICT purchase since 2010

Item	2010-11		2011-12		2012-13		2013-14		2014-15	
	No	Amount	No	Amount	No	Amount	No	Amount	No	Amount
Printer	12	185720	4	19308	2	16450	1	6510	7	155800
Memory	10	7231	2	600	1	600	1	2250	3	20430

Laptop	6	156036	9	236633	-	-	-	-	17	547400
Network Switch	-	-	-	-	-	-	8	160573	2	31450
Desktop PC	7	170138	14	291583	2	41650	29	739313	45	1592845
LCD/DLP	23	1289870	15	576920	-	-	-	-	-	-
UPS	8	14874	5	230929	3	30800	-	-	-	-
Scanner	7	25797	1	3000	5	16200	-	-	-	-
Ceiling Mount	13	71240	-	-	-	-	-	-	4	16200
Server	-	-	2	764000	-	-	-	-	-	-
Server Rack	-	-	1	36000	-	-	-	-	-	-
Netbook	-	-	8	135600	-	-	-	-	15	322500

#### 4.3.5 ICT for computer-aided teaching and learning:

- Teachers are encouraged to take their classes by incorporating Power point presentations and videos by using the ICT facilities installed in their class rooms and Departments.
- Teachers are encouraged to upload their lecture notes and other study materials in the College website.
- Teachers are motivated to prepare and make use of virtual lab contents in various subjects. The Department of Chemistry has already prepared computer aided teaching materials to teach computational chemistry.

#### 4.3.6 Learning activities and technologies deployed through ICT:

##### **Online teaching learning resources**

The College has an interactive website with several functions to integrate the teaching - learning process. A library search option is provided in the home page of the web site to search the books available in the College library. All the teachers are provided with individual e-mail IDs to enable them to communicate with the students and peers. Teachers have password protected log in facility to the College website for updating their individual pages, uploading teacher notes, posting e-books and other articles. Students can access these materials and download them using passwords provided to them by individual teachers.

##### **ICT enabled class rooms/learning spaces**

All classrooms are sufficiently spacious and ventilated and well- equipped with necessary amenities like electric lights, fan, speaker, white/ blackboards, chair, desks, benches etc. A total of 46 DLP/LCD projectors installed in the Class Rooms. Out of these, 11 Class Rooms are converted to Smart Class Rooms

in 2015. All PG classrooms are fully furnished and are provided with modern student- friendly furniture. All final year Under Graduate and all Post Graduate Class Rooms have broad band connectivity and desktop/laptop computers. All the language Departments are provided with public addressing systems. Teachers have access to the Wi-Fi connection in the campus. In addition, the seminar halls are equipped with modern ICT facilities.

#### 4.3.7 Connectivity to National Knowledge Network:

The college is registered under the N-LIST (National Library & Information Services Infrastructure for scholarly Content) of the UGC – INFONET. We have been subscribing N-LIST e-resources since 2010. By utilizing this facility the authorized users can access e-resources and download articles required by them.

In addition to the N-LIST e-journals, we have access to INFLIBNET/IUC facilities like Shodh Ganga, the repository of theses, Ind Cat, the union catalogue of Indian Universities, e-pathshala, the subject gateway to PG Courses etc. through internet.

### 4.4 Maintenance of Campus Facilities

#### 4.4.1 Optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities:

The College augments the infrastructure by effectively utilising the financial assistance from all possible sources such as grants-in-aid from the UGC, State Government, Kerala Sports Council, Sports Authority of India (SAI) and contributions from Alumni, donations from the PTA and the substantial financial support from the College Management.

*UGC funds allocated for the last five years*

No	Particulars	2010-11	2011-12	2012-13	2013-14	2014-15
UGC						
1	Coaching Classes for Entry in Services for SC/ST/OBC (Excluding Creamy Layer) and Minorities –Books Journal Study materials	-	-	1.25	-	-
2	Coaching Classes for Entry in Services for SC/ST/OBC (Excluding Creamy Layer) and Minorities –Recurring	2	-	2.50	-	-
3	Indoor Shooting Range	-	25	-	20	5
4	Swimming Pool	-	-	50	-	40
5	Promotion of Basic Scientific Research	40	-	-	36	-
6	General development Scheme (Class Room)	1.5	-	-	-	-
7	CPE-Phase I	50	-	40	-	10

8	CPE- Phase II	-	-	-	100	
9	Coaching for NET/SET for SC/ST/OBC and Minorities	-	-	1.12	-	-
10	Coaching for NET/SET for SC/ST/OBC and Minorities- Equipment: and Books ,journal, study material	-	-	0.62	-	-
11	Undergraduate Education: Books and Equipment GDA : Undergraduate Education	-	1.7	-	3	31
12	Colleges with relatively higher proportion of SC/ST/OBC and Minorities	3.6	-	-	-	-
13	IQAC	-	-	-	-	3
14	Sports equipments	2.5	-	2.5	-	-
15	Seminar/Conference	2.9	0	1.7	4.4	4.8
16	Career Oriented Courses	-	-	-	-	15.3
17	MRP (Major research project)	4	8.07	4.10	-	-
18	Minor research project	5.9	1.1	11.4	10.6	11.7
19	Additional Assistance	12.5	10	2.10	11	6.69
20	FDP (Faculty Development Program)	3	9	16.7	10.4	34.7
21	Career and counseling cell	-	0.6	-	--	-
22	Equal opportunity centre	0.5	-	-	--	-
23	HEPSN COMPONENT-1	1.7				
24	HEPSN COMPONENT-2	2	-	1.6	-	0.4
25	HEPSN COMPONENT-3	0.9	-	-	--	-
26	Improvement of facilities in existing premises	1.6	-	-	-	4
27	Women's hostel construction	8.5	-	-	40	
28	Net work resource Centre	1.2	-	0.1	-	-

*Funds received from DST/Govt. since 2010*

<b>DST</b>						
1	DST –FIST for Science Depts.	-	-	79	-	-
2	DST Major Research Project	-	-	-	12	15
<b>Sports Authority of India(SAI)</b>						
1	Sports Authority of India(SAI)	-	0.7	0.9	-	-
<b>Kerala Govt.</b>						
1	Kerala State Sports Council	-	-	-	-	11.4
2	Kerala State Council for Science Technology & Environment (Major Research Project)	-	-	-	-	15.7
3	Scholar Support Programme	-	-	-	-	0.59

*Management expenditure for infrastructure maintenance and upkeep since 2010*

SI No	Particulars	2010-11	2011-12	2012-13	2013-14	2014-15
1.	Sub-station	7900	6000	2600	-	-
2.	Building	4077222	1182139	656504	-	-
3.	Canteen	5942	3755	2629	-	-
4.	Ladies Hostel	97666	77414	50300	-	-

5.	New Ladies Hostel	1860285	887636	442377	-	-
6.	Biogas Plant	25000	-	-	-	-
7.	Indoor Stadium Interior	701906	504049	-	-	-
8.	Ground work	27195	19975	158915	-	-
9.	Furniture & Equipment's	218820	693	129062	-	-
10.	M P Varghese Library	13063	-	506473	-	-
11.	Repairs	238197	273394	163568	382025	285238
12.	College Campus beautification	141051	197826	198488	-	2027341
13.	Front wing	-	-	7399309	11750747	-
14.	Vehicle parking for students	-	-	-	-	229523
15.	Clock Tower	-	-	-	-	4565548

*Management expenditure for general maintenance and upkeep since 2010*

Head of expenditure	2010-11	2011-12	2012-13	2013-14
Electricity Charge	578539	886303	1406369	1632519
Printing Charge	73720	9698	-	92635
Stationary	50252	63490	48560	-
Travelling	30198	8797	-	39815
Telephone Charge	46083	45021	-	-
Scholarship	5000	127500	276250	-
Sports Promotion	1092566	1488544	1897780	2270000
Sports Expenses	240000	290000	-	-
Subscription and Journal Paper Publishing	4200	14000	-	-
Office Expenditure	244375	172043	-	176347
Remuneation	453847	682308	729899	965280
Audit Fee	16970	18000	18645	25040
Insurance Premium	-	4037	-	-
Exhibition Expense	-	10000	-	-
UGC audit	7500	-	-	-
Gas connection expenses	6000	-	-	-
Postage	30000	19700	-	63200
Computer Maintenance	-	2765	-	-
NCC	26610	-	-	-
Advt. expenses	53725	-	-	-
Return filing fee	-	3224	-	-
Stage arrangement	25159	-	-	-

Registration fee	7000	-	-	35153
Labour charge	146535	-	192793	335718
Meals and Coffee	14622	-	-	-
College Band Expenses	-	425	-	-
Office Administration Expenditure	-	-	307074	-
Equipment purchase	-	-	-	303097
Prize money/Incentives	-	-	-	172000

#### 4.4.2 Mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the College:

- One teacher is assigned to monitor the use and up keep of each one of the equipments.
- Permanent lab technician is appointed to carry out operations and minor maintenance of the equipments.
- Management is providing sufficient funds to carry out the maintenance of equipments as and when required.
- A nominal fee is levied as consultancy charges to meet the recurring costs.

#### 4.4.3 Calibration and other precision measures for the equipment/instruments:

The College has taken measures to calibrate the instruments regularly

#### 4.4.4 Maintenance and upkeep of sensitive equipments:

Sensitive equipments such as Gas Chromatograph, Atomic Absorption Spectrophotometer, uv- Visible spectrophotometer etc. are maintained in the Instrumentation centre. X Ray Diffractometer, LCR Meter, Impedence Analyser etc are kept in the Research Lab of Physics. Surface area analyzers, TOC, TPD etc. purchased under the DST-FIST support are placed in DST-FIST Lab. All these Labs are equipped with 6kVA uninterrupted power supply and air conditioners.

## CRITERION V: STUDENT SUPPORT AND PROGRESSION

### 5.1 Student Mentoring and Support

#### 5.1.1 Information dissemination

The College has a website which encompasses all the details regarding the College including the courses offered and other facilities available in the College. The website is regularly updated.

The College also brings out a bi-lingual prospectus every year which contains information on courses offered, admission procedures and fees structures.

As per the RTI Act 2005, a State Public Information Officer and an Appellate Authority are appointed for the timely response to the queries.

The College publishes a detailed and updated handbook every year and it is issued to the students and staff. The handbook helps the staff and students to carry out the academic activities within the stipulated time. The information contained in the handbook are as follows:

- (a) Mar Athanasius College over the Ages
  - (i) College Management
  - (ii) Vision, Mission
  - (iii) Mar Athanasius College Association
  - (iv) Succession List of Secretaries and Principals
  - (v) List of Retired Teachers
  - (vi) M.A. College Council
- (b) Staff
  - (i) Teaching Faculty
  - (ii) Non Teaching Staff
- (c) Information for Students
  - (i) The Pledge
  - (ii) College Dictum
  - (iii) An Appeal to the Students
  - (iv) College Rules
  - (v) Courses of Study and Student Strength
  - (vi) Fees and Rules for Collection/Refund of Fees / Caution Deposit
    - (vii) Attendance and Leave of Absence
    - (viii) Kerala Ragging Prohibition Act 1998
    - (ix) Examination and Test Papers
    - (x) Internal Assessment Programme
    - (xi) Form of Application for Leave, Transfer Certificate
    - (xii) Scholarships and Prizes
    - (xiii) College Union

- (xiv) Student Charter
- (d) Facilities in the College
  - (i) M.P. Varghese Library
  - (ii) Career Guidance Centre
  - (iii) M.G. University Research Centres
  - (iv) M.A. College Cooperative store
  - (v) NCC, NSS, PTA, Alumni Association
- (e) Miscellaneous
  - (i) M.G. University General Information
  - (ii) College Time Table
  - (iii) Phone Numbers of M.G. University Offices, Collegiate Education offices and public utility services

### 5.1.2 Institutional scholarships:

- Sports scholarships
- Prof. K P. George Memorial award (Dept of Zoology)
- Prof. K P Geevarghese Memorial award (Dept of Mathematics)
- Prof. T M Paily prize (Dept of Sociology)
- Prof. V. V. Kuriakose prize (Dept of Chemistry)
- Prof M Rajalakshmi prize (Dept of Statistics)
- Ebrahim memorial award (Dept of English)
- Alumni Scholarships (Zoology, Mathematics and Economics)
- Poor student aid fund
- Prof. P I. Daniel prize (Department of Mathematics)
- Scholarship for Rank holders in PG classes

### 5.1.3 Students receiving financial assistance from Government:

No. of students enjoying fee concession							
UG							
Sl. No.	Category	2012-13		2013-14		2014-15	
		Boys	Girls	Boys	Girls	Boys	Girls
(a)	OBC Students	88	144	59	171	55	199
(b)	Forward Community (Students under KPCR)	151	190	137	196	120	186
(c)	Socially & Economically B.C.	-	-	-	-	-	-



No. of students enjoying fee concession							
PG							
Sl. No.	Category	2012-13		2013-14		2014-15	
		Boys	Girls	Boys	Girls	Boys	Girls
(a)	OBC Students	2	6	-	-	-	-
(b)	Forward Community (Students under KPCR)	10	25	10	27	9	29
(c)	Socially & Economically B.C.	8	33	5	30	4	15

Students enjoying stipend from the Harijan Welfare Department.							
UG							
Sl. No.	Category	2012-13		2013-14		2014-15	
		Boys	Girls	Boys	Girls	Boys	Girls
1	SC	78	110	1	2	1	2
2	ST	18	29	93	169	266	665

Financial support from government 2010-2011				
Scholarship		Nos.	Amount	Total
Post metric scholarship	Fresh	340	3000	1020000
C H Muhammed Koya (Muslim girls only)	Fresh	62	4000	248000
Suvarna Jubilee Merit Scholarship	Fresh	38	10000	380000
Blind/Physically Handicaped	Fresh	7	10000	70000
Central Sector (State) Scholarship	Fresh	122	10000	1220000
Central Sector (CBE) scholarship	Fresh	15	10000	150000
LIC Merit Scholarship	Fresh	5	10000	10000
Single girl Child scholarship	Fresh	5	25000	125000
Higher Education scholarship	Fresh	22	12000	264000
Total				3527000

Financial support from government 2011-2012				
Scholarship		Nos.	Amount	Total
Post metric scholarship	Fresh	251	3000	753000
C H Muhammed Koya (Muslim girls only)	Fresh	67	4000	268000
Suvarna Jubilee Merit Scholarship	Fresh	43	10000	430000
Blind/Physically Handicaped	Fresh	8	10000	80000
Central Sector (State) Scholarship	Fresh	91	10000	914000

Central Sector (CBE) scholarship	Fresh	22	10000	220000
LIC Merit Scholarship	Fresh	16	10000	160000
Single girl Child scholarship	Fresh	10	25000	250000
Higher Education scholarship	Fresh	29	18000/ 12000	480000
Total				3551000

Financial support from government 2012-2013				
Scholarship		Nos	Amount	Total
Post metric scholarship	Fresh	307	3000	921000
C H Muhammed Koya (Muslim girls only)	Fresh	91	4000	364000
Suvarna Jubilee Merit Scholarship	Fresh	70	10000	700000
Blind/Physically Handicaped	Fresh	29	10000	290000
Central Sector (State) Scholarship	Fresh	62	10000	620000
Central Sector (CBE) scholarship	Fresh	38	10000	380000
LIC Merit Scholarship	Fresh	20	10000	200000
Single girl Child scholarship	Fresh	12	25000	300000
Higher Education scholarship	Fresh	22	24000	528000
	Renewal	29	18000	522000
	Renewal	19	12000	228000
Total				5053000

Financial support from government 2013-2014				
Scholarship		Nos.	Amount	Total
Post metric scholarship	Fresh	206	3000	618000
	Renewal	108	3000	324000
C H Muhammed Koya (Muslim girls only)	Fresh	32	4000	128000
	Renewal	31	4000	128000
Suvarna Jubilee Merit Scholarship	Fresh	10	10000	100000
	Renewal	18	10000	180000
Blind/Physically Handicaped	Fresh	3	10000	30,000
	Renewal	5	10000	50,000
Central Sector (State) Scholarship	Fresh	17	10000	170000
	Renewal	7	20000	140000
	Renewal	27	10000	270000
Central Sector (CBE) scholarship	Fresh	14	10000	140000
	Renewal	12	10000	120000

Hindi Scholarship	Fresh	3	5000	15000
	Renewal	5	5000	25000
Sitharam Jindal Scholarship	Fresh	7	5000	35000
	Renewal	6	5000	30000
Higher education scholarship	Fresh	12	12000	144000
	Renewal	17	18000	306000
	Renewal	6	24000	144000
	Renewal	6	40000	240000
Total			552	3333000

Financial support from government 2014-15				
Scholarship		Nos.	Amount	Total
Post metric scholarship	Fresh	189	3000	567000
	Renewal	163	3000	489000
C H Muhammed Koya (Muslim girls only)	Fresh	63	5000	315000
	Renewal	28	5000	190000
Suvarna Jubilee Merit Scholarship	Renewal	21	10000	210000
Blind/Physically Handicaped	Fresh	7	10000	70000
	Renewal	5	10000	50000
Central Sector (State) Scholarship	Fresh	24	10000	240000
	Renewal	18	10000	180000
	Renewal	15	10000	150000
	Renewal	6	20000	120000
	Renewal	5	20000	100000
Central Sector (CBE) scholarship	Fresh	18	10000	180000
	Renewal	16	10000	160000
Hindi Scholarship	Fresh	7	5000	35000
	Renewal	6	5000	30000
Sitharam Jindal Scholarship	Fresh	7	5000	35000
	Renewal	6	5000	30000
Higher education scholarship	Fresh	24	12000	288000
	Renewal	16	18000	288000
	Renewal	20	24000	480000
	Renewal	6	40000	240000
	Renewal	6	60000	360000
	Renewal	6	10000	60000
	Renewal	8	10000	80000
Total			700	4947000

#### 5.1.4 Specific support services/facilities available:

##### *Students from SC/ST, OBC and economically weaker sections*

- Remedial coaching with the financial support of UGC
- Book bank facility in the Library
- NET/Bank/PSC coaching with the financial support of UGC
- Scholarship for Other Backward Community (OBC) of UGC
- Hostel facility for SC/ST students
- Scholarships for SC/ST students of the State Government

##### *Students with differently abled*

- An enabling unit
- Rails are constructed along the stairs with the financial support of UGC
- Brailly materials in the college library
- Ramps and rails in the College Indoor stadium
- Lift facility in the library building

##### *Students to participate in various competitions/National and International*

- Management scholarships to the students participating in sports (Total amount of Rs. 67,48,890/- since 2010)
- Sports Authority of India (SAI) scholarships to the students participating in sports
- Management support for medical and other emergencies
- Management support for participation in all sports events
- State-of-the-art infrastructure facility
- Multi gymnasium
- Trained coaches for Physical Education

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

All the enrolled students of the College are insured under 'Student Safety Insurance Policy' of Mahatma Gandhi University, Kottayam with a premium of Rs.1 per student per annum. The scheme covers an annual insurance coverage of Rs. 1 lakh for death due to accident. In addition to this, up to a coverage amount up to Rs. 50,000/- is provided for the inpatient medical expenses due to accident to a student with a premium of Rs. 10/- per student per annum.

##### *Organizing coaching classes for competitive exams*

- NET/Bank/PSC coaching with the financial support of UGC

### *Skill development programmes*

- Personality and Communication skill development programmes
- Language lab support
- Additional Skill Acquisition programme (ASAP) of Kerala State Higher Education Council.
- Walk With Scholar Programme (WWSP) of Kerala State Higher Education Council.
- Hand to hand experience conducted by Women`s Cell

### *Support for “slow learners”*

- Scholar Support Programme (SSP) of Kerala State Higher Education Council.
- Remedial coaching with the financial support of UGC

### *Publication of student magazines*

The College annually publishes student magazine

### **5.1.5 Entrepreneurial skill development:**

- An Entrepreneurship Development (ED) club functions in the College
- Organize industrial visits
- Communication Skill and personality development programmes
- Language lab

### **5.1.6 Policies and strategies to ensure participation of students in extracurricular and co- curricular activities:**

- Sports Scholarships: The management has instituted 60 scholarships every year and a total amount of Rs. 67,48,890/- has been spent since 2010.
- Creation and Maintenance of sports infrastructure- Olympic standard swimming pool, indoor shooting range, multipurpose indoor stadium, outdoor stadium, multipurpose synthetic court, volley ball court, basket ball court, multi gymnasium, jumping pits etc.
- Athletic Academy: The academy nurtures the spirit of sportsmanship among students by giving advanced scientific training in athletics under experienced coaches. The academy provides residential facility.
- M.A. College Cricket Academy: The College started a cricket academy in collaboration with the Ernakulam District Cricket Association. The academy is conducting cricket camps for the budding youth of the state.

- An Indoor Cricket Facility: It is named as ‘Indoor Nets’ and is functioning in the campus for giving intensive and continuous coaching even at the time of adverse weather. The academy aims to produce future international players.
- Gold Medals: The Inter University Athletic champions are honored with Gold Medals by the Management.

The College institutes various clubs and forums to organize the extracurricular activities:

- Students’ Council
- Arts Club
- Music Club
- Film Club
- Women’s Cell
- Nature Club
- Science Forum
- National Service Scheme (NSS)
- National Cadet Corps (NCC)
- Road Safety Club
- Disaster Management Cell
- Youth Red Cross
- Speakers’ Forum
- Entrepreneurship Development Club
- Quiz Club
- Debating Society
- Alumni Association
- Career and Placement Cell

*Additional academic support, flexibility in examinations:*

The College encourages the students to participate in co-curricular and extracurricular activities by providing class attendance, flexible schedule for appearing internal examinations, assignment submission and seminar presentation.

*Special dietary requirements, sports uniform and materials:*

Accommodation and food are provided to the students performing in sports with the financial assistance of Sports Authority of India (SAI) and the College management.

#### 5.1.7 Support and guidance to the students for the competitive exams:

The institution is making wholehearted effort to encourage maximum eligible students to appear for various competitive examinations. In addition to regular seminars by subject experts, special coaching classes are organized for

NET. Also, under the Career Guidance Cell, a separate section in the library is allotted to the needs of such students. The College organizes NET/ PSC/Bank exam coaching classes with financial assistance of UGC under Entry in Services Scheme.

*NET/SET qualified students since 2010*

SI No.	Month	Name	Register Number	Subject
UGC/CSIR/NET				
1	June 2010	Johnson George	122507	Chemistry
2	June 2010	Monisha Baby	128110	Chemistry
3	December 2010	Sruthy K.N	16010532	Economics
4	December 2010	Christy Kunjachan	107630	Chemistry
5	December 2010	Arya Gopi	16081287	Commerce
6	December 2010	Sulfia Meeran	16081471	Commerce
7	December 2010	Alwin James	107366	Chemistry
8	June 2011	Mathew Joy	149109	Chemistry
9	June 2011	Siamlal T.A	32010285	Economics
10	June 2011	Nimisha P M	112462	Chemistry
11	June 2011	Leena P. K	507968	Physics
12	December 2011	Vinitha K.B	16010156	Economics
13	December 2011	Silja Abraham	113347	Chemistry
14	December 2011	Remya V R	112889	Chemistry
15	December 2011	Sony Kuriakose	17080508	Commerce
16	June 2012	Dannis Joy	16010791	Economics
17	June 2012	Sharanya Prathapan	16080077	Commerce
18	June 2012	Padmini M	16080070	Commerce
19	December 2012	V.M. Junaid	16010791	Economics
20	December 2012	Chithra Gopi	16081387	Commerce
21	December 2012	Ebin P. Mani	16080006	Commerce
22	December 2012	Apsara Aliyar	16300897	English
23	December 2012	Jijo Thomas	508096	Physics
24	June 2012	Aparna Rajan	16302426	English
25	June 2012	Ajitha A. R.	111288	Chemistry
26	June 2012	Divya George	16300123	English
27	March 2013	Chithra K.G	-	Commerce
28	March 2013	Saranya	-	Commerce
29	March 2013	Neethu P.N.	-	Commerce
30	December 2013	Shanavas Yousuf	114103	Chemistry
31	December 2013	Priya Sara Paul	113599	Chemistry
32	March 2013	Divya S.Nair	114141	Chemistry
33	March 2013	Binshad. B	-	Biochemistry
34	December 2013	Aswathy Udayan		Microbiology
35	December 2013	Neetha R L		Biotechnology
36	October 2013	Sijo Sebastian P.S	-	English
37	March 2013	Asna Ali	-	English

38	June 2014	Christin Shaji	-	English
39	June 2014	Sijo Sebastian P.S.	-	English
40	December 2014	Vishnupriya	-	English
41	June 2014	Anumol	114386	Chemistry

Inspire Fellowship for Ph. D				
1	2012	Binshad. B	IISER, Trivandrum	Biochemistry
2	2012	Sudheesh A P.	RGCB, Trivandrum	Biotechnology
3	2012	Sajith M	RGCB, Trivandrum	Biotechnology

GATE				
1	March 2012	Silja Abraham	7106489	Chemistry
2	March 2012	Remya V R	7106443	Chemistry
3	March 2012	Ajitha A R	7106383	Chemistry
TET				
1	2014	Sijo Sebastian P.S		English

#### 5.1.8 Counselling services:

A permanent class teacher is in-charge of each batch during the entire course of study. The teacher interacts with the students regularly in the class. The progress, grievances and suggestions of the students are noted down when they meet the class teacher for routine interpersonal meeting. The findings of the students are kept in a confidential diary as a reference record for further action. The class teacher directs those students who have some serious problem within themselves to the student counsellor.

#### 5.1.9 Career guidance and placement:

A placement cell under the able leadership of teachers works for attaining maximum student placements during the last four years. Three campus placements are conducted and 23 students are placed in firms like Wipro, South Indian Bank and Federal Bank since 2010.

#### 5.1.10 Student grievance redressal cell:

A Grievance Redressal Cell is functioning in the College for the students to submit any type of complaints, harassment and any other inconveniences. The cell consists of two teachers as members. If any complaint or grievance is received in writing or oral by the committee, the case is heard by the committee and suitable measures are taken to redress the grievance.

Following grievances are redressed during the last four years

- Untidy toilets in the rest room of girls
- New toilets in the third floor
- Hand rails in all the stairs
- PVC Ceiling in the third floor class rooms, to reduce room temperature.



- Book bank facility in the library
- Vehicle parking facility for students

#### 5.1.11 Efforts to address sexual harassment:

A Women's Cell has been established in the College with an aim to empower the women students. The cell is very active among the girls and it aims to educate them the legal rights of women and inculcate healthy attitude. The cell organizes lectures, symposia and presentations by eminent women speakers on current topics for the empowerment of women. An Internal Complaint Committee constituted under the guidance of the Govt. of Kerala to address the issues pertaining to sexual harassment.

#### 5.1.12 Anti-ragging committee:

An anti-ragging Committee constituted under the guidance of UGC, as Principal as the Chairman. Municipal Chairman, Kothamangalam, Sub Inspector of Police, Kothamangalam, three Heads of the Departments, College Office Administrative Assistant, PTA representative, student representatives are the other members in the committee. No cases were reported since 2010.

#### 5.1.13 Welfare schemes for students:

- Poor Student Aid Fund
- Sports Scholarships
- The Management presents Gold Medals to the outstanding sports persons.
- Co-operative Society
- Reprographic facility
- College canteen
- College Hostels
- AIACHE Scholarship: The College nominates two students from *Dalit* Christian-Tribal background and another two students from general Christian category. The Annual income of the family of the applicant should be below Rs.75,000/-. The scholarship is Rs.1500/- annually to each student.
- Golden Jubilee Scholarships:
  - (a) Department of Mathematics- Rs.2,500/- per year.
  - (b) Department of Economics- Rs. 2,500/- per year.
- Prof. P I Daniel endowment prize – Rs. 25,000/- per year is to be distributed among the meritorious students of the Department of Mathematics.

#### 5.1.14 Alumni Association:

The College has a registered Alumni Association. The alumni contributed to the infrastructural development of College. Every year the alumni honour the

achievers in sports, academic and other fields.

## 5.2 Student Progression

### 5.2.1 Students progressing to higher education or employment

Student progression	%
UG to PG	53
PG to M.Phil.	5
PG to Ph.D.	6
Employed	6
• Campus selection	
• Other than campus recruitment	25
Self-employment	12

### 5.2.2 Programme wise pass percentage for the last four years in comparison with that of the Colleges of the affiliating university within the city/district.

Comparison of student performance with neighbouring Colleges (2014)

Subject	Mar Athanasius College	College 1	College 2	College 3
UG				
Mathematics	88.9	72	85	95.6
Physics	85.0	79	70	81.25
Chemistry	93.0	84	80	100
Botany	85.7	67	-	-
Zoology	78.7	77	-	72.7
Statistics	80.8	-	-	-
Commerce Model I	95.8	98	95	97.7
Commerce Model III	94.9	-	-	-
English	89.2	76	100	70.5
Hindi	72.0	55	90	-
Economics	67.7	85	90	-
History	75.0	61	77	75
Sociology	67.0		-	-
PG				
Mathematics	69.2	73	-	-
Physics	35.7	-	-	-

Chemistry	77.8	-	-	-
Commerce	100	88	56	-
English	83.3	RA	-	-
Economics	66.7	-	-	-
Microbiology	94.7	-	100	-
Biotechnology	86.7	71	-	-
Biochemistry	100	-	-	-
Zoology	93	-	-	-
Actuarial Science	100	-	-	-

### Comparison of student performance with neighbouring Colleges (2013)

Subject	Mar Athanasius College	College 1	College 2	College 3
UG				
Mathematics	95.65	77	79	96
Physics	82.35	78	77	100
Chemistry	88.23	72	83	90.9
Botany	100	78	-	-
Zoology	75	70	-	94.4
Statistics	92	-	-	-
Commerce Model I	93.61	94	97	97.5
Commerce Model III	94.73	-	-	-
English	88.23	90	96	90.9
Hindi	81.81	87	65	-
Economics	77.77	93	68	-
History	88.23	67	94	93.3
Sociology	62.16	-	-	-
PG				
Mathematics	64.3	73	-	-
Physics	21	-	-	-
Chemistry	78	-	-	-
Commerce	92	94	65	-
English	75	94	-	-
Economics	67	-	-	-
Microbiology	94.74	-	100	-
Biotechnology	86.7	77	-	-
Biochemistry	100	-	-	-

Comparison of student performance with neighbouring Colleges (2012)

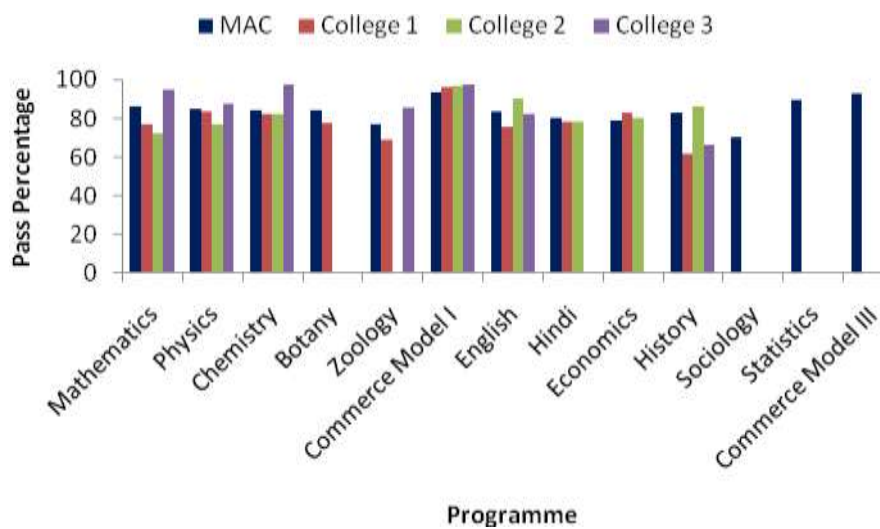
Subject	Mar Athanasius College	College 1	College 2	College 3
UG				
Mathematics	100	93	59	96
Physics	90	94	93	100
Chemistry	87	88	76	100
Botany	93	78	-	-
Zoology	70	67	-	88
Statistics	96	-	-	-
Commerce Model I	96	98	98	100
Commerce Model III	100	-	-	-
English	81	82	88	100
Hindi	89	83	80	-
Economics	71	94	87	-
History	82	79	89	80.7
Sociology	65	-	-	
PG				
Mathematics	81	54	-	-
Physics	67	-	-	-
Chemistry	92	-	-	-
Commerce	71	94	97	-
English	85	57	-	-
Economics	82	-	-	-
Microbiology	83	-	67	-
Biotechnology	93	80	-	-
Biochemistry	88	-	-	-

Comparison of student performance with neighbouring Colleges (2011)

Subject	Mar Athanasius College	College 1	College 2	College 3
UG				
Mathematics	60	66	65	91.6
Physics	81	83	68	68.8
Chemistry	69.2	86	90	100
Botany	59.5	88	-	-
Zoology	85.2	63	-	87.5

Statistics	88.5	-	-	-
B Com Model I	89.3	96	97	94.8
B Com Model III	81.5	-	-	
English	75.8	55	78	68
Hindi	78.4	88	77	-
Economics	100	60	76	-
History	85.4	39	85	17.3
Sociology	86.5	-	-	-
PG				
Mathematics	58.3	56	-	-
Physics	42.9	-	-	-
Chemistry	33.3	-	-	-
Commerce	66.7	100	100	-
English	91.6	77	-	-
Economics	78.9	-	-	-
Microbiology	71.4	-	60	-
Biotechnology	66.7	100	-	-
Biochemistry	66.7	-	-	-

Comparison of examination results with neighbouring colleges



### 5.2.3 Efforts to facilitate student progression to higher level of education and/or towards employment:

Career guidance cell and Placement cell of the College provide ample training and opportunities to the students towards employment. Guidance and

training for various competitive examinations are conducted by the financial assistance of UGC.

#### 5.2.4 Efforts to reduce drop out of students:

- Scholar Support Programme (SSP) of Kerala State Higher Education
- Remedial teaching programme supported by the UGC
- Counselling cell of the College
- Class teachers act as mentors
- Financial support to the needy

### 5.3 Student Participation and Activities

#### 5.3.1 Sports, games, cultural and other extracurricular activities:

Athletics, Football, Volleyball, Basketball, Badminton, Shooting, Chess, Swimming, Cricket, Taekwondo and Table tennis are the major sports events practicing in the College.

All kinds of cultural activities are performed by the students during the Youth festivals and major functions of the College.

#### 5.3.2 Major student achievements:

##### *Student achievements in various competitions 2014-15*

Name of the Student	Program
Ms. Esther A.L (B.Com Computer)	Two presentations at UGC sponsored National Seminars
Sharon Sebastian (M.Sc Actuarial Science)	Presented paper titled "Introduction of Contributory Pension Scheme in Kerala" in the National Seminar at Bishop Heber College, Trichi
E. Sourath (M.Sc Microbiology)	Best Oral presentation in UGC sponsored National Seminar on Biovision – Sept.2014
Blessen T Sam (BA Sociology)	Presented a paper on 'Advertisements and Consumerism influence on Youth, Children and Culture' - National Conference Conducted by All Kerala Sociological Society At Carmel College Mala Assistant researcher with Dr. Michael Manjaloor A.U.T University, New Zealand on Social Exclusion of SC/ST population in colony areas – A Case study of Nadoli Colony Chelad .
Nivya James (M.Sc Biotechnology)	Oral presentation at National Level Seminar
Ms. Shilpa Zacharia and Rameeza.P. Ali (B.Sc. Chemistry )	Bagged first prize in intercollegiate quiz competition (Chemi quiz) in February 2014 at Devamatha College, Kuravilangad.
Safeer Salim (B.Sc. Chemistry )	Bagged third prize in intercollegiate quiz competition in April 2014 at KMEA college, Pukkattupadi. Bagged first prize in intercollegiate quiz competition in April 2014 at Christ Knowledge City, Irapuram
Rohan K Joshi (B.Sc Physics)	First in Voice of Sanskriti, Second in Duet in Sanskriti 2014 conducted by Mar Athanasius College of

	Engineering, Kothamangalam. Second in Duet and RJ Hunt at Christ Knowledge City First in Duet and Voice of Azure2k14 at Amal Jyothi College First in Acoustic Cover, Infigo at St. Xavier's College, Aluva 'A' grade in Light Music in Mahatma Gandhi University Youth Festival.
Basil Thankachan (III B.Com Tax)	First prize in Quiz competition in Sanskriti 2014 organized by MACE First prize in AGON'14 at Amal Jyoti College of Engineering First prize in Superknowa'14 organized by Cochin College First place in Neuron Twister at Amal Jyoti College of Engineering
Able Baby (M.Com Computer)	Second prize for Mimicry in M.G University Youth festival
Geethanjali (M.Sc Biotechnology)	World Ozone Observation at CUSAT, Kochi
Melvin Philip (M.Sc Biotechnology)	World Ozone Observation at CUSAT, Kochi
Bibin Baby (M.Sc Biotechnology)	World Ozone Observation at CUSAT, Kochi
Leo Varghese (B. A. Sociology)	First in 2014 State Body Building Mr Ernakulam
Jitty Maria George (BA Sociology)	Participated in National Integration Camp of NCC in Darjeeling 2014
Afrah Ali ( B.A.English)	II Prize Short Story Writing at M.G.University Youth Festival 2014
Tasha Rose Mary George ( B.A.English)	I Prize Inter Collegiate Group Dance Competition organized by Christ Knowledge City, 2014
Christina Savio ( B.A.English)	I Prize in Poster Making' held at St. Thomas College, 2014 II Prize in 'Debate Competition' in the Inter Collegiate Techno-Cultural Fest organized by Christ Knowledge City, 2014 II Prize in Start-Action Play' organized as part of 'Xav Virtuoso' by St. Xavier's College, Aluva
Arunima Cheriyan ( B.A.English)	I Prize 'Poster Making' held at St. Thomas College, 2014
Anju Jiffri ( B.A.English)	I prize 'Personality Contest' held at Ilahia College of Engineering
Basima Ali (B.A.English)	III Prize Personality Contest' held at Ilahia College of Engineering

*Student achievements in various competitions 2013-14*

Name of the Student	Program
Eldhose Varghese I B A Sociology	I Prize in Intercollegiate -Debate competition
Albert Varghese I B Sc Physics	III Prize in Intercollegiate- Debate competition
Akhil Johnson III B Com Tax	I Prize in Intercollegiate- Elocution competition
Akhil Johnson III B Com Tax	II Prize in All Kerala Intercollegiate- Elocution Competition

Adarsh S. I B Com Computer	I Prize in Intercollegiate Kalothsavam – Mimicry
Able Baby III B Com Computer	II Prize in Intercollegiate Kalothsavam – Mimicry
Sunil Kumar III B A Sociology	I Prize in Intercollegiate Kalothsavam -Poster Designing
Basil Thankachan II B Com Tax	I Prize in Intercollegiate Kalothsavam -Quiz Competition
Aruunima Cherian I B A English	I Prize in Intercollegiate Kalothsavam -Poster designing

*Student achievements in various competitions 2012-13*

Name of the Student	Program
Ms. Milta Saju (I B.Com Tax)	II Prize in Intercollegiate Kalothsavam - Painting competition
Rohan K Joshi (I B.Sc Physics)	A Grade in Intercollegiate Kalothsavam -Light Music
Maria Thomas (I B A English)	A Grade in Intercollegiate Kalothsavam- Mimicry
College Team	A Grade in Intercollegiate Kalothsavam -Group Dance
Bonny Kurian (I M Sc Mathematics)	A Grade in Intercollegiate Kalothsavam -Folk Dance competition.
Gopika P.S (I M.Sc Physics )	A Grade in Intercollegiate Kalothsavam- “Kavithaparanam”

*Student achievements in various competitions 2011-12*

Name of the Student	Program
Miss. Soorya George	Attended the NSS Mega Camp from 13 to 24 November 2011 held in New Delhi Attended Adventure Camp conducted by Atal Bihari Vajpayee Institute of Mountaineering and Allied Sports, Manali, Govt. of Himachal Pradesh.
Robin Eldho	I Prize in a Painting Competition conducted by Kothamangalam Municipality during the Independence Day Celebration.
College Arts Team	Participated in a south India based skit competition and bagged second prize of Rs.15000.
Bony Kurian (III B Sc Mathematics)	I Prize in Intercollegiate Kalothsavam- Folk Dance
College team	IV Prize with A Grade in Intercollegiate Kalothsavam- Thiruvathira
College team	IV Prize with A Grade in Intercollegiate Kalothsavam- Kavya Keli.

*Student achievements in various competitions 2010-11*



Name of the Student	Program
Sharonne K Meeran & Geemon George (II B.A. English)	II Prize in Inter-collegiate Quiz Competition organized by Alphonsa College, Pala
Sharonne K Meeran & Geemon George (II B.A. English)	I Prize in Velayudhan Sir Memorial Quiz Competition organized by Yugadeepthi Library, Nellikuzhi
Aboobacker K.M. (III B.Sc. Chemistry) & Muhzina Muhammed (III B.Sc. Physics)	I Prize in Inter-collegiate Quiz Competition organized by St. Xavier's College, Aluva
Sharonne K Meeran & Geemon George (II B.A. English)	II Prize in Inter-collegiate Quiz Competition organized by St. Xavier's College, Aluva
Pradeep Kuriakose & Vishnu M.S. (III B.Com)	III Prize in Inter-collegiate Quiz Competition organized by St. Xavier's College, Aluva

*The athletes represented India in various international events are:*

Year	Sports	Name of students	Level of participation
2014-15	Athletics	Anilda Thomas	Common Wealth Games, Glasgow, Scotland.
2013-14		Anilda Thomas	World Athletic Championship (Moscow) Asian Athletic Championship (Pune) – Gold Medal Asian Indoor Athletic Championship Hangzhou (China)
2013-14	Athletics	Sheena N V.	World University Games, Kazan, (Russia) Asian Indoor Athletic Championship, Hangzhou (China)
2013-14	Athletics	Arunima P M	Junior SAF Games (Ranchi)
2012-13	CHESS	Vishnu Prasad	Represented India in the Commonwealth Chess Championship (Chennai)
2012-13	Arm Wrestling	Jestin Jose (Alumni)	Won one Silver Medal in the World Arm Wrestling Championship, Punjab
2011-12	Arm Wrestling	Jestin Jose (Alumni)	Won one Gold and Silver Medal in the World Arm Wrestling Championship, Spain

*Athletes represented India in various international events*



**Anilda Thomas**



**Sheena N V.**

*Championships Bagged in for Sports and Games since 2010:*

- The College Athletic Team won the Championship for men and women in the College Games organized by the *Sports Council of Kerala* (2013-14).
- The College Athletic team became champions in the Mahatma Gandhi University Athletic Meet in the Men's section in 2010, 2011, 2012, 2013, and 2014.
- The College Football team won the Mahatma Gandhi University Inter Collegiate Football Championship in 2012 and Runner-up in, 2011 and 2013.
- The College Volleyball team was University Champions in 2011 and 2012 and placed second runner up in 2010.
- The College Cross Country team won the Mahatma Gandhi University titles in 2010.

*National and Inter University Championships:*

2014-15			
Sl No.	Level of participation	Medals	Records
Athletics			
1	1- Athlete Represented India		
2	12-Athletes Participated All India Inter University	5-Gold	2 Meet Records
3	7-Athletes Represented Kerala State in Junior Nationals/south zone nationals	4-Gold 4-Silver	
4	1-Athlete Represented Kerala State in Open Nationals	1-Gold	
5	1-Athlete Represented Kerala State in federation Nationals	1-Gold	

6	8-Athletes Represented Kerala State in 35 <sup>th</sup> National Games	4-Gold 1-Silver	2-Meet Records
7	32-Athletes participated in the Mahatma Gandhi University Athletic Championship	17-Gold 8 -Silver 3 – Bronze	4-Meet Records
8	30-Athletes Participated in various state level Athletic Championships	15 -Gold 6 -Silver 2 – Bronze	2 Meet Records
9	Best Athlete Award for women in the Mahatma Gandhi University Athletic meet – Anilda Thomas		
Football			
1	MG University Second Runner- up	Bronze	
2	4-Students selected to the Mahatma Gandhi University team to take part in the All India Inter University Championship		
Volleyball			
1	1-Student selected to the Mahatma Gandhi University team to take part in the All India Inter University Championship		

2013-14			
SI No.	Level of participation	Medals	Records
Athletics			
1	Three Athletes represented India	1-Silver	
2	15 Athletes represented All India Inter University	5-Gold 4-Silver 3- Bronze	
3	40 Athletes represented Kerala State in Various Junior/Senior Nationals	22-Gold 10-silver 5-bronze	
4	42 Athletes participated in the Mahatma Gandhi University Athletic Championship	20-Gold 18-Silver 7-Bronze	5-Meet Records
5	42 Athletes participated in various State Level Athletic Championships	18-Gold 15-Silver 9- Bronze	
6	Best Athlete Award for Women -All India Inter University Athletic Championship- Anilda Thomas		
7	Best Athlete Award for men and women in the Mahatma Gandhi University Athletic Meet		
Football			
1	MG University Runner- up	Silver	
2	Five students selected to the Mahatma Gandhi University team to take part in the All India Inter University Championship	Silver	
3	Best Mid Fielder Award to Mr. Muhammad Rashid in the All India Inter University Championship		
4	One student selected to the Under 23 Kerala team		
Volleyball			
1	Three students selected to the Kerala State Youth team to participate in the Youth Nationals	Gold	

2	One student selected to the Mahatma Gandhi University team		
Cross Country			
1	One student represented Mahatma Gandhi University in the All India Inter University Championship		
Handball			
1	One student represented Mahatma Gandhi University in the All India Inter University		
2	One student represented Kerala State in the Senior Handball Team		

2012-13			
SI No.	Level of participation	Medals	Records
Athletics			
1	Five Athletes represented in the Senior Nationals	2-Gold 1-Silver 1-Bronze	
2	13 Athletes represented All India Inter University	3-Gold 3-Silver 1- Bronze	
3	10 Athletes represented Kerala State in Junior/Senior Nationals	3-Gold 3-silver	
4	38 Athletes participated in the Mahatma Gandhi University Athletic Championship	22-Gold 17-Silver 4-Bronze	3-Meet Records
5	10 Athletes participated in the Junior National Athletic Championship	5-Gold 3-Silver	
6	14 students participated in the Kerala State Senior Athletic Meet	4-Gold 3-Silver 2-Bronze	
7	Best Athlete Award for Men and Women - Mahatma Gandhi University Athletic Meet		
Football			
1	MG University Winners	Gold	
2	Seven students selected to the Mahatma Gandhi University team to take part in the All India Inter University Championship		
Volleyball			
1	Mahatma Gandhi University Winners	Gold	
2	Three Students selected to the Kerala State Youth team to participate in the Youth Nationals		
3	Six students selected to the Mahatma Gandhi University team to participate in the All India Inter University Championship		
4	Three students represented Kerala State Senior team in the South India Nationals One Student represented Kerala in the Youth Nationals	Gold	
Basketball			
1	Mahatma Gandhi University, Third Place	Bronze	
2	Two students represented Mahatma Gandhi University team in the All India Inter University		

	Championship		
Cross Country			
1	Mahatma Gandhi University Runner Up	Silver	
2	Two students represented Mahatma Gandhi University in the All India Inter University		
Handball			
1	One student represented Mahatma Gandhi University		
2	One student represented Junior Nationals		
Chess			
1	One student represented India in the Common Wealth Games held at Chennai		
Taekwondo			
1	One student represented M G University to participate in the All India Inter university		
2	Four medals in the Mahatma Gandhi University Championship	1-Gold 2-Silver 1Bronze	
Weight Lifting			
1	Four Medals in the Mahatma Gandhi University Championship	2-Silver 2-Bronze	

2011-2012			
SI No.	Level of participation	Medals	Records
Athletics			
1	Mahatma Gandhi University Champions (Men) Mahatma Gandhi University Runner up (Women)	Gold Silver	
2	10 Athletes represented All India Inter University	2-Gold 2- Bronze	
3	Five Athletes represented Kerala State in Senior Nationals	2-Gold 2-silver 1-bronze	
4	30 Athletes participated in the Mahatma Gandhi University Athletic Championship	15-Gold 7-Silver 6-Bronze	
Netball			
1	Mahatma Gandhi University Runner up	Silver	
2	One student represented Mahatma Gandhi University		
Basketball			
1	First Runner up Two students represented Mahatma Gandhi University in the All India Inter University One student represented Kerala State in the Junior Nationals	Bronze  Gold	
Football			
1	MG University Runner- up	Silver	
2	Six students selected to the Mahatma Gandhi University team to take part in the All India Inter University Championship	Silver	
Volleyball			
1	Winners of Mahatma Gandhi University	Gold	
2	Four students selected to the Mahatma Gandhi University team Two students selected to the Kerala State team	Gold	

	for the Youth Nationals		
Cross Country			
1	One student represented Mahatma Gandhi University in the All India Inter University championship		
Handball			
1	One student represented Mahatma Gandhi University in the All India Inter University		
2	One student represented Kerala State in the Senior Handball Team	Gold	

#### *Achievements in Athletics (2010-11)*

- Winners : Mahatma Gandhi University Inter collegiate Athletics (Men) Champions
- Winners : Men & Jr. Men Section in the Kerala State Inter Club Athletics Meet
- Winners: Men & Junior Men in the Ernakulam Dist. Athletics meet.
- Seven students represented Mahatma Gandhi University for the All India Inter University Athletics Meet.
- 11 students represented Kerala State for the National Championship
- Basil George won All India Inter University Medal ( Silver) in Long Jump
- Two of our former Students represented India in the Asian Games and Commonwealth games : Tiana Mary Thomas, Anchu M.M
- Five of our former and present students represented Kerala for the National Games at Ranchi. : Basil George, Anchu M.M, Anitha Abraham, Dibin Eldhose, Amitha Baby

#### *Achievements in 2010-11*

##### Cross Country

- College won the Mahatma Gandhi University Cross Country Championship
- Two students represented Mahatma Gandhi University for the All India Inter University Cross country championship.

##### Volley Ball

- 3 students represented Mahatma Gandhi University
- Two students represent Kerala state

##### Football

- One student represented Kerala State
- 3 students represented Mahatma Gandhi University

##### Chess

- One student represented Mahatma Gandhi University

*Meet Record Set by the College Athletes in the Mahatma Gandhi University Athletics Meet*

Sl.No	Name	Section	Event	Performance	Year
1	Naveen Narayanan	Men	Javelin Throw	65.01 M	2010
2	Basil George	Men	Long Jump	7.54 M	2010
3	Joseph John	Men	20 Km RW	1 Hr:41 Min	2010
4	Sheena N V	Women	Javelin Throw	43.99	2012
5	Alfin V P	Men	Shot put	16.58 M	2014
6	Anilda Thomas	Women	200 M	23.9 Sec	2014
7	Anilda Thomas	Women	400 M	52.62 Sec	2014
8	Sheena N V	Women	Triple Jump	12.98 M	2013
9	Anuroop John	Men	4 X 100 M		2013
10	Meran Jose Sebastian	Men	High Jump	2.04 M	2013

**Athletes won Gold Medals in Inter-Varsity Meet**



**Alfin V P**

**Anuroop John**

**5.3.3 Feedback from graduates and employers:**

An annual feedback mechanism is effectively utilized for continuous evaluation of the teachers. Feedback is being collected from the peer group and alumni with a view to bring new changes in the curriculum and improve infrastructure facilities for better learning process.

**5.3.4 Student Publications:**

- College publishes student magazine every year

- Department Newsletters
- Manuscripts of NSS

### 5.3.5 College Student Council:

The College has an elected student council. The council is being governed by the Chairman, Vice-chairman, General Secretary, Student Editor, Two University Union Councilors and an Arts Club Secretary. In addition, each batch has a representative and two women representatives in the executive committee. The parliamentary system is followed in the selection of the office bearers. The Students' Council conducts various activities which include arts competitions, youth festival, Arts Day, and College Day.

### 5.3.6 Student representation in academic and administrative bodies:

- Internal Quality Assurance Cell (IQAC)
- Anti ragging cell
- Road safety Club
- Internal Complaint Committee.
- Grievance Redressal Cell
- The students of the College elect two University Union Councilors in order to represent the College in the Mahatma Gandhi University academic and administrative bodies. They act as mediators between the University and the College.

### 5.3.7 Alumni Participation:

The College ensures alumni participation through:

- Retired Teachers Forum
- Retired Non-teaching Staff Forum
- Alumni Association with regular meeting and get together
- Alumni Day celebration on Second Saturday of February every year.



## **CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 Institutional Vision and Leadership**

#### 6.1.1 Vision and mission of the Institution and the practices to address all the stakeholders:

##### Vision

To build up the community of people with character and integrity, courage and tenacity to promote the good and fight the evil and provide justice and fair play to all.

##### Mission

We are committed to prepare our students for life by imparting knowledge which focuses on academic competence, social skills and moral values.

The Mission and Vision of the College is in tune with the objectives of Higher Education policies of the Nation. Quality education is provided to the students of the College and all efforts are made to inculcate moral values and worthy citizenship. Most of the students in the College are first generation learners in higher education and the institution is committed to impart knowledge to the students and overcome the lack of opportunities and backwardness of the area. The College carries out a number of activities which uphold the social, secular and democratic values. Students from different strata of the society irrespective of caste and creed come together and form unity in diversity. The institution celebrates various religious festivals and National Days which uphold the unity and integrity of the Nation. The world is undergoing rapid changes and to rise up to the expectation, one needs to be physically fit, mentally tough, morally strong, socially responsible, economically sound and rich in competence and performance.

#### 6.1.2 The role of top management, Principal and Faculty in design and implementation of its quality policy and plans:

- Motivates the staff and students by giving proper guidance and advice.
- Gives leadership for various curricular, co-curricular and extra-curricular activities.
- Convenes periodical Students' Council meetings to hear the grievances of students and redress them.
- Motivates the staff to submit research project proposals and publish books, papers, articles, etc.
- Encourages the faculty for higher studies and learn to adapt them with the teaching-learning process.
- Maintains general discipline in the campus.

### 6.1.3 The role of Management in leadership:

The Governing Body and the Executive Committee of Mar Athanasius College Association are the Apex Bodies which decide the vision, mission and objectives of the College. The Secretary of Mar Athanasius College Association is the administrator of the activities approved by the apex bodies. The teachers, students and other staff members of the College are bound to obey the rules and regulations made by them.

Present members of Kerala legislative assembly (MLAs) from Kothamangalam and Perumbavoor constituencies are Governing Body members of Mar Athanasius College Association. The Chairman of Kothamangalam Municipality is also a Governing Body member of the College. The College Association has taken initiatives to form an NGO under the name organization of farmers for establishments of rights (OFFER) to protect the rights of the farmers by making them aware of their valuable service to the nation. OFFER has been playing a vital role in educating the farmers to instill the sparks of the cooperation and unity.

The College has established Prof M P. Varghese Foundation, Alumni Association and Parent Teacher Association to enrich stakeholder participation. The apex bodies not only formulate the yearly action plans with long standing vision but also encourage other stakeholders to implement them effectively.

### 6.1.4 Monitoring and evaluation policies and plans of the institution for effective implementation and improvement:

- The Governing board meets at regular intervals and the policy decisions were implemented through the executive committee.
- The Manager (Secretary of the Mar Athanasius College Association) visits the College regularly and accepts suggestions and recommendations of staff and students.
- Heads of the Departments submit periodical report of the various activities to the Head of the Institution (The Principal).
- The reports are evaluated by the Principal and communicated to the Management for further actions.
- Teacher in charge of various Clubs/Forums/Cell submit annual report of the activities to the Principal.
- Student appraisals of teachers are carried out annually.
- A Suggestion box is placed near Principal's office.
- A Grievance Redressal Cell functions to redress the grievances of staff and students.

### 6.1.5 Academic leadership provided to the faculty:

The Principal of the college convenes regular meetings of the College Council to formulate various programmes of action. Regular Department meetings are conducted for the effective implementation of the programmes. An effective mechanism is functioning in the College to ensure that the objectives are communicated to the students and the staff properly. All communications are displayed on the notice board/read in classes and Departments.

### 6.1.6 Leadership Grooming:

#### **Principal:**

The Principal is the head of the College and is responsible for the internal management, administration and overall discipline of the College. The Principal makes necessary arrangements for admission, discharge of students and conducting internal and external examinations. Principal is the authority for official communication to University and Government and act as Drawing and Disbursing Officer.

#### **IQAC:**

Internal Quality Assurance Cell of the college coordinates academic, extension, research and other activities of the College. IQAC helps to implement policies taken by the College Council and the Management. IQAC also evaluates and ensures that the policies are properly executed.

#### **College Council:**

The Council advises the Principal in all internal administrative affairs of the College.

#### **Head of Departments:**

- Appointment of class-teachers
- Distribution of workload
- Students' feedback on teachers
- Maintenance of discipline
- Convenes department meetings and PTA meetings.

#### **Teachers:**

- Teaching and evaluation
- Conducting students' seminars, class tests, study tour, etc.
- Remedial teaching
- Students counselling

- Organizing co-curricular activities assigned by the Principal and the IQAC
- Maintenance of discipline
- Responsibilities of various Clubs/Forums/Cells are assigned to the staff by the Principal.

#### **The Student Council:**

- Suggestions and recommendations about the functioning of the College
- Act as a bridge between the student community and the Principal

#### **6.1.7 Operational autonomy and delegation of authority to the Departments:**

##### **Following Responsibilities are delegated to Heads of the Departments**

1. To lead and manage the Department.
2. To be in charge of the functioning of the Department in academic and administrative matters.
3. To propose the annual plans/master plan of the concerned department for the next academic year in consultation with the teachers in the department and submit proposals to the Principal for submission to RUSA, DCE and other funding agencies.
4. Preparation of Department Time Table and allocation of topics as per syllabus. HOD should also ensure that classes are engaged as per the time table.
5. Identifying the eligible students for various 'New Initiative' programmes with the assistance of the Co-ordinator of the Programmes.
6. Depute Teaching Staff / Non-Teaching Staff for accompanying the study tour.
7. Assessment of the Confidential Reports of the subordinate teaching staff.
8. Hold departmental meeting at least once in a month and record the same in the minutes.
9. Conduct class-wise PTA meetings.
10. The Head of the Department will be custodian of all registers and maintain Department Stock.
11. Keep register for various stores in the Department unless it is not delegated to the subordinates. (*viz.* Books, Computer & IT equipments, chemical, furniture, alcohol etc.).

12. Communicate all the information received from the Principal, decisions of the College Council and the IQAC to the staff and if required to the students.
13. Publish attendance and CE marks of the students in the Department notice board and resolve complaints, if any.

#### 6.1.8 Participatory management:

- College Principal is an Ex-officio member of Governing Body and Executive committee of the Mar Athanasius College Association.
- All Heads of Departments and two elected members of the faculty are part of College Council.
- A Student Council under the leadership of Staff Advisor
- An Editorial Board under the leadership of Staff Editor
- Student representation in IQAC
- Student representation in Anti Ragging Committee
- Alumni representation in IQAC
- Parent Teacher Association (PTA)
- A registered NGO (Pollution Control Club, Kothamangalam) is founded in the College
- An Internal Complaint Committee with student representation

## 6.2 Strategy Development and Deployment

### 6.2.1 Quality policy:

Based on the Dictum- Knowledge is Power- the College nurture students with character, integrity, courage, tenacity, academic competence, social skills and moral values. The institution formulates its policies after discussions in various bodies stated above including the IQAC. IQAC ensures its effective execution.

In order to prepare the students to face the challenges of time, the institution prepares its students to overcome the obstacles that blocks the way of progress. Along with the curricular activities, the students are given ample training in co-curricular and extra-curricular activities. To open new avenues in

the realm of science and technology and master the scientific temper, a number of career oriented courses have been conducted. The genuine interest and commitment of the institution has resulted in creating a healthy youth for a healthy India for the last sixty years. The institution has been rendering its meritorious service in the higher education sector. The strength of the institution remains with its faculty, students and alumni.

The institution is committed to the all-round development of the students. The College opens new avenues to students through research, training, community outreach programmes and job oriented courses. The College organizes various community extension programmes in association with local education institutions and non-governmental organizations.

Moral education is inculcated by the healthy relationship that exists among the students, teachers and parents. Value education is imparted to the students by organizing lecture classes, seminars, rallies and other extension activities. The institution encourages the students to mingle freely with all teaching and non teaching staffs. Various inter-disciplinary activities are organized in the campus for the benefit of the students.

#### 6.2.2 Plan for development:

- Achieve Autonomous status to the College
- Starting new job oriented courses
- Attain the status of Centre of Excellence (CE) of UGC

#### 6.2.3 Describe the internal organizational structure and decision making processes:

The Mar Athanasius College Association is constituted as a charitable society registered under the Cochin Registration of Literary, Scientific and Charitable Societies Act. The Association has now 395 shareholders including 37 Parish Churches (Institutional Members) of the Malankara Jacobite Syrian Church and individuals. The Association is managed by a Board of Governors elected by the General Body of the Association. The executive functions of the Board of Governors are carried out by an Executive Committee consisting of Vice-Chairman, Secretary, Treasurer and three other members and Principals as ex-officio members. The Executive Committee members are elected by the Board of Governors from among themselves.

The College has an efficient internal co-coordinating mechanism in the form of College Council. The council consists of Principal, Head of all the Departments and not less than two members elected from the teaching staff, other than the Head of Departments. Principal is the Head of the Council and whenever the need arises, he seeks the advice of the College Council and arrives at a collective decision on an issue. The objectives of this Council are 1) internal co-ordination, 2) Maintenance of discipline of students, 3) Assessment of

infrastructural needs, and 4) Redressal of staff and students grievances. This body has been effective in resolving problems related to the above.

#### 6.2.4 Quality improvement strategies of the institution:

##### **Teaching & Learning**

- Qualified teachers- 34 Ph. D holders and 17 M Phil holders, 26 rank holders in the qualifying examination.
- ICT enabled class rooms- 46 DLPs, 11 Smart Boards, Wi-Fi connectivity, broad band connection in final year UG and PG class rooms and staff rooms.
- Web enabled learning
- Regular student feedback mechanism
- Staff members are motivated to avail FIP of UGC and to attend orientation/refresher/workshops
- Transparency in the conduct of internal evaluation examinations
- Library - 64000 books, book bank facility
- Network Resource Centre (NRC) and Academic Technology Centre (ATC).
- Merit Scholarships for students
- Remedial teaching, NET/SET/Bank/PSC/UPSC coaching

##### **Research & Development**

- Sophisticated Instrumentation Centre
- DST-FIST laboratory
- Physics, Chemistry, Zoology, English and Economics research centres
- Uninterrupted power supply and water supply
- Financial support to create and maintenance of research infrastructure by the College Management.
- Incentives for faculty for publication of research papers distributed by the management.

- Granted 9 major and 50 minor research projects during the last five years.

### **Community engagement**

- Founded Pollution Control Club, Kothamangalam to co-ordinate environment related activities and awareness in this Taluk.
- Nature club, Women's cell, Social Service League, NCC, NSS etc. is established to co-ordinate community oriented services through students.
- Ensured maximum student participation from the neighboring institutions and mother institution for various activities.
- Adopted a tribal village at Kuttampuzha Grama Panchayath
- Co-ordination of Kuroorthode rejuvenation programmes
- Started extension services such as water quality analysis and soil analysis of nearby villagers.
- Ensuring stakeholder participation in all community related activities

### **Resource management**

- The College Management appoints Internal and external auditors for auditing the financial resources.
- Time bound stakeholder feedback conducted
- Efficient and qualified teaching and nonteaching staff are recruited.

### **Industry interaction**

The Departments of Chemistry and Biosciences have signed MOUs for extending consultancy services to industries.

#### **6.2.5 Review of the institutional activities:**

- Timely submission of confidential reports of the Heads of the Departments to the Manager.
- Individual confidential report regarding the performance of the faculty is submitted to the Principal at the end of the academic year.
- Submission of Performance appraisal of teachers by students to the Manager through the Principal.



- Submission of AQARs to the Executive Committee by the IQAC Co-ordinator through the Principal.
- Submission of the College annual report to the Executive Committee and Governing Board by the Principal.
- Presentation of annual report in General Body meeting of the Management by the Principal.

#### 6.2.6 Involvement of the staff in institutional processes:

All efforts have been made by the Principal to incorporate the potential of every teaching faculty of the College in the overall improvement of the effectiveness and efficiency of the Institution. The following committees, clubs and forums are functioning in the College.

- College Council
- Internal Quality Assurance Cell
- Students' Council
- Parent Teacher Association (PTA)
- Admission Committee
- Internal Evaluation Committee
- UGC Committee
- RUSA Cell
- Building Committee
- Purchase Committee
- Library Committee
- Canteen Committee
- Disciplinary Committee
- Anti-ragging Committee
- Grievance Redress Cell
- Internal Complaint Committee
- Scholarship Committee
- Co-operative Store Executive Committee
- Credit Society Executive Committee
- Women's Cell
- Nature Club
- Science Forum
- National Service Scheme
- Road Safety Club
- Youth Red Cross
- Speakers' Forum
- Entrepreneurship Development Club
- Quiz Club
- Debating Society

- Teaching Staff Association
- Non-teaching Staff Association
- Alumni Association
- Disaster Management Cell
- Career and Placement Cell
- Student Feedback Committee
- SC/ST Cell

#### 6.2.7 Management Council resolutions in the last year and its status:

Management Council is the Board of Governors. Resolutions are adopted only when decisions are to be conveyed to Government/University/Banks. Otherwise decisions are recorded and implemented. In 2014-15 the following resolutions were adopted by the Board of Governors. Status of implementation is also furnished.

Date of Meeting	Subject/decision	Status of Implementation
22-07-2014	Ratification of additions/deletion to fixed assets/current assets/equipments	Submitted for audit purposes
06-09-2014	Resolution I Dr. Winny Varghese, Secretary, appointed as Manager of all Educational Institutions Managed by Mar Athanasius College Association	Implemented
	Resolution II Dr. Winny Varghese, Secretary and Sri George K peter, Treasurer will jointly operate bank accounts.	Implemented
26-01-2015	No resolutions passed	-
05-02-2015	No resolutions passed	-

#### 6.2.8 Efforts made by the institution in obtaining autonomy:

All the necessary infrastructural facilities were created inside the campus on the basis of which, the College has been recommended for granting Autonomy to the UGC by the Kerala Higher Education Department on 16 April 2015.

#### 6.2.9 Grievance redress mechanism:

A two-tier grievance redress mechanism is functioning in the College. A Staff Advisor, senior faculty member, is appointed as Liaison Officer to redress grievances of all sorts. The employees are free to approach the Principal/Manager to solve their grievances.

#### 6.2.10 Court cases filed by and against the institute: Nil

#### 6.2.11 Student feedback mechanism for analyzing institutional performance:

The College receives regular feedback from the alumni, students, employees and academic peers on curriculum and the collected data are analyzed and the information is routinely communicated to the authorities of the College. The views are discussed and resolutions are passed accordingly. Based on the feedbacks, the College management introduced courses in M.Sc. Actuarial Science, M Com International Business and Career-oriented add-on courses.

### **6.3 Faculty Empowerment Strategies**

#### 6.3.1 Professional development of the staff:

- Encouraged to avail Faculty Development Programmes of UGC
- Attend Refresher/Orientation courses and national/international seminars
- Faculty members are encouraged to publish books, research papers and articles
- The College regularly organizes seminars, workshops, symposia, conferences and lectures on relevant academic and social issues for the benefit of the faculty and student communities.
- Academy Technology Centre (ATC) and the Network Resource Centre (NRC) provides common platform for the staff to develop e-learning resources.
- All the teachers can access the facility of Sophisticated Instrumentation Centre and DST-FIST lab for research.
- New books and journals are added to the library regularly.

#### 6.3.2 Faculty empowerment:

- Encouraged to avail Faculty Development Programmes
- They are encouraged to pursue their research work with the full support of the College and financial assistance from the UGC and other funding agencies.
- They are deputed to attend refresher courses, orientation courses, workshops and seminars.
- Organizing staff training programmes on Kerala Service Rules, Financial Rules, Right to Information Act 2005 etc.

- Computer training programmes
- Staff Day celebrations and other Staff Association activities

### 6.3.3 Performance appraisal system:

A confidential report about the faculty has to be submitted to the Principal by the Heads of the Departments. Regular comprehensive evaluation of the performance of teachers by students is being practiced in the College. Evaluation by Alumni and Parents on courses taught, infrastructure, library facilities, and teaching efficiency are also in place.

### 6.3.4 Performance appraisal review by the management:

The Executive Committee of the College Management discusses the appraisal reports and suggests measures based on the feedback received from the students and the Heads of the Department.

### 6.3.5 Welfare schemes available for staff

- Co-operative Store
- Co-operative Credit Society
- Staff Association for teaching and Non-teaching staff
- Separate dining hall for staff in the canteen
- Multi-gymnasium and indoor/outdoor game facility
- Post office facility inside the campus
- Well-furnished staff rooms
- Incentive for research publication
- Vehicle Parking Facility
- The College Management is giving salary advance to the teaching/non-teaching staff.
- The College Management is also extending financial support to the staff to meet the contingencies.

### 6.3.6 Faculty recruitment

Teachers are recruited as per U.G.C norms, University Act, Statutes and Orders issued from time to time by the Government. Vacancies are advertised in three leading newspapers along with 'University News'. Interview for selection is conducted by a board comprising one subject expert from the University, one Government nominee not below the rank of Joint Secretary/District Collector, two nominees of the College management and the Principal. Other staffs are appointed as per the norms of the Government/University giving priority to their skill and experience. Reservation policy, stipulated by the state government from time to time, is strictly adhered to in the selection process.

The principal gives full academic freedom to the teachers. They are encouraged to pursue their research work with the full support of the College and financial assistance from the UGC and other funding agencies. They are given freedom to explore innovative methods of teaching. They are deputed to attend refresher courses, orientation courses, workshops and seminars. The faculty improvement programmes of UGC are fully utilized by the staff members. They are encouraged to publish books, research papers and articles in their respective field to prove their expertise.

## **6.4 Financial Management and Resource Mobilization**

### 6.4.1 Institutional mechanism to monitor effective and efficient use of available financial resources:

Various Boards and Councils are constituted to monitor the judicious use of the financial resources:

- Governing Board of Mar Athanasius College Association
- Executive Committee of Mar Athanasius College Association
- College Council
- UGC implementation committee
- Research Committee
- RUSA Cell
- Purchase Committee
- Building Committee

### 6.4.2 Institutional mechanisms for internal and external audit

Internal Auditors are appointed by the Board of Governors of the Educational Agency and all transactions are verified by them for their veracity of facts and figures. External Auditors are appointed by the General Body of the Educational Agency in accordance with auditing standards and they verified all the books of accounts and certified the correctness of the accounts. Last audit was done on 31<sup>st</sup> March 2014. Major objections did not occur.

### 6.4.3 Major sources of institutional receipts/funding:

Main sources of Institutional funding are Govt./UGC/DST. Deficit is met from the donations received and raised from well wishers. Copies of audited income and expenditure statement for the last four years are attached. Reserve fund is not being maintained now.

**Mar Athanasius College Association, Kothamangalam, Kerala, 686 666**  
**Mar Athanasius College of Arts & Science**  
**Income and Expenditure Account for the year ended 31-3-2011**

	As at 31-3-2010	As at 31-3-2011	As at 31-3-2010	As at 31-3-2011	
<b>Expenditure</b>					
Staff Salary	32538459.00	34767601.00	628714.00	Special Fee	
Sports Affiliation Fee	63765.00	102135.00	32605061.00	Staff receipts	744355.00
Library exp.	79868.00	69010.00	0.50	Tuition fee	944780.00
Athletics expenses	63668.00	15670.00		Less Payments	944780.00
Univ. Union Exp.	45720.00	41550.00		Registration fee	33680.00
Post Matriculation	....	116670.00		Less Payments	33680.00
UGC Add course	462391.00	0.00		State ment Scholarship	.....
Student Aid fund exp.	7080.00	0.00	59560.00		8750.00
AIP	3302.00	2465.00		P.F A/C	10522949.00
Audio Visual exp.	35310.00	0.00		Less Payments	10522949.00
Calander	21100.00	20500.00		Late T.C	465.00
UGC Personnel Development Skill	.....	11750.00		Less Payments	510.00
Bank charge	1756.00	0.00		Lakshadweep Scholarship	-45.00
Lab Exp.	184026.00	214859.00		Less Payments	.....
Students welfare fund	15230.00	13850.00		Application fee	59840.00
Stationary exp.	35345.00	0.00	39840.00	Less Payments	80000.00
Women cell	6958.00	0.00	203350.00	Interest	-20160.00
UGC Equal Opportunity	.....	74999.00		Other Receipts	270147.00
Medical Inspection Exp.	5080.00	0.00		Muslim Scholarship	.....
Application fee exp.	.....	0.00	250.00	Less Payments	0.00
SC/ST/OEC	316945.00	0.00		Spices Board Scholarship	.....
Less: Hostel Fee	.....	0.00		FIP Grant	
Association fee expenses	.....	0.00		Less Payments	
College Union	21480.00	0.00		Suvarna Jubilee Scholarship	
Electricity	.....	614061	10000.00	Less Payments	0.00
Less: Collection	.....	614081	5600	Carmer Guidance	.....
Magazine	55130.00	110645.00		Kerala State Grant	
<b>MANAGEMENT A/C</b>				Decode Resume Service	100.00
Electricity Charge	824741.00	578539.00			
Printing Charge	29383.00	73720.00			
Stationary	12027.00	50252.00			
Travelling	44740.00	30198.00			
Telephone Charge	245523.00	46083.00			
Salary & Remuneration	800.00	5000.00			
Scholarship	1430800.00	1092566.00			
Sports Promotion		240000.00			
Sports Expenses		4200.00			
Subscription and Journal					
Campus Beautification	148067.00	244375.00			
Office Exp.	200795.00	25159.00			
Stage Arrangement		7500.00			
UGC Audit		453847.00			
Remuneration		6000.00			
Gas Connection Expenses					

14615.00	Audit fee	16970.00		
3419.00	Insurance Premium	0.00		
273021.00	Seminar Exp.	0.00		
101935.00	Advertisement Exp.	53725.00		
	Registration Fee	7000.00		
	Labour charge	146535.00		
	NCC	26610.00		
6755.00	Meals and Coffee	14622.00		
11000.00	Postage	30000.00		
<b>37330254.00</b>	<b>Total</b>	<b>38714805.00</b>		
			<b>3777858.50</b>	
				<b>Excess of expenditure over income</b>
				<b>2948442.00</b>
				<b>38714806.00</b>



**Mar Athanasius College Association, Kothamangalam, Kerala, 686 666**  
**Mar Athanasius College of Arts & Science**  
**Income and Expenditure Account for the year ended 31-3-2012**

	As at		As at		Income	As at	
	31-3-2011	31-3-2012	31-3-2011	31-3-2012		31-3-2012	31-3-2012
<b>Expenditure</b>							
Staff Salary	34,767,601.00	-	744,355.00	-	Special Fee		
Sports Affiliation Fee	102,135.00	42,485.00	34,763,216.00		Staff receipts		
Library exp.	69,010.00	62,075.00	-		Tuition fee	1,374,240.00	
Athletics expenses	15,670.00	69,668.00	-		Less Payments	1,374,240.00	
Univ. Union Exp.	41,550.00	-	-		Registration fee	10,110.00	
Post Matriculation	116,870.00	-	-		Less Payments	10,110.00	
Student Aid fund exp.	-	4,240.00	8,750.00		State merit Scholarship		
AIP	2,465.00	10.00	-		P.F A/C	7,020,798.00	
Calander	20,500.00	29,870.00	-		Less Payments	7,020,798.00	
UGC Personnel Development Skill	11,750.00	-	-		Late T.C	690.00	
Lab Exp.	214,859.00	169,527.00	-45.00		Less Payments	690.00	
Students welfare fund	13,850.00	46,808.00	-		Application fee	13,840.00	
UGC Equal Opportunity	74,999.00	1,500.00	-20,160.00		Less Payments	21,970.00	
Electricity	-	1,187,785.00	270,147.00		Interest		-8,130.00
Less: Collection	-	1,187,785.00	-		Muslim Scholarship		111,997.00
Magazine	110,645.00	-	-		FIP Grant	1,169,499.00	3,000.00
Exam Remuneration	-	43,103.00	-		Less Payments	1,169,499.00	
Brown Award	-	12,000.00	-		Education Certificate Verification		200.00
Hindu Scholarship	-	3,500.00	100.00		Decode Resume Service		-
NSS Grant	-	100,000.00	-				
Less Receipts	-	50,000.00	-				
Cash Prize	-	1,000.00	-				
SAI	-	70,000.00	-				
DST	-	17,204.00	-				
UGC Enter in Service	-	167,033.00	-				
UGC Net/Set	-	99,667.00	-				
UGC COC	-	30,942.00	-				
UGC Sports Equipment	-	91,860.00	-				
UGC HPEL	-	172,783.00	-				
UGC Remedial Coaching	-	108,566.00	-				
UGC Career & Council	-	60,000.00	-				
UGC Initive Capacity	-	365,717.00	-				
UGC PG Assistance	-	1,238,800.00	-				
UGC UG Assistance	-	368,574.00	-				



<u>MANAGEMENT A/C</u>					
Electricity Charge	578,539.00		886,303.00		
Printing Charge	73,720.00	49,948.00			
Less: Refund		<u>40,250.00</u>			
Stationary	50,252.00		9,698.00		
Travelling	30,198.00		63,490.00		
Telephone Charge	46,083.00		8,797.00		
Schoarship	5,000.00		45,021.00		
Sports Promotion	1,092,566.00		127,500.00		
Sports Expenses	240,000.00		1,488,544.00		
Subscription and Journal	4,200.00		290,000.00		
Paper Publishing	-		14,000.00		
Office Exp.	244,375.00		172,043.00		
Stage Arrangement	25,159.00				
UGC Audit	7,500.00				
Remuneration	453,847.00		682,308.00		
Gas Connection Expenses	6,000.00				
Audit fee	16,970.00				
Insurance Premium	-		18,000.00		
Exhibition Expense	53,725.00		4,037.00		
Advertisement Exp.	7,000.00		10,000.00		
Registration Fee	146,535.00				
Labour charge	26,610.00				
NCC	14,622.00				
Meals and Coffee	30,000.00				
Postage			19,700.00		
Computer Maintenance			2,765.00		
College Band Expenses			425.00		
Return Filing Fee			3,224.00		
Maintenance to Jain Mathew		10,000.00			
Less: Refund		<u>10,000.00</u>			
<b>Total</b>	<b><u>38,714,805.00</u></b>		<b><u>7,172,787.00</u></b>		
			<b>2,948,442.00</b>	<b>Excess of Expenditure over</b>	
				<b>Income</b>	<b>5,750,345.00</b>
				<b>Total</b>	<b><u>7,172,787.00</u></b>



Mar Athanasius College Association, Kothamangalam, Kerala, 686 666

Mar Athanasius College of Arts & Science  
Income and Expenditure Account for the year ended 31-03-2013

As at 31-03-12	Expenditure	As at 31-03-13	As at 31-03-12	Income	As at 31-03-13
42,485.00	Sports Affiliation Fee	66,345.00	1,315,375.00	Special Fee	1,398,825.00
62,075.00	Library Expenses	132,250.00	-	Tuition fee	1,398,825.00
69,668.00	Athletics Expenses	-	-	Less: Payments	12,140.00
-	University Union Expenses	111,524.00	-	Registration fee	12,140.00
4,240.00	Student Aid Fund Expenses	86,175.00	-	Less: Payments	7,899,704.00
10.00	AIP	714.00	-	P.F. A/C	7,899,704.00
29,870.00	Calander	26,375.00	-	Less: Payments	1,845.00
169,527.00	Lab Expenses	181,316.00	-	Late T.C	1,845.00
46,808.00	Students Welfare Fund	-	-	Less: Payments	23,780.00
1,500.00	UGC Equal Opportunity	-	-	Application fee	23,780.00
-	Electricity	1,631,408.00	(8,130.00)	Less: Payments	-
-	Less: Collection	1,631,408.00	111,997.00	Interest from bank	144,999.00
-	Magazine	-	3,000.00	Muslim Scholarship	-
43,103.00	Exam Remuneration	10,000.00	200.00	Education Certificate Verification	-
12,000.00	Brown Award	-	-	Principal Scholarship	250,677.00
3,500.00	Hindu Scholarship	-	-	Exam Fee Collected	1,283,780.00
-	NSS Grant	-	-	Less: Remitted	480,580.00
50,000.00	Less: Receipts	89,000.00	-	Harjjan Welfare Fund	803,200.00
1,000.00	Cash Prize	45,000.00	44,000.00	-	1,765,643.00
70,000.00	SAI	-	-	-	-
17,204.00	DST	-	-	-	-
167,033.00	UGC Enter in Service	-	-	-	-
99,667.00	UGC NET/SET	-	-	-	-
30,942.00	UGC COC	-	-	-	-
91,860.00	UGC Sports Equipment	-	-	-	-
172,783.00	UGC HIPEL	-	-	-	-
108,566.00	UGC Remedial Coaching	-	-	-	-
-	UGC Remedial Coaching (Recurring Items)	5,000.00	-	-	-
60,000.00	UGC Career & Council	3,500.00	-	-	-
365,717.00	UGC Insitive Capacity	-	-	-	-
1,238,800.00	UGC PG Assistance	-	-	-	-

368,574.00	UGC UG Assistance	-	-
-	Provisional Tax	92,780.00	-
-	Exam Fee Refund	20,192.00	-
-	University Affiliation (HWD)	33,100.00	-
-	UGC Hostel Fee	655,948.00	-
-	SC/ST Scholarship	22,700.00	-
-	Poor Aid Fund	17,210.00	-
-	UGC Science Fund	99,699.00	-
-	SWF Fee	11,490.00	-
-	Stationary	72,768.00	-
-	Sports Expense	85,345.00	-
-	Bank Charge	520.00	-
<b>MANAGEMENT A/C</b>			
886,303.00	Electricity Charge	1,406,369.00	-
9,698.00	Printing Charge	-	-
63,490.00	Stationary	48,560.00	-
8,797.00	Travelling	-	-
45,021.00	Telephone Charge	-	-
127,500.00	Schoarship	276,250.00	-
1,488,544.00	Sports Promotion	1,897,780.00	-
290,000.00	Sports Expenses	-	-
14,000.00	Paper Publishing	-	-
172,043.00	Office Expenses	-	-
682,308.00	Remuneration	729,899.00	-
18,000.00	Audit fee	18,645.00	-
4,037.00	Insurance Premium	-	-
10,000.00	Exhibition Expense	-	-
19,700.00	Postage	-	-
2,765.00	Computer Maintenance	-	-
425.00	College Band Expenses	-	-
3,224.00	Return Filing Fee	-	-
-	Labour Charge	192,793.00	-
-	Office Administration Expenses	307,074.00	-
<u>7,172,787.00</u>		<u>6,656,321.00</u>	<u>5,750,345.00</u>
			<u>7,172,787.00</u>
			Excess of Expenditure over Income
			2,655,318.00
			<u>6,656,321.00</u>



Mar Athanasius College Association, Kothamangalam, Kerala, 686 666

Mar Athanasius College of Arts & Science  
Income and Expenditure Account for the year ended 31-03-2014

Expenditure	As at 31-03-14	Income	As at 31-03-14
Library Fee		Special Fee	
University Affiliation	140,150.00	H.Welfare	1,652,010.00
Less: Collection	140,150.00	General	1,526,872.00
Poor Aid Fund		Less	100,872.00
Calander		Tuition fee	3,078,010.00
Lab Expenses			
Chemicals		H.Welfare	1,352,860.00
Magazine		General	2,093,385.00
College Union		Less Treasury Deposit	3,446,245.00
Donation			-
Electricity		Registration fee	24,300.00
Less: Collection	1,909,190.00	Less Remitted	24,300.00
Hostel Fee HWD	1,909,190.00		
Less: Collection	724,010.00	P.F Collected	4,555,153.00
Principal Scholarship	722,326.00	Less Remitted	4,555,153.00
SC/ST Hostel Fee			
Less: Collection	310,311.00	Late T.C	1,850.00
Refund	99,995.00	Less Remitted	1,850.00
Blood Donation			
Sports		Application fee	57,050.00
University Fees Remittance		Less Remitted	34,250.00
Bank Charge			
MG University Expenses		Interest from bank	
Store Expenses		AIP	946.00
		Less Remitted	880.00
		Education Certificate Verification	
		AIDS Control	
			22,800.00
			648,096.00
			66.00
			100.00
			4,000.00

<b>MANAGEMENT A/C</b>				
Electricity & Telephone Charge	1,632,519.00			
Printing & Stationary	92,635.00			
Travelling	39,815.00			
Prize Money/Incentive	172,000.00			
Registration	35,153.00			
Audit fee	25,040.00			
Office Expenses	176,347.00			
Remuneration	965,280.00			
Postage	63,200.00			
Labour Charge	335,718.00			
	<b>5,441,498.00</b>			
			Excess of Exp. over Income	1,688,426.00
				<b>5,441,498.00</b>



#### 6.4.4 Efforts in securing additional funding and the utilization:

- UGC/DST/KSCSTE has sanctioned 9 Major and 50 Minor Research Projects.
- Sports Authority of India (SAI) awarded scholarships to sports students.
- Kerala Sports Council built a multipurpose synthetic court.
- Kerala Council for Science Technology and Environment (KSCSTE) sanctioned funds for Major research projects, conducting seminars, National Science Day celebrations, Student Research Projects etc.
- Kerala State Biodiversity Board has supported for biodiversity documentation and conservation programmes.
- Kerala Cricket Association supported for installing indoor net facility for cricket coaching.
- Kerala State Higher Education Council supported for conducting courses such as Additional Skill Acquisition Programme (ASAP), Walk with Scholar (WWS) and Scholar Support Programme (SSP).

### 6.5 Internal Quality Assurance System (IQAS)

#### 6.5.1 Internal Quality Assurance Cell (IQAC):

The college performs continuous evaluation of its academic, administrative, and financial matters and introduces changes to better functioning of all departments favoring quality improvements. The IQAC plays a vital role in this and is becoming a part of an institution's system and work towards realizing the goals of quality enhancement. The main aim of the activities of the college is to make it a Center of Excellence in all aspects of its functions. Academic and administrative audit of the College is to be carried out regularly to ensure sustainable and progressive performance. SWOT analysis of all departments and teachers are to be carried out and feedback received from all stake holders are to be analyzed and acted upon. Training for staff in academic, teaching and research areas ensuring quality of support obtained by the students and ensure quality of academic and research programmes. The college will give all support to all staff who establish academic and research collaborations within India and abroad. Quality benchmarks are to be met in time. The College will organise national/international seminars and workshops to favour networking among academicians and researchers. Documentation and evaluation of activities of the college and its analysis is to be done periodically and prepare Annual Quality Assurance Reports.

## **Proposals of submitted by the IQAC since 2010**

- Purchase and install Management Information System (Office Automation Software)
- Starting new PG courses
- Introduce Wi- Fi in the campus
- Conduct various National/State level seminars
- Availing DST-FIST support
- Submission of Research Project proposals
- Celebration of Diamond Jubilee
- Organize environment conservation activities
- Organize science popularization programmes
- Construction of new Class rooms and Laboratories
- Installation of surveillance cameras
- Introduction of Smart class room
- Strengthen ICT, research, sports infrastructure
- Introduce e-learning platforms

## **Composition of IQAC**

- Dr. Benny Antony, the Managing Director, Arjuna Extracts Ltd. Aluva was nominated to the IQAC as an external member of IQAC. The College has signed an MOU with the organization.
- The Principal nominates a student and an alumni representative to the IQAC. The IQAC considers their suggestions and recommendations.
- A faculty from each Department is a member of IQAC and participates in all meetings and discussions. All the decisions are communicated to their peer groups and collect feedback. Administrative Assistant is a representative of non-teaching staff

### **6.5.2 Integrated framework for quality assurance:**

Every year the IQAC prepares an action plan and academic calendar for the systematic conduct of various activities in the College. Based on the feedback received from various stakeholders the IQAC submits suggestions and recommendations to the Principal and Management. IQAC takes a proactive role in the implementation of various schemes.

### **6.5.3 Staff training for effective implementation of the quality assurance:**

The College organized various training and awareness programmes to strengthen the teaching and non-teaching staffs of the College by the financial support of UGC. The members of the IQAC attended workshops/seminars conducted outside the campus on quality assurance.

#### 6.5.4 Academic audit:

Every year the Departments carry out input and output analysis of students to evaluate the learning outcomes.

#### 6.5.5 Alignment of internal and external quality assurance:

The activities of IQAC focuses on the strengthening of academic activities of the College like curriculum transaction, evaluation, feedback, mentoring, research and extension activities to achieve academic excellence in adherence with the rules and regulations of the external agencies.

#### 6.5.6 Mechanisms are in place to continuously review the teaching learning process:

Regular periodical class tests and terminal examinations are conducted by the College for evaluating the academic progress of the students. Progress reports are prepared by the class teachers and intimated to the parents for obtaining their remarks.

A feedback mechanism is in place to assess the performance of teachers in the College. The proforma prepared for this purpose is distributed among students and the filled up forms are statistically analyzed. Each teacher is assessed by the students of all classes engaged by the teacher. Through the process, teachers are able to understand their strengths as well as weaknesses. Teachers were personally informed of the score they have secured and this acts as a great motivating factor to improve their performance in the ensuing years. In addition to this, the Heads of the Departments evaluate the performance of individual teachers and the results of such evaluation are conveyed to the Principal and the Management through confidential reports.

#### 6.5.7 Dissemination of quality assurance policy:

The College has an active website which encompasses all the details regarding the College including the courses offered and other facilities available in the College.

The College brings out prospectus at the beginning of every academic year which includes the course details, duration, fee structure etc. for the management quota admission. It is given to the applicants free of cost along with the application form.

The College announces the admission procedure of the College with regard to the courses through the newspapers.

The rank lists of the applicants for various courses are published in the College notice board. The College brings forth the academic calendar every year. It contains all the information regarding the programmes and activities of



the College.

At the commencement of every academic year/semester, special sessions are held for students and parents. The teachers-in-charge and heads of the department instruct students in detail regarding the quality assurance policies and mechanisms.

A hand book is also published containing information on the evaluation methods. The time table for the In-semester and University examinations published in the College notice board.

## **CRITERION VII: INNOVATIONS AND BEST PRACTICES**

### **7.1 Environment Consciousness**

#### **7.1.1 Green initiatives:**

The bird fauna, butterfly fauna, dragonfly fauna and floral diversity of the Campus was documented by the Departments of Zoology and Botany. The checklists are published in the College Website and a copy of the same submitted to the Kerala State Biodiversity Board. The College has received the 'Green Award' of Kerala State Biodiversity Board in the year 2011.

#### **7.1.2 Eco-friendly activities in the campus:**

##### **a) Energy conservation:**

Following measures are taken in the college to conserve energy

- All the instruments are regularly calibrated and serviced.
- Batteries of UPS are regularly serviced and the damaged ones are replaced.
- A Steam Cooking System was installed in the Mar Athanasius Women's Hostel.
- Periodical awareness was given to the students in the class rooms and laboratories.

##### **b) Renewable energy:**

A bio-gas plant constructed at a cost of Rs. 300,000/- is functioning adjacent to the canteen for recycling the organic waste from the canteen and to utilize the bio-gas for cooking.

##### **c) Water harvesting:**

As a part of eco-friendly drive, the college has setup a facility for Rain Water Harvesting at a cost of Rs. 270,934/-. The rain water reservoir has the capacity of more than a million litres.

##### **d) Efforts for Carbon neutrality:**

The College has taken initiatives to plant trees along the Bypass road, Malayankezhu, Kothamangalam in association with the Pollution Control Club and the Kothamangalam Merchants Association. 55 educational institutions in

and around Kothamangalam extended whole hearted support to the great venture. During the programme the students planted more than 100 saplings of *Manimarathu*. The plantation has been nurtured by the students of various clubs such as nature club, NSS and NCC of the college. The trees have been maintained, later bloomed and the entire road is now known as ‘Academic Garden’.

In addition, the bypass road from Malayankezhuzh to Thangalam was also planted with *Asoka* trees during the year 2010. 100 *Asoka* tree saplings were planted along 1.5 kms of the bypass road. 2000 students from 73 institutions along with the members of YMCA, YWCA, IMA and Rotary Club of Kothamangalam have participated in this venture.

A Biodiversity plot of seven cents of the college campus behind the Department of Chemistry planted with rare and valuable fruit trees like lichi, mangosten, rambutan, sapota, guava etc. are regularly nurtured and well maintained by the students of nature club.

A 100 different species of medicinal plants are growing in cement pots nurtured by the students of nature club. The pots are kept along the college verandah to promote awareness among the students about the use of medicinal plants.

With the financial assistance of Kerala Biodiversity Board, a biodiversity plot of over two acres at Thattekkad, nearby picturesque tourist-spot was planted with about 100 varieties of rare fruit trees and medicinal plants. The nurturing of the plants was undertaken by the College as a community exercise outside the campus.

A tree park was established and named as ‘M. P. Varghese Tree Park’ in the College campus to commemorate late Prof. M.P. Varghese, Former Principal and Secretary, Mar Athanasius College, Kothamangalam. The park aims to conserve the rare and endangered species of trees. Recently different species of ‘*Nakshathra*’ plants are also planted in the park.

## **7.2 Innovations**

### **7.2.1 Innovations introduced during the last four years:**

In the last four to five years the college has undergone a number of significant changes aimed at improved stake holder experience, academic excellence, academic diversity and extracurricular activities.

- M. Sc. in Actuarial Science, a trendy, career oriented new generation course, was started. It has immense job potential during the era of economic restructuring of the Nation and it is the first of its kind in Kerala.

- M Com International Business, first of its kind in Kerala, a career oriented course, introduced in 2014 is being well received by the students.
- Surveillance cameras were installed in the College campus to prevent ragging, to ensure proper discipline and security in the campus.
- Eleven Smart Boards and 46 DLP projectors were installed in classrooms for better class room experience and effective delivery of lectures.
- DST-FIST supported research laboratory
- All steps were taken to avail the National and State scholarships to every eligible students.
- A number of sophisticated instruments (X ray Diffractometer (Rigaku), Atomic Absorption Spectrophotometer (Perkin Elmer), Gas Chromatograph (Perkin Elmer), High Performance Liquid Chromatograph, UV Visible Spectrometer (Perkin Elmer), TOC, TPD, Pressure reactor, Surface area analyzer etc. were installed to foster research culture in the campus and are actively being used by researchers in various departments. These instruments were purchased by financial assistance from the UGC, DST and the College Management.
- Constructed an Indoor Shooting Range by the financial support of UGC and the College Management.
- A multi-purpose synthetic court was constructed by the financial support of Govt. of Kerala. It catered to the needs of Basketball, Volleyball and Shuttle Badminton.
- The College has purchased and installed a Management Information Software by the financial assistance of the College Management.
- The river Kuroorthode is flowing through the eastern boundary of the College and is a principal drinking water source of Kothamangalam Municipality. The College has taken various steps to educate the general public about the conservation importance of the river
- A master plan was prepared by the College for the solid waste management of the Kothamangalam Municipal area in consultation with the experts from various fields. The report has submitted to the Municipality for action.
- The College, as part of its social commitment has adopted a tribal village at Kuttampuzha Grama Panchayath to uplift the villagers.

- Pain and palliative care programs were undertaken to extend support to the needy by the help of the students.
- A number of women empowerment programmes such as cycling, driving, swimming etc. are carried out.
- An Olympic standard swimming pool was constructed in the campus by the financial support of UGC and Mar Athanasius College Association (College Management).

### **7.3 Best Practices**

#### **7.3.1 Two Best Practices of Mar Athanasius College:**

##### **1. Fostering Research Culture among the Teachers and Students**

###### **Goal**

To perform genuine research of international repute and to train students on the relevance of conducting research.

###### **The Context**

Research and teaching learning process are inter related and depends mostly on the state-of-the-art infrastructure facilities. Spacious laboratories equipped with modern and sophisticated instruments, well managed library, ICT facilities and support from the College Management are major factors that encourage scientific research in the college.

###### **The Practice**

A research committee and an ethics committee scrutinize the research activities. The Management has taken a key role in creating a research atmosphere in the campus and also instituted prize money for research publications. The college motivates the teachers to prepare and submit individual research project proposals. Moreover, the institution has been taking an immense effort for availing financial support from various agencies by submitting proposals. The College has established a centralized instrumentation center and FIST (DST) laboratory. Students are encouraged to avail the facilities to carry out their end of the course research projects apart from research fellows using these for frontline research.

###### **Evidence of Success**

Nine Major Research Projects and fifty Minor Research Projects have been sanctioned by various agencies during the last five years. 90 papers published in

International/National journals during the last five years and 140 papers presented in International/National conferences. One patent was generated by the Department of Physics in 2014 through collaborative research with the University of Strathclyde in Glasgow, Scotland, UK. 41 research scholars are working in our college leading to PhD. The department of Chemistry and Biotechnology offers Consultancy services to various industries and institutions. Extension services such as analysis of soil, water, food adulterants etc. are also offered to the farmers of neighboring community. Student projects of PG and UG programmes are also being carried out using the sophisticated instruments and students are getting a rare opportunity to get involved in frontline research.

## **Resources**

The College has received DST-FIST grant of Rs. 79 lakhs from the Department of Science and Technology, Government of India. The College Management maintains these facilities. The College has already utilized the amount received from the UGC for College with Potential for Excellence Phases I and II for the purchase of costly equipments.

## **2. Holistic Development of Students Through Physical Education**

### **Goal**

Create physical fitness and inner discipline for the overall development of students through Physical Education and thereby achieve National/International excellence in sports and games.

### **The Context**

Physical education creates an inner discipline that is essential for the student's holistic development and a healthy and structured life. It also provides a platform for the students to excel in sports by which they can represent the college in various National and International events. The college has created a generation of students who are creative and active participants in all the sports activities. College has provided adequate infrastructure, best trainers and coaches, incentives and scholarships to students.

### **The Practice**

Infrastructure facilities:

The infrastructural facilities consisted of Football Field 110 x75 m, 3 Volleyball Courts (including Wooden, Mud and Synthetic Multipurpose Stadium), 3 Basketball Courts (including Wooden, Concrete and Synthetic Multipurpose Stadium), 3 Badminton Courts (wooden), 320 m Training Track with 2 Jumping Pits, High Jump Mat and all Throwing Sectors with Fencing and floodlit facility, Multi- purpose Indoor Stadium (11,000 sq. ft.), Indoor Shooting Range 30 x 20 x 4m, 8 Lane Swimming Pool with dimension of 50 x 25 x 2m,

Fitness Centre and Weight Training Hall, Cricket Field, 2 Cricket Indoor Nets, Handball Court, 2 Hills for Training, and Boys and Girls Warm-up Area. Apart from students, teachers and non-teaching staff utilize these facilities provided by the department of Physical Education

Incentives:

Several students won medals/trophies in International/National/State wise/Regional events in the past 4 years. The college management gives extra gold medals to the winners at special functions every year. Those students who are having talents in sports are given free accommodation and food provisions by the Management.

Coaches:

The College Management appointed four coaches in addition to the two faculty members of the Department of Physical Education supported by the government.

### **Evidence of Success**

Awards/Recognitions:

- The College was selected as the 'Best College in Sports' in 2014 by the Sports Council of Kerala.
- Prof. P I Babu, Head, Department of Physical Education (2014) has been awarded Best Physical Education Teacher award by the Sports Council of Kerala.
- The Kerala Govt. has sanctioned funds for Sports Hostel for Athletics, Football and Volleyball based on achievements by the students of M A College in the state/national level.
- Kerala Cricket Association sanctioned and laid Indoor Cricket Nets with floodlight facilities for the college.
- *Sports Authority of India* (SAI) selected Mar Athanasius College as its extension centre.
- Sri Mathews Jacob, Head of the Department of Physical Education was appointed the coach for Junior Women Volleyball team of Kerala in the year 2015, which eventually finished second in the National Championships.
- Sri Haary Benny was appointed as the coach of junior football team.

#### b) Achievements in Athletics/Games:

- In the M. G University Athletic Meet, the college athletic team became champions in the Men's section in the years 2006, 2007, 2008, 2010, 2011, 2012 2013 and 2014 (eight times) and was runner up twice - in 2005 and 2009.
- The college won University championship in Football in 1997, 1998, 2000, 2002, 2004, 2008, 2009 and 2012 (eight times) and runner up in 1996, 1999, 2001, 2005, 2011 and 2013 (six times).
- It was also University champions in Volleyball thrice - in the years 2007, 2011 and 2012, runner up twice in 2008 and 2009 and placed second runner up in 2010.
- The college won university championship in cross country in the years 1995, 1999, 2007 and 2010 and runner up thrice in 2006, 2008 and 2009.

#### International participation:

- Ms. Anilda Thomas represented India in Common Wealth Games (2014), Glasgow, Scotland, World Athletic Championship (Moscow-2014), Asian Athletic Championship (Pune-2014), Asian Indoor Athletic Championship Hangzhou (China) and World University Games, Kazan, (Russia-2013).
- Ms. Sheena N V. represented India in Asian Indoor Athletic Championship, Hangzhou (China-2013) and World University Games, Kazan (Russia)
- Ms. Arunima P M. represented India in Junior SAF Games (Ranchi) and Common Wealth Games (2013).
- Mr. Vishnu Prasad represented India in the Common Wealth Chess Championship, Chennai (2013)

#### National Games 2015:

- 8-Athletes Represented Kerala State in 35<sup>th</sup> National Games 2015 and won four Gold and one Silver Medals.

#### Resources

- The Management has instituted scholarships at a cost of Rs. 18 lakh in the year 2010, Rs.21 lakh in the year 2011, Rs. 23 lakh in the year 2012, Rs. 23 lakh in the year 2013 and Rs. 25 lakh in the year 2014 for the enhancement of sports in the campus.



- The Sports Authority of India also instituted various sports scholarships. The facilities such as the indoor shooting range and swimming pool are created by the support of UGC.
- Multipurpose synthetic court and synthetic runway for jumping were built by the support of Govt. of Kerala. All other sports infrastructural facilities are created by the College Management itself.

## POST ACCREDITATION INITIATIVES

### Recommendations for Quality Enhancement of the Institution made by the NAAC Peer Team visited in 2010.

- Steps need to be taken to popularize skill based and value addition courses.
- ICT teaching learning need to be integrated in all the departments.
- ICT training to be provided to the teachers.
- Innovative teaching methods to be adopted.
- Teaching learning process is to be further systematized.
- Research culture to be promoted among all the departments.
- More opportunities to be provided for personality development of students.
- Steps to be taken to arrange transportation facility to students coming from far off places.
- Optimum utilization of available infrastructure.
- Health care facilities to be augmented.
- The College should take steps to admit more number of students belonging to SC/ST category.
- Remedial coaching to be formalized.
- Financial assistance for organizing seminars/conferences at the departmental level to be enhanced.
- All the teachers need to be involved in the activities of the College.
- Opportunities at the teaching level to be provided for candidates belonging to SC/ST category as per the prevailing rules.

The College has been taken initiatives considering the recommendations of NAAC Peer Team to improve, enhance and sustain the quality parameters by introducing various courses, activities and measures. The highlights of achievements made are enumerated below.

## Curricular aspects

- Two career oriented courses M. Sc. Actuarial Science and M.Com International Business, and five conventional courses M.Sc. Botany (aided stream), M Sc Zoology, M Sc Statistics, M.A. History and M.A. Sociology were introduced since 2010.
- UGC sponsored (add on) certificate course in Math lab and taxation are introduced during 2014-15.
- The College has prepared syllabi for the M. Sc. Actuarial Science and M.Com International Business.
- The research laboratories were augmented with sophisticated instruments like X ray Diffractometer (Rigaku), Atomic Absorption Spectrophotometer (Perkin Elmer), Gas Chromatograph (Perkin Elmer), UV Visible Spectrometer (Perkin Elmer), TOC, TPD, Pressure reactor, and Surface area analyzer to facilitate the research works.
- Classrooms are equipped with 46 DLP projectors, 11 smart boards, Broad band and Wi-Fi connectivity.
- One international, 13 UGC sponsored national seminar and 9 state level workshops and seminars were organized by various Departments during the period.
- The College has established a centralized sophisticated instrumentation centre and DST-FIST laboratory to facilitate the students to carry out their research projects.

## Teaching learning and evaluation

- Major strength of the College is a team of highly qualified and resourceful teachers. 84 permanent teaching posts are sanctioned by the Government. Out of this, 74 teachers are presently working in the College. One third of the teaching faculty is University Rank holders. Thirty teachers are Ph. D Degree holders and seventeen are M. Phil Degree holders.
- The College was selected as the '*Best College in Sports*' in 2013 by the Sports Council of Kerala. The College has been awarded *Green Award* (2011) of the Kerala Biodiversity Board.
- The College has been awarded five star grade for conducting Additional Skill Acquisition Programme (ASAP) of Kerala State Higher Education Council during 2013-14.
- Sri P I Babu has been selected as the Best Physical Education Teacher by the Govt. of Kerala in 2013.

- Advanced learners are identified and ample opportunities are made available to interact with scholar teachers under Walk with Scholar Programme (WWS) under the support of the Kerala State Higher Education Departments.
- Scholar Support Programme (SSP) of Higher Education Department of Kerala to bridge the knowledge gap of students.
- Scholarships are given to the University rank holders in their qualifying examinations who joined the institution for higher studies. An amount of Rs. 40,000/-, 20,000/- and 10,000/- have been given to the first, second and third rank holders respectively.
- Every year the Management honors the University rank holders with gold medals.
- Students are given chances to participate in the seminars, workshops and symposia conducted by other Colleges and Universities. 13 UGC sponsored National Seminars were conducted in the College since 2010. All the students of the concerned Department participated in it.
- The Career Guidance Cell and Placement Cell help students to plan their future and career.
- The College regularly organizes coaching classes in order to prepare the students for various competitive examinations by the financial support of UGC.
- Three seminar halls with a seating capacity of 40 chairs are also made available from 2014-15. They are equipped with DLP projectors , laptops, audio systems etc
- 11 smart class rooms are introduced to augment the teaching learning process in the College.
- A total of 46 DLP/LCD projectors are in the college. All the departments, final year Under Graduate and Post Graduate class rooms have broadband cable connectivity for aiding teaching process.
- The College has an active web site to enable e-learning or web based learning. The web site provides options for posting lecture notes, teaching notes and PowerPoint presentations of teachers. Passwords are also made available to students and individual teachers to access the materials.
- The Mathematics lab consist of 12 computers to train students in various mathematical and statistical softwares such as Math lab, SPSS, TEX,

Equation editor etc.

- A Computational Chemistry lab facility consists of 9 computers, DLP projector, white board and UPS to carry out computational analysis.
- Full time student counsellor was appointed to deal the academic and emotional problems and give remedial measures and suggestions which relieve their stress and strain. Class teacher can act as mentors by regular monitoring.
- All the Departments, final year PG and UG class rooms are connected with Broad band facility. The Women's hostels are also equipped with broad band connectivity. All staff members are authorized to access the broad band through Wi-Fi.

### **Research and Extension**

- 50 minor (Rs.53,47,000/-) and 9 major research projects (Rs.1,13,34,500/-) have been approved by various funding agencies since 2010.
- The College availed the CPE Phase I of UGC and purchased a number of sophisticated instruments such as X-ray Diffractometer (Rigaku), Atomic Absorption Spectrophotometer (Perkin Elmer), Gas chromatograph (Perkin Elmer), UV Visible Spectrometer (Perkin Elmer).
- The CPE Phase II was also awarded to the College up to 2019. An amount of Rs. 1 cr. has been sanctioned by the UGC.
- Two teachers are awarded PhD under FIP of UGC, Four teachers submitted their Ph. D thesis under FIP of UGC, Five teachers are pursuing research for Ph. D under FIP of UGC. Four teachers have applied for FIP in 2014.
- The College has been selected by DST under the FIST programme during 2013-14. The major equipments procured in this scheme are Surface Area Analyser (Micromeritics) (Rs.12,40,527/-), Total Organic Carbon Analyser (Schimadzu) (Rs. 10,26,736/-), Precision Impedance Analyser (Agilent) (Rs. 20,39,344/-), Gel Documentation System (Rs. 3,88,000/-) and Leica S8 Apo Trinocular Microscope (Rs. 5,50,094/-). An amount of Rs. 6,00,000/- was also utilized for augmenting the ICT facilities.
- 9 research fellows were awarded PhD in various fields and 41 research scholars are pursuing research in the 4 research centers since 2010.
- 90 research papers were published in reputed National and International Journals.

- 5.4% of the funds are utilized for research out of Rs. 47,06,77,790/- allocated by various funding agencies and Management during the last five years.
- Dr. A.P.J. Abdul Kalam, the former President of India, visited the college on 6 June 2010 and addressed the students on “Empowering the Youth towards Vision 2020”.
- The Department of Physics collaborated for a patent on ‘Focused gamma ray beam generating system for e.g. gamma knife used during cancer treatment, has target positioned before focal points of electron beam, where interaction between beam and target causes radiation that forms gamma ray beam’ with Jaroszynski D and Cipiccia S. of Straclyde University, Scotland.
- The Department of Chemistry and the Department of Computer Applications, Cochin University of Science and Technology (CUSAT) are being collaborated to carry out research on Computational Chemistry.
- The Departments of History and Sociology are jointly conducting a major research project titled ‘Muzris Heritage Project- Socio-Historic impact’ sponsored by the ICSSR. Departments of Biotechnology and Chemistry are collaborated for three minor research projects. The Department of Chemistry and Department of Physics are collaborated for research on Magnetic Property of Ferrites.
- The College has prepared an action plan for the solid waste management of Kothamangalam Taluk in consultation with the experts from Central Water Resources and Management (CWRDM), Pollution Control Board (PCB), *Suchithua* Mission, Govt. of Kerala and the Centre for Earth Science Studies (CESS). The detailed plan was submitted to the Kothamangalam Municipality.
- Ensure the participation of local self government authorities of Kuttampuzha Grama Panchayath in the village adoption programme implementing at Pinavoorkkudy tribal village.
- Ensure participation of the Kothamangalam Municipal authorities in the implementation of Kuroorthode rejuvenation programme
- An Academic garden maintains in the Bye Pass road, Kothamangalam in collaboration with the Kothamangalam *Vyapary Vyavasaya Samithi* and various NGO’s.
- A biodiversity plot was prepared by utilizing the financial support of Kerala State Biodiversity Board.

## **Infrastructure**

- Constructed third floor in the western and southern wing of the college building.
- A PG Women hostel was constructed at a cost 1.25 cr. with the financial support of 85 lakhs from UGC which can accommodate 135 students. Keeping the environment aspects in mind, latest facilities like steam cooking was installed in the hostel.
- Surveillance cameras were installed in the College campus to prevent ragging, to promote proper discipline in the campus and to monitor the general activities of students.
- As a part of eco-friendly drive, the college has setup a Rain Water Harvesting facility at a cost of Rs. 270934/- with a reservoir capacity of 1053630 litres.
- Constructed an Indoor Shooting Range at a cost of 82 lakhs, with the financial support of 50 lakhs from UGC.
- An Olympic standard swimming pool was constructed in the campus at a cost of 1.3 cr. with the financial support of 90 lakhs from UGC.
- A multi-purpose synthetic court was constructed with the financial support of Govt. of Kerala catering to the needs of Basketball, Volleyball and Shuttle Badminton teams.
- A parking facility for two wheelers for students is provided in the campus near the outdoor stadium for the students.
- Rails are built in all the stairs of the College to make differently abled friendly

## **Student support and Progression**

- Remedial coaching with the financial support of UGC
- NET/ Entry in Service coaching with the financial support of UGC
- Scholarship for Other Backward Community (OBC) of UGC
- Availed an amount of Rs 2.04 cr. from the state and central Government as scholarships to the meritorious students of the College
- Rails are constructed along the stairs with the financial support of UGC
- The management has instituted 60 scholarships every year to encourage sports. An amount of Rs. 67.48 lakhs distributed as sports scholarships.
- Sports Authority of India (SAI) scholarships to the students participating in sports
- Additional Skill Acquisition programme (ASAP) of Kerala State Higher

Education Council.

- Walk with Scholar programme (WWSP) of Kerala State Higher Education Council.
- Scholar Support Programme (SSP) of Kerala State Higher Education Council.

### **Governance and leadership**

- Efforts to achieve Autonomous status of UGC - the College has been recommended for granting Autonomy by the Kerala Higher Education Department on 16 April 2015.
- Availed CPE Phase I and Phase II of UGC
- The College has availed an amount of Rs 5.25 cr. from UGC for developing infrastructure and implementing various schemes since 2010.
- Availed DST-FIST support for an amount of Rs. 79 lakhs
- A built up area of 8129.96 m<sup>2</sup> was created during the last five years.
- An amount of Rs. 3.95 cr. spent by the college management for infrastructure development, maintenance and upkeep since 2010.
- Purchased and installed Management Information System (Office Automation Software)
- An amount of Rs. 67.48 lakhs was distributed as sports scholarships.
- Efforts made to strengthen the library by adding books and journals.
- 30 permanent qualified Assistant Professors are appointed since 2010.



**PART III**

**EVALUATIVE REPORT OF THE DEPARTMENTS**

## DEPARTMENT OF CHEMISTRY

1. Name of the department : Chemistry
2. Year of Establishment : 1959
3. Names of Programmes/  
Courses offered : PhD in Chemistry, M.Sc. Chemistry (PG)  
and B.Sc. Chemistry (UG)

4. Names of Interdisciplinary courses and the departments/units involved

The Department offers open course (Environmental Chemistry) 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 M G University for the UG Chemistry Programme (6 semester)
  - The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG Chemistry (4 semester).
6. Participation of the department in the courses offered by other departments

The Department offers a Complimentary course for B.Sc. Physics, Zoology and Botany programmes and an open course (Environmental Chemistry) for fifth semester CBCSS Undergraduate students of the College.

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: 9

	Sanctioned	Filled
Professors	-	-
Associate Professors	5	5
Asst. Professors	4	4

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Designation	Qualification	Specialization	TE*	No. of PhD students guided for last 4 years
Dr. Shanti A. Avirah	Asso. Prof. & Head	Ph.D	Polymer Chemistry	25	-
Dr. K. B. Sherly	Asso. Prof.	Ph.D	Physical Chemistry	22	2 (ongoing)
Dr. Densely Jose	Asso. Prof.	Ph.D	Organic Chemistry	18	-
Dr. Jayamma Francis	Asso. Prof.	Ph.D	Polymer Chemistry	20	-
Dr. ManjuKurian	Asso. Prof.	Ph.D	Inorganic Chemistry	11	3(ongoing)
Dr. Annu Anna Varghese	Asso. Prof.	Ph.D	Physical Chemistry	10	-
Dr. Binu Varghese	Asso. Prof.	Ph.D	Coordination Chemistry	10	-
Ms. Marymol Moothedan (on FIP leave)	Asso. Prof.	M.Sc., Pursuing Ph.D	Nano Chemistry	7	-
Dr. Ajish K. R. (Leave vacancy)	FIP Substitute	Ph.D	Organic chemistry	10 (months)	-

\*TE: teaching experience

11. List of senior visiting faculty- Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

Programme	Percentage
UG - Theory	15.8%
Practical	15.9%
PG - Theory	7.77%
Practical	0%

13. Student -Teacher Ratio (programme wise)

Programme	Student teacher ratio
M.Sc. Chemistry	5:1
B.Sc. Chemistry	20:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled -

	Sanctioned	Filled
Technical staff	4	4
Administrative staff	0	0

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

1	Dr. Shanti A Avirah	M.Sc., PhD
2	Dr. K. B. Sherly	M.Sc., M.Phil, Ph.D
3	Dr. Densely Jose	M.Sc., M.Phil, Ph.D, BEd.
4	Dr. Jayamma Francis	M.Sc., Ph.D
5	Dr. Manju Kurian	M.Sc., Ph.D, BEd
6	Dr. Annu Anna Varghese	M.Sc., Ph.D, BEd
7	Dr. Binu Varghese	M.Sc., Ph.D
8	Dr. Ajish K. R.	M.S.c, BEd,Ph.D

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.

Major research projects: 2

Minor research projects: 7

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

#### Major research projects

- Wet oxidation process over nanoceria based catalysis as green route for water pollution remediation (Funded by KSCSTE)- Dr.Manju Kurian as PI. Amount: Rs.16,80,160/-.
- Catalytic Wet Oxidations of Pesticides over Mixed Nanoferrites at Mild Temperatures: A Green Approach for Water Pollution Remediation. (DST- Fast Track Young Scientist)- Dr.Manju Kurian as PI. Amount: Rs.15,18,000/-
- Synthesis, Characterisation and Catalytic Activity of Sulfated Nano Zirconia (Funded by UGC). - Dr. K.B. Sherly as PI. Amount: Rs.5,79,300/-

#### Minor research projects funded by UGC

- Phytochemical Screening and Evaluation of the Anti- microbial Potential of Coleus Amboinicus - Dr. Shanti A. Avirah as PI. Amount: Rs.82500/-

- Screening of Herbal Plants and Ascertaining the effects of their extracts on the inhibition of a Mammalian Lyaluronidase Isolated from Pathogenic Bacterial Strains and proposing Novel Potential Microbicides-Dr. Densely Jose as PI. Amount Rs: 60,000/-
- Evaluating Heavy Metal Abatement Potential of Selected Cyanobacterial Strains and Assessing its Application in Pollution Control - Dr.Jayamma Francis as PI Amount: Rs.1,07,000/-
- Synthesis, structural and spectral characterisation of transition metal complexes of phenylsemicarbazones- Dr.Binu Varghese as PI. Amount: Rs. 55,000/-
- Synthesis characterisation and Catalytic Application of Nano Lanthana - Ms.Marymol Moothedan as PI. Amount: Rs.1,50,000/-.
- Preparation, characterisation and Catalytic Applications of Supported Transition Metal Complexes- Dr.Annu Anna Varghese as PI. Amount: Rs.1,20,000/-

18. Research Centre /facility recognized by the University – M.G. University Regional Research Centre in Chemistry, Mar Athanasius College, Kothamangalam, Kerala-686 666

19. Publications: 20

a) Publication per faculty- 2.22

b) Number of papers published in peer reviewed journals (national /international) by faculty and students –20

- Shanti A Avirah, Nivya Mariam Paul ,Ajitha A R ,Elsa John, Phytochemical screening and evaluation of the antimicrobial potential of Coleus Amboinicus, World Journal of Pharmaceutical Research, Vol.3,No.2, 2811-2826, 2014, IF-0.62.
- K.B Sherly, K .Rakesh, Synthesis and catalytic activity of polysaccharide templatednanocrystalline sulfated zirconia, American Institute of physics proc, 1576,128, 2014.
- K.B Sherly, K .Rakesh, Route-sol-gel- Synthesis and characterization of nanosrystalline zirconia, Advances in applied Research Vol.5 No.2 120-123, 2013.

- K.B Sherly, Marymol Moothedan, Synthesis and Characterisation of Nano lanthana, American Institute of Physics Conference Proc , 549-551, 2011
- Densely Jose, Asha Gangadharan, Elizabeth Jacob, Phytochemical Analysis, Antibacterial and Hyaluronidase Activity of Three Indigenous Medicinal Plants, World Journal of Pharmacy and Pharmaceutical sciences, vol.3, 6, 751-761 2014, IF-0.629.
- Manju Kurian, Divya S Nair, Manganese zinc ferrite nanoparticles as efficient catalysts for wet peroxide oxidation of organic aqueous wastes, Journal of Chemical Sciences, IF 1.224, (In press).
- Manju Kurian, Divya S Nair, Heterogeneous Fenton behavior of nano nickel zinc ferrite catalysts in the degradation of 4-chlorophenol from water under neutral conditions, Journal Water Process Engineering, doi:10.1016/j.jwpe.2014.10.011.
- Manju Kurian, Christy Kunjachan, Investigation of size dependency on lattice strain of nanoceria particles synthesised by wet chemical methods, International Nanoletters, 44 (2014) 73-80.
- Smitha Thankachan, Manju Kurian, Divya S Nair, Sheena Xavier, E. Muhamed, Effect of rare earth doping on structural, magnetic, electrical properties of magnesium ferrite and its potential use in waste water treatment, International Journal of Engineering Science and Innovative Technology 3,4 (2014) 529-537.
- Manju Kurian, S.Sugunan, Single pot benzylation of o-xylene with benzyl chloride and benzyl alcohol over pillared Montmorillonites, Polish Journal of Chemical Technology 16, 3 (2014) 69-73, IF-0.474, SJR-0.218, SNIP-0.464.
- Manju Kurian, Divya S Nair, on the efficiency of cobalt zinc ferrite nanoparticles for catalytic wet peroxide oxidation of 4-chlorophenol, Journal of Environmental Chemical Engineering 2, 63-69, 2014.
- Manju Kurian, Divya S Nair, A. M. Rahnamol, Influence of the synthesis conditions on the catalytic efficiency of  $\text{NiFe}_2\text{O}_4$  and  $\text{ZnFe}_2\text{O}_4$  nanoparticles towards the wet peroxide oxidation of 4-chlorophenol, Reaction Kinetics, Mechanisms and Catalysis, 111,2 (2014), 591-604, IF-0.983, SJR-0.459, SNIP-0.775.
- Manju Kurian, Divya S Nair, Effect of Preparation Conditions on Nickel Zinc Ferrite Nanoparticles: A Comparison between Sol-Gel Auto Combustion and Co-precipitation Methods, Journal of Saudi Chemical Society <http://dx.doi.org/10.1016/j.jscs.2013.03.003>. 2013, SJR-0.308, SNIP-0.928.

- Manju Kurian, and Robin Babu, Iron aluminium mixed pillared montmorillonites and the rare earth exchanged analogues as efficient catalysts for phenol oxidation, *Journal of Environmental Chemical Engineering* 1: 86-91, 2013.
- Kurian M., Eldhose A., Thasleenabi R. M, Mild Temperature Oxidation of Phenol Over Rare Earth Exchanged Aluminium Pillared Montmorillonites, *International Journal of Environmental Research* 6(3):669-676, (2012), IF-1.8, SJR-0.558, SNIP-1.036.
- Manju Kurian, Mathew Joy, Deepthi Raj, Hydroxylation of phenol over rare earth exchanged iron pillared montmorillonites, *Journal of Porous Materials*,19,633-40, 2012, IF-1.24, SJR-0.523, SNIP-0.845.
- Bejoy Thomas, V Ganga Ramu, Sanjay Gopinath, Jino George, Manju Kurian, Guillaume Laurent, Glenna L Drisko, Sankaran Sugunan, Catalytic acetalization of carbonyl compounds over cation ( $Ce^{3+}$ ,  $Fe^{3+}$  and  $Al^{3+}$ ) exchanged montmorillonites and  $Ce^{3+}$ -exchanged Y zeolites, *Applied Clay Science*,53, 227-235, 2011, IF-2.3, SJR-1.142.
- Manju Kurian, Divya S. Nair, Synthesis and Characterization of Nickel Zinc Ferrite, *American Institute of Physics Conf. Proc.* 1391, 594,2011.
- M. R. P Kurup, Binu Varghese, Suja Krishnan, Synthesis, spectral and structural characterisation of Copper(II) complexes of 2-benzoyl pyridine-N-4 phenylsemicarbazone, *Polyhedron* 30, 1, 70-78, 2011, IF-2, SJR-0.664, SNIP-1.023
- K.B Sherly, Marymol Moothedan, Synthesis and Characterisation of Nano lanthana, *American Institute of Physics Conference Proc* , 549-551, 2011

- c) Listed in International database: 19
- d) Monographs: Nil
- e) Chapter in Books: Nil
- f) Books edited: Nil
- g) Books with ISBN/ISSN numbers: Nil
- h) Citation Index: 10-139
- i) SNIP: 0.464-1.036
- j) SJR: 0.218-1.142
- k) Impact Factor: 0.474-2.3
- l) h Index: 1-7

20. Areas of consultancy and income generated:

Areas of consultancy	Income generated
Effluent Water analysis	Rs.20000/- (From Arjuna Natural Extracts Pvt. Ltd, Aluva

21. Faculty as members in

National committees b) International Committees c) Editorial Boards.  
a) National committees

Dr. Shanti A. Avirah: Member of Society of Polymer Technologists of India  
Member of Indian Science Congress Association  
Dr. K. B. Sherly Member of Indian Science Congress Association  
Dr. Jayamma Francis: Member of Society of Polymer Technologists of India  
Member of Indian Science Congress Association  
Dr. Densely Jose Member of Indian Science Congress Association  
Dr. Manju Kurian Member of Indian Science Congress Association  
Dr. Annu Anna Varghese Member of Indian Science Congress Association  
Dr. Binu Varghese Member of Indian Science Congress Association  
Ms. Marymol Moothedan Member of Indian Science Congress Association

22. Student projects

	Programme	Percentage
No. of in-house projects	B.Sc. Chemistry	100%
	M.Sc. Chemistry	95%
No. of Outside projects	B.Sc. Chemistry	Nil
	M.Sc. Chemistry	5%

23. Awards / Recognitions received by faculty and students –

- Ms. MarymolMootheden - Best Poster Award at National Conference on Recent Advances in Spectroscopy, M. A. College, Kothamangalam, 2014
- Dr. Manju Kurian - DST Fast Track Young Scientist (2010-2013)

Awards/Recognitions received by students

- ShanavasYoosuf I<sup>st</sup> Rank, M.Sc. Chemistry, 2012
- Rahanamol A. M. III<sup>rd</sup> Rank, M.Sc. Chemistry, 2012
- Neethu Sunny VIII<sup>th</sup> Rank M.Sc. Chemistry, 2013
- ShilpaZacharia University Topper (A<sup>+</sup>, GPA 3.89/4), BSc Chemistry, 2014



24. List of eminent academicians and scientists / visitors to the department

Name and Designation	Office Address	Year of Visiting
Dr. Vijayamohanan K. Pillai Scientist H, Outstanding Scientist	Director CECRI, Karaikudi, India	July, 2014
Dr. A. Salahudeen Kunju Professor	Former Principal University College, Trivandrum	July, 2014
Dr. R. S. Swathi Asst. Professor	IISER, Trivandrum, Kerala	August 1, 2014
Dr. Vinesh Vijayan Asst. Professor	IISER, Trivandrum, Kerala	August 1, 2014
Dr. Y. Adithya Lakshmana Asst. Professor	IISER, Trivandrum, Kerala	August 1, 2014
Dr. K. Veluthambi Professor	Head of the Department of Plant Biotechnology Madurai Kamaraj University, Tamilnadu	March 12, 2013
Dr. G. M. Nair Professor and Dean	School of Biological Sciences, Central University of Kerala, Kasargod	March 12, 2013
Dr. Dinesh A. Nagegowda Principal Scientist	CSIR-CIMAP Research Centre, Bangaluru	March 13, 2013
Dr. Benny Antony M.D.	R & D, Arjuna Natural Extracts	March 24, 2015
Dr. Merina Benny General Manager	R & D, Arjuna Natural Extracts	March 13, 2013
Dr. Rani Joseph	CUSAT, Cochin	September 1, 2014
Dr. S Sugunan	CUSAT, Cochin	September 1, 2014

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

- Two day National Conference on “Recent Advances in Spectroscopy,” Sponsored by UGC, at Mar Athanasius College on 31<sup>st</sup> July and 1<sup>st</sup> August, 2014.
- Two day National Conference cum Workshop on ‘Nutraceuticals- Perspectives, Prospects and Challenges’ Sponsored by UGC, at Mar Athanasius College on 12<sup>th</sup> and 13<sup>th</sup> March, 2013.

b) International: Nil

26. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
<b>B. Sc. Chemistry</b>					
2010	751	35	8	27	88
2011	937	30	5	25	93
2012	1595	37	8	29	Results awaiting
2013	1699	38	10	28	Ongoing
2014	1559	40	11	29	Ongoing
<b>M. Sc. Chemistry</b>					
2010	-	13	2	11	92
2011	-	9	0	9	78
2012	864	13	1	12	78
2013	918	11	1	10	Ongoing
2014	941	12	2	10	Ongoing

\*M = Male \*F = Female

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. Chemistry	100	0	0
M.Sc. Chemistry	98.2	1.75	0
PhD in Chemistry	100	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

JRF/NET/SET/GATE	No. of students
JRF with NET	6
NET	2
GATE	3
SET	4

## 29. Student progression

Student progression	Against % enrolled
UG to PG	24%
PG to M.Phil.	1.75%
PG to Ph.D.	10.5%
Ph.D to Post-Doctoral	Nil
Employed	
•Campus selection	3.8%
•Other than campus recruitment	30%
Entrepreneurship/Self-employment	30%

## 30. Details of Infrastructural facilities a)

Library: 2725 Books in the College library

Department of Chemistry has a library having of 285 books in addition to 2500 books in chemistry at M. P. Varghese Library of Mar Athanasius College. Indian Journal of Chemistry; A and B, Journal of Science Education, Indian Chemical Society, Current Science, Resonance journal of Science Education, Proceedings of Chemical Sciences, Chemistry Today, Research Journal of Chemistry and Environment, Journal of Chemical sciences, Scientific American are the chemistry journals subscribing in the library.

### b) Internet facilities for Staff & Students

Computing facilities include 13 multimedia computers, 4laptops, and 2 net books with broad band internet connection-Operating systems, Windows 2000 and 2007 professional and Windows Xp professional.

### c) Class rooms with ICT facility:

### d) Laboratories:

The Department has four laboratories; two for postgraduates, one for research and one 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 Colorimeter, Refractometer, Thermostat, Muffle Furnace, Electronic balances (with accuracy 0.1 mg and 1 mg), Microwave Oven, Rotary Shaker, Rotary Evaporator, Plastic Shredding Machine, IR thermometer, Sound Level Meter,

Water analyser etc.

31. Number of students receiving financial assistance from college, university, government or other agencies:

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	31	49	44	19	7
2	Higher education scholarship	4	1	0	0	0
3	Central sector scholarship	4	0	1	1	0
4	C H Muhammed Koya scholarship	7	1	5	4	0
5	Suvarana Jubilee Scholarship renewal	0	7	13	13	0
6	Hindi scholarship renewal	0	6	0	0	0
	Total	46	64	63	37	7

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

Celebrations of international year of Chemistry 2011: The international year of chemistry was celebrated with the following programme.

- Inaugurated the activities of the department in connection with the International year of chemistry on 1-09-2011
- Paper presentation on environmental problems by the students of the college and near-by schools on 16-09-2011
- An air show conducted in association with M. A. College of Engineering on 30-09-2011
- Seminar on Soil Analysis by soil chemist, Smt. Ushadevi T. R., District Soil Testing Unit, Arikuzha, Thodupuzha on 30-09-2011
- Analysis of soil collected from different parts of Kothamangalam Taluk in terms of NPK values by District Soil Testing Unit, Arikuzha, Thodupuzha on 30-09-2011
- Analysis of well water samples collected from different parts of Kothamangalam Taluk by the Department.

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 classes were given to B.Sc. students in communicative English
- Remedial coaching was given to B.Sc. students in Mathematics

34. Participation in Institutional Social Responsibility (ISR) and Extension:

The members of the department are in-charge of various student oriented services of the college. The various responsibilities are the following

- Dr. Shanti A. Avirah - Co-ordinator, Women cell and Grievance and Redressal cell, Class teacher of 3<sup>rd</sup> year BSc Chemistry class.
- Dr. K. B. Sherly- Member UGC cell, teacher in-charge of instrumentation centre (GC), Class teacher of Ist year MSc Chemistry class.
- Dr. Densely Jose - Co-ordinator, Students Feedback, Chief warden M. A. Women's Hostel, teacher in-charge of instrumentation centre (HPLC), Class teacher, II<sup>nd</sup> BSc Chemistry.
- Dr. Jayamma Francis - Co-ordinator, Film club, Member SC-ST cell.
- Dr. Manju Kurian - Co-ordinator, UGC cell, Member Film Society, teacher in-charge of instrumentation centre (AAS), Class teacher of I<sup>st</sup> year BSc Chemistry class.
- Dr. Annu Anna Varghese - Member, Youth Red Cross, Career Guidance, Students Feedback, Nature Club. Class teacher of II<sup>nd</sup> year MSc chemistry class
- Dr. Binu Varghese - Co-ordinator, Career guidance and Nature Club

Extension activities of the Department

The major extension activities conducted by the department in the last five years

- Chemistry Exhibition: A six day chemistry exhibition was conducted by the Department at M. A. College of Engineering in association with the Golden Jubilee Celebrations of the Engineering College with 52 experiment demonstrations including ice bomb, liquid nitrogen, alcohol distillation unit; elephant toothpaste, magic sketch, Mullaperiyar Dam Model, Magic flower, rainbow etc. the exhibition was well received by

the audience as evidenced by the feedback form.

- Newsletter Publication (C-news)
- Department of chemistry publishes newsletter, C news, twice in a year comprising the important events and news of the department and current issues.
- Petition against Endosulfan.
- A discussion on the production, use and toxic effects of pesticides like endosulfan was conducted under the joint auspices of the Dept. of Chemistry and the Nature Club of the college. A Petition was submitted through online to Mr. Jayaram Ramesh, Hon'ble Minister for Forest and Environment to ban the production, distribution and use of such hazardous chemicals.

### 35. SWOC analysis of the department and Future plans

#### Strength of the Department:

- Excellent faculty with nine Ph.D holders who are actively involved in institutional and social responsibilities
- Recognized research centre of M. G. University
- 20 research publications in international journals in the last five years
- So far published 4 scientific books and 146 research papers
- Produced 2 Ph. Ds
- Well equipped B.Sc. and M.Sc.labs
- A Computational Chemistry lab with internet facilities
- Excellent library facilities

#### Weakness:

- Falling standards of students due to entry level constraints

#### Opportunity:

- Extensive research in various fields like catalysis, organic synthesis, rubber chemistry, inorganic complexes
- Add on courses
- Major and minor research projects
- International and national seminars and workshops

#### Challenges:

- Compelled to use hazardous chemicals as per curriculum.
- Competition from self financing professional colleges

#### Future Plans:

- To elevate the Department as the centre of excellence
- Collaboration with industries and research institutes

- Interaction of students with eminent personalities by organizing national and international seminars in relevant subjects
- Remedial teaching for students of the department with lower performance level
- Efforts to reduce carbon foot print

## DEPARTMENT OF PHYSICS

1. Name of the department : Physics
2. Year of Establishment : 1959
3. Names of Programmes /  
1. Courses offered : BSc, MSc and Ph.D.
4. Names of Interdisciplinary courses and the departments/units involved  
  
The Department offers open course (Energy and Environmental Physics) 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 M G University for the UG Economics Programme ( 6 semester)
  - The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG Economics ( 4 semester).
6. Participation of the department in the courses offered by other departments  
  
The Department offers a Complimentary course for B.Sc Chemistry, and Mathematics programmes and an open course (Energy and Environmental Physics) for fifth semester CBCSS Undergraduate students of the College.
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

	Sanctioned	Filled
Professors	-	-
Associate Professors	2	2
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	No. of Years of Experience
Dr. Benoy M D	M. Sc, Ph. D	Asso. Prof.	Thin Film	21
Smt.SmithaThankachan	M. Sc, M. Phil	Asst. Prof. & Head	Nano magnetic materials	9
Smt.Deepa S (on FIP Leave)	M. Sc, M. Phil	Asst. Prof.	Gas Sensors	5.5
Sri.Francis Xavier P A	M. Sc	Asst. Prof.	Material Science	4.5
Dr.Riju C Issac	M. Sc, Ph.D	Asst. Prof.	Plasma studies	3.5
Sri.Krishna Prasad	M. Sc	Asst. Prof.	Material Science	3.5
Smt. Jassi J	M. Sc, M.Phil	Asst. Prof.	Material Science	3.5
Sri. Gopakumar C K (FIP Substitute)	M Sc	Asst. Prof.		1

11. List of senior visiting faculty- Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

Programme	Percentage of lecture classes by temporary faculty	Percentage of practical classes by temporary faculty
UG	15.6%	12.5%
PG	6.25%	0%

13. Student -Teacher Ratio (programme wise)

- BSc Physics-24:1
- M Sc Physics-6:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Technical staff	6	6
Administrative staff	-	

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification
Dr. Benoy M D	M. Sc, Ph. D
Smt.SmithaThankachan	M. Sc, M. Phil
Smt.Deepa S (on FIP Leave)	M. Sc, M. Phil
Dr.Riju C Issac	M. Sc, Ph.D
Smt. Jassi J	M. Sc, M.Phil

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

4 Minor and 2 Major research projects of UGC.

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

No	Name of the Faculty	Minor / Major	Funding Agency	Amount	Status
1	Dr. Binoy M D	Major	UGC	5,23,000	Completed
2	Dr. Boben Thomas	Major	UGC	9,60,300	Completed
3	Deepa S	Minor	UGC	52,000	Completed
4	Francis Xavier P A	Minor	UGC	90,000	On-going
5	Jassi J	Minor	UGC	1,31,000	On-going
6	Krishnaprasad P S	Minor	UGC	1,50,000	On-going

18. Research Centre /facility recognized by the University

Research Centre of Physics recognized by Mahatma Gandhi University, Kottayam

19. Publications:

a) Publication per faculty- 5.5

b) Number of papers published in peer reviewed journals (national /international) by faculty and students –44

- Spray deposited Mg-doped SnO<sub>2</sub> thin film LPG sensor: XPS and EDX analysis in relation to deposition temperature and doping, Boben Thomas , BenoySkariah, Journal of Alloys and Compounds 625(2015) 231-240 Source Normalized Impact per Paper (SNIP): 1.657 SJR): 1.181 Impact Factor: 2.726 ISSN: 0925-8388
- Gas sensing properties of magnesium doped SnO<sub>2</sub> thin films in relation to AC conduction, S.Deepa,AnishaJoseph,BenoySkariah ,and Boben Thomas, Citation:AIP Conference Proceedings 1576, 49 (2014); doi: 10.1063/1.4861977
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- Structural and Surface Analysis of B:SnO<sub>2</sub> Thin Films for Gas Sensing. BenoySkariah and Boben Thomas, Journal of Pure Applied and Industrial Physics, 2014, Vo.4(3):Pg 99-109
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- Effect of rare earth doping on structural, magnetic, electrical properties of magnesium ferrite and its catalytic activity , SmithaThankachan, Manju Kurian, Divya S Nair, Sheena Xavier, E M Mohammed, International Journal of Engineering Science and Innovative Technology (IJESIT) Volume 3, Issue 4, July 2014 Impact Factor—1.913
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- G G Manahan, E Brunetti, C Aniculaesei, M P Anania, S Cipiccia, M R Islam, D W Grant, A Subiel, R P Shanks, R C Issac, G H Welsh, S M Wiggins, D A Jaroszynski. New Journal of Physics 10/2014; 16(10):103006. · 4.06 Impact Factor
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- Article: Gamma-rays from harmonically resonant betatron oscillations in a plasma wake. Silvia Cipiccia, Mohammad R. Islam, Bernhard Ersfeld, Richard P. Shanks, Enrico Brunetti, Gregory Vieux, Xue Yang, Riju C. Issac, Samuel M. Wiggins, Gregor H. Welsh, Rachel Montgomery, Gary Smith, Matthias Hoek, David J. Hamilton, Nuno R. C. Lemos, Dan Symes, Pattathil P. Rajeev, Val O. Shea, M. Dias, Dino A. Jaroszynski. *Nature Physics* 09/2011; 7(11):867-871. · 19.35 Impact Factor
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- P S Krishnaprasad et al., Buffer assisted, domain matched epitaxial growth B<sub>2</sub>N thin films, *J. Alloys. Comp.* (2013)
- P S Krishnaprasad et al., Domain matched epitaxial growth of BiZnNb thin films for optoelectronic applications, *Mat. Res. Soc.* (2013)

- High tunability of pulsed laser deposited Ba<sub>0.7</sub>Sr<sub>0.3</sub>TiO<sub>3</sub> thin films on perovskite oxide electrode, R. Reshmi, A.S.Asha, P.S Krishnaprasad, M. K. Jayaraj, M.T.Sebastian, Journal of Alloys and Compounds, 509 6561–6566, (2011)

c) Listed in International database:

d) Monographs: Nil

e) Chapter in Books: Nil

f) Books edited: Nil

g) Books with ISBN/ISSN numbers:

h) Citation Index:

i) SNIP: 0.094 to 6.310

j) SJR: 0.033 to 17.174

k) Impact Factor: 0.4272 to 18.423

l) h Index: 2-20

20. Areas of consultancy and income generated

XRD analysis facility is provided for other research institutions and Rs. 1798/ is generated by consultancy.

21. Faculty as members in

- a) National committees b) International Committees c) Editorial Boards.

Dr. Binoy M D

- Reviewer: IOP Publishing
- Reviewer: DAE- Solid State Physics Symposium

Dr. Riju C Issac

- Reviewer: New Journal of Physics, Applied Physics Letters, Journal of Applied Physics etc.
- Thesis examiner: University of Pune, Cochin University of Science & Technology.
- Life Member: Indian Laser Association (ILA)
- Life members: Plasma Science Society of India (PSSI)
- Life Member: Indian Association of Physics Teacher (IAPT)

Mr. Krishna Prasad

- Member : SPIE- society of photo-optical instrumentation engineers
- Member : ECS- Electrochemical Society



22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/programme

Almost 100% of UG and PG students have done in-house projects

- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies.

Outside the institution i.e.in Research laboratories/Industry/ other agencies 1%

23. Awards / Recognitions received by faculty and students - Nil

Dr.Riju C Issac got patent for invention of Tunable Converging Gamma Ray Beam. Publication number: WO2014006427 A1 dated January 9<sup>th</sup>,2014.

Students:

- Mr. Justin Jose (BSc Physics 2008 &MSc Physics 2010) won World Arm Wrestling Championship held in Spain 2012.
- Mr. Vishnu Prasad S (BSc Physics 2011 and MSc Physics 2013) represented India in Commonwealth Games for Chess championship

24. List of eminent academicians and scientists / visitors to the department

- Padmabhushan B. Sinha, the HomiBhabha Chair Professor of the Variable Energy Cyclotron Centre
- P Asthana, Department of Science and Technology
- D. Bora, Department of Science and Technology
- Dr. M. Nethaji, Department of Inorganic and Physical Chemistry, IISc. Bangalore
- Dr. P. A. Joy, CSIR-National Chemical Laboratory Pune 41100
- Dr. R. Nandini Devi, CSIR-National Chemical Laboratory Pune 41100
- Dr.C.Sudarsanakumar, Professor, School of Pure and Applied Physics, Mahatma Gandhi University
- Dr. K. Indhulekha, School of Pure and Applied Physics, M. G. University, Kottayam

25. Seminars/ Conferences/Workshops organized & the source of funding

- a) National

UGC sponsored seminar on “Fundamentals of Powder Diffraction and Microstructural Characterization of Materials” (2011)

b) International:

7<sup>th</sup> International conference on “Frontiers of Plasma Physics and Technology” was organized on 13-17 April 2015.

26. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
<b>B Sc Physics</b>					
2010	622	21	7	14	82
2011	938	21	10	11	85
2012	1175	32	16	16	Result awaiting
2013	1656	40	13	27	Ongoing
2014	1324	37	21	16	Ongoing
<b>M Sc Physics</b>					
2010	-	16	3	13	67
2011	-	14	6	8	21
2012	825	14	2	12	36
2013	917	15	2	13	Ongoing
2014	911	14	1	13	Ongoing

\*M = Male \*F = Female

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 2011 2012 2013 2014	100% 100% 95% 100% 100%	5%	0%
MSc 2010-2014	100%	0%	0%

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Two students have qualified NET, One has entered to defence service

No	Month	Name	Register Number
1	June 2011	Leena P. K	507968
2	December 2012	Jijo Thomas	508096

29. Student progression

Student progression	Against % enrolled
UG to PG	75-80%
PG to M.Phil.	7%
PG to Ph.D.	7%
Ph.D. to Post-Doctoral	0%
Employed	
•Campus selection	7%
•Other than campus recruitment	35%
Entrepreneurship/Self-employment	5%

30. Details of Infrastructural facilities

a) Library:

3716 Books in M P Varghese Library. In addition, multiple copies of reference books are available at department library.

b) Internet facilities for Staff & Students

Computers with Broad band and Wi-Fi internet connection is provided for students and staff at Knowledge Centre arranged in the department (3 Desk tops, 3 Laptops and one netbook)

c) Class rooms with ICT facility:

- First year PG class is provided with a laptop and projector
- Second year PG class is facilitated with Smart Board and laptop
- LCD projector is provided in third year UG class

d) Laboratories:

B Sc Physics Lab, B. Sc Electronics Lab, M Sc spectroscopy Lab and M Sc Electronics Lab

31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	22	33	35	12	2
2	Higher education scholarship	4	1	0	0	0
3	Central sector scholarship	1	0	4	4	0
4	C H Muhammed Koya scholarship	12	5	4	4	0
5	Suvarana Jubilee Scholarship renewal	0	0	1	1	0
6	Hindi scholarship renewal	0	1	0	0	0
Total		39	40	44	21	2

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

- UGC-NET coaching is provided for PG students
- Periodical workshop and seminars are conducted every year

33. Teaching methods adopted to improve student learning:

Regular class test, assignments and seminars are given to students. Periodical evaluation of students by discussion by faculties help to find strength and weakness of each students.

34. Participation in Institutional Social Responsibility (ISR) and Extension:

Both UG and PG students involve actively in extension programmes conducted by NCC, NSS and various clubs. Department is having Physics Association with all students of the department and one faculty member as teacher in charge to conduct various co-curricular activities in department

35. SWOC analysis of the department and Future plans

Strengths

- Competent teaching faculty
- Department Library with multiple copy of books
- Reading Room and department Computer centre
- Well equipped laboratories
- Physics Association activities

### Weaknesses

- No smart class in UG class
- Under utilization of library
- Inadequate fund for extra curricular activities

### Opportunities

- Strengthening ICT facility
- Community extension programmes
- Collaboration with National and International Organization
- Consultancy services
- Organize International seminars
- Imparting value education

### Challenges

- Falling students standard due to entry level constraints
- Competition from self financing professional colleges
- Procedure hurdles in the appointment of staff

### Future Plans

- New experimental setups.
- Procure multiple copies of reference books in MSc and BSc syllabus
- Arrange one hour after the class time for Physics Association activities and extra classes
- Procure sophisticated instruments

## DEPARTMENT OF ECONOMICS

1. Name of the department : Economics
2. Year of Establishment : 1957
3. Names of Programmes / Courses offered : Ph. D in Economics, PG in Economics, and BA in Economics
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
  - The Choice Based Credit and Semester System (CBCSS) of M G University for the UG Economics Programme ( 6 semester)
  - The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG Economics ( 4 semester).
6. Participation of the department in the courses offered by other departments  

The Department offers a Complimentary course for B.A History and B A Sociology programme and an open course (Environmental Economics) for fifth semester CBCSS Undergraduate students of the College.
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

Name of Post	Sanctioned	Filled
Professors	-	-
Associate Professors	3	3
Asst. Professors	5	4

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.Chitra J.	M.A.M.Phil, Ph.D	Asso.Prof.	Macro Economics	26
Dr.M.S.VijayaKumari	M.A. M.Phil,Ph.D	Asso.Prof.	International Economics	23
Dr. K. Manjula	M.A. M.Phil, Ph.D	Asso.Prof.	Public Finance	21
Dr.Igy George	M.A. M.Phil, Ph.D	Asso.Prof.	Development Economics	13
Sri.Eldhose A.M	M.A. M.Phil	Asso.Prof.	Modern Banking	10
Ms.Sheeba Abraham	M.A. B.Ed	Asso.Prof.	Agricultural Economics	7
Ms.Puthuma Joy	M.A. B.Ed	Asso.Prof.	Micro Economics	2.5

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)

- BA Economics- 30:1
- MA Economics - 7:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification
Dr.Chitra J.	M.A.M.Phil, Ph.D
Dr.M.S.VijayaKumari	M.A. M.Phil,Ph.D
Dr. K. Manjula	M.A. M.Phil, Ph.D
Dr.Igy George	M.A. M.Phil, Ph.D
Sri.Eldhose A.M	M.A. M.Phil

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

2 Minor and 1 Major research projects of UGC.

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Name of the Faculty	Projects funded by UGC	Grants received
Dr.Manjula.K	Major	9,67,600
Ms.Sheeba Abraham	Minor	55,000
Ms.Puthuma Joy	Minor	90,000
Total		11,12600

18. Research Centre /facility recognized by the University -

The Department has been recognized as the M.G.University Research Centre in Economics in the year 2006 vide the university order no. N.AC.AVI/2/291/RC/2003,dated 24.04.06

19. Publications:

a) Publication per faculty- 1.38

b) Number of papers published in peer reviewed journals (national /international) by faculty and students –

Sl.No	Name of the author	Name of the article	National/International	Journal
1	Dr.Leena George	Food Inflation is here to stay	National	Facts for you, 31(7) ,2011
2	Dr.Leena George	Financial inclusion and the kisan credit cards:A macro level analysis of the trend and variation across banks and regions	National	Cooperative Perspective, 49 (1) ,2014
3	Dr.K.Manjula	Impact of Development Induced Displacement in Kerala	International	Journal of Internal Displacement, 3(1)pp.1-13, 2013



4	Dr.K. Manjula	Land Acquisition Rehabilitation and Resettlement Bill 2011- A challenge to development?	International	Social Action, 62(2)pp.137-149, 2012
5	Dr.Igy George	Modified Importance – Performance analysis of Airport facilities – A Case study of Cochin International Airport Limited	International	ISOR Journal of Humanities and Social Sciences Vol. No.X, Issue 10,e-ISSN:2279-0837, 2013
6	Sri.EldhoseA.M.	Health Expenditure and Health Care Burden of Unorganized Workers in Kerala- A Perspective Analysis	International	IFRSA Business Review Vol. No. 4 Issue.4 ISSN 2249-8168, 2014
7	Sri.EldhoseA.M.	Role of Health Insurance Schemes to Mitigate Health Care Burden of Unorganized Workers – An Analytical Study	International	IFRSA Business Review Vol.4 Issue.4 ISSN 2249-8168, 2014
8	Sri.EldhoseA.M.	Intensity of Health problems and Health hazards of the workers in the Unorganised Sector- A theoretical Analysis	International	Academic Research in Science, Engineering Art and Management Vol.2 Issue I ISSN 2349-4808, 2015
9	Sri.EldhoseA.M.	Health Status and Health Care Expenditure in India- An Analysis with focus on Kerala State	International	Academic Research in Science, Engineering Art and Management Vol.2 Issue I ISSN 2349-4808, 2015
10	Sri.EldhoseA.M.	Structure of Unorganised Sector in India-An Analysis with focus on Kerala	International	IFRSA Business Review Vol.5 Issue I ISSN 2249-5444, 2015
11	Ms.Sheeba Abraham	A case study analysis of the Impact of Paddy land conversion in Kerala	International	IFRSA Business Review Vol.5 Issue I ISSN 2249-5444, 2015

c) Listed in International database: Nil

d) Monographs: Nil

e) Chapter in Books: 3

Sl.No	Name of the Author	Title of the book	Publisher
1.	Dr.Igy George	Role of Information and Communication Technology on Women Empowerment-A micro level study	SERIALS Publications ISBN-978-81-8387-539-42012
2.	Dr.Igy George	Joint Liability Groups, A catalyst for Women Empowerment-A Case study of Angamaly Municipality	Novel Corporation, Chennai ISBN: 978-81-906512-1-92012
3.	Dr. Igy George	Analysis of the competitiveness of the three international airports in Kerala using Fuzzy Linguistic Approach	Bloomsburry publishing India Pvt. Ltd ISBN:978-81-924302-2-52012

f) Books edited: 1

Sl.No	Name of the Author	Title of the book	Publisher
1.	Dr.M.S.Vijayakumary	International Finance	Kalyani Publishers, New Delhi ISBN-2010

g) Books with ISBN/ISSN numbers: 4

h) Citation Index: Nil

i) SNIP: Nil

j) SJR: Nil

k) Impact Factor: Nil

l) h Index: Nil

20. Areas of consultancy and income generated -Nil

21. Faculty as members in

- b) National committees b) International Committees c) Editorial Boards.

Dr. Leena George:

- Appointed as the Principal of Mar Athanasius College, Kothamangalam on 1<sup>st</sup> November 2011
- Worked as a Jury Member for the CAG Essay Competition -2011 conducted by the Comptroller and Auditor General of India
- Surprise Inspector of AISSE/ AISSCE, March 2006
- Subject Expert for the selection of candidates to the post of Assistant Professor in Economics of Pavanatma College, Murickassery, December 2010

- Subject Expert for the selection of candidates to the post of Assistant Professor in Economics of Sree Sankara College, Kalady, February 2011
- Ph.D thesis was qualified for publication grant of Indian Council of Social Science Research in 1999
- Served as a member of Expert Committee of UGC for extending autonomous status to Government Arts College Coimbatore in February 2012

Dr. M S. Vijayakumari:

- Appointed as the subject expert in Economics, Inspection Commission constituted for applying P.G Course in Economics, St Joseph College, Moolamattom, September 2013
- Appointed as the Member of PG Board of Studies, M.G.University, Kottayam, in March 2014
- Appointed as the Member of UG Board of Studies, M.G.University, Kottayam, in August 2014
- Appointed as subject Expert, in the selection of candidates for FIP, Department of Economics, New Man College, Thodupuzha, in 2014
- Subject Expert for the selection of candidates to the post of FIP Guest Lecturer, in Economics of New Man College, Thodupuzha, in 2014
- Appointed as the Question paper setter for the PG course, in the subject International Economics, Department of Applied Economics, Cochin University of Science and Technology, Cochin, in January, 2015.

## 22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/programme - Nil
- c) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies. :

Name of the student	Title of the project work	MA/BA	Agency under which the project has been carried out
Junaid V.M	Economic Benefits and Environmental Costs of Plywood Industries in Kerala-A micro Level Study in Asamannoor Panchayath	MA	Kerala Chamber of Commerce and Industry March 2013

## 23. Awards / Recognitions received by faculty and students - Nil

24. List of eminent academicians and scientists / visitors to the department

SL. No	Name of the Academician	Designation
1	Dr. Visakha Varma	Retired Associate Professor, Department of Economics, Maharajas College, Ernakulam
2	Dr. Visakha Varma	Retired Associate Professor, Department of Economics, Maharajas College, Ernakulam
3	Dr.K.M.H.Iqbal	Faculty, KEEDS, Kalamassery, also Trainer Ministry of Youth Affairs, Government of India
4	Aybin Alexander and Deepak C Joy	H.R Trainers, "Success Mine", Muvattupuzha
5	Sri. Jibi Varghese	System Professor, FISAT, Angamaly
6	Sri. Jibi Varghese	System Professor, FISAT, Angamaly
7	Aybin Alexander Deepak C Joy	System professor, FISAT, Angamaly
8	Dr. K.C Sankaranarayanan	Former Head of the Department of Applied Economics, CUSAT, Cochin
9	Dr. D. Shyjan	Assistant Professor, Department of Economics, John Mathai Centre, Thrissur
10	Prof. Shambu Namboothiri	Associate Professor, Sree Sankara College, Kalady
11	Dr.Visakha Varma	Retired Associate Professor, Department of Economics, Maharajas College Ernakulam
12	Prof.Dr. K.P Mani	Associate Professor, John Mathai Centre, Thrissur
13	Dr. Geetha	Associate Professor, Department of Economics, S.S College, Kalady
14	Dr. K.M.H. Iqbal	Faculty, KEEDS Kalamaseery
15	Dr. Visakha Varma	Retired Professor, Maharajas College, Ernakulam
16	Prof. Dr. K.P Mani	Professor, John Mathai Centre, Thrissur
17	Dr. Visakha Varma	Retired professor, Maharajas College, Ernakulam
18	Dr. Martin Patrick	Former Associate professor, Maharajas College, Ernakulam
19	Dr. D. Narayana	Faculty, Department of Economics, CDS, TVM
20	S. Gopakumar	Gulati Institute of Finance and Taxation, TVM
21	Dr. C.P Chandrasekhar	Professor in Economics and Planning, JNU, Delhi

25. Seminars/ Conferences/Workshops organized & the source of funding

SL.No	Date	National/State level	Topic of the seminar
1	8 <sup>th</sup> & 9 <sup>th</sup> February 2012	National,UGC	Goods and Service Tax- A Threat to the Autonomy of States
2	7 <sup>th</sup> & 8 <sup>th</sup> March 2013	National,UGC	Foreign Direct Investment in Multi-Brand Retail Sector in India- Issues and Challenges Ahead
3	23rd September 2014	State Level	Scope for Urban Agriculture in Kerala- A Move towards food sustainability

International Seminar: Nil

26. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
<b>BA Economics</b>					
2010	980	43	25	18	78
2011	989	42	20	22	68
2012	1179	45	25	20	Result Awaiting
2013	1069	53	17	36	Ongoing
2014	1222	49	18	31	Ongoing
<b>M A Economics</b>					
2010	-	15	3	12	82
2011	-	10	3	7	67
2012	299	15	3	12	67
2013	265	12	3	9	Ongoing
2014	258	14	7	7	Ongoing

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
BA Economics	99	1(Lakshadweep)	-
M A Economics	100	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

List of students who Qualified NET since 2010

Year	Month	Name	Register Number
2010	December	Sruthy K.N	16010532
2011	June	Siamlal T.A	32010285
2011	December	Vinitha K.B	16010156
2012	June	Dannis Joy	16010791
2012	December	V.M. Junaid	

29. Student progression

Student progression	Against % enrolled
UG to PG	24
PG to M.Phil.	3
PG to Ph.D.	3
Ph.D. to Post-Doctoral	NIL
Employed • Campus selection • Other than campus recruitment	NIL
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities

a) Library: 5832 books in the College library

b) Internet facilities for Staff & Students:

The department has internet facility in all the PG and UG Class rooms and in the research centre.

d) Class rooms with ICT facility :

All UG and PG class rooms under the Department has computers and LCD projectors.

e) Laboratories:

Research Lab-The Research lab of the Department has six desktops, a scaner, a copier and a printer. Wi-Fi facility is available and the research centre has its own original version of the SPSS software programme. It has a library with 50 books mainly on research methods and statistical techniques. Eight journals of the national and international repute are subscribed during the academic year 2010-15.

31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	33	43	35	18	7
2	Higher education scholarship	10	3	0	0	0
3	Central sector scholarship	1	0	6	5	0
4	C H Muhammed Koya scholarship	14	4	9	9	0

5	Suvarana Jubilee Scholarship renewal	3	3	0	0	0
Total		61	53	50	32	7

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

Seminars are conducted regularly and power point presentations on these seminars give the students an exposure to ICT teaching and learning.

33. Teaching methods adopted to improve student learning:

The Department faculty is familiar with the use of computer aided teaching methodology. They often prepare teaching notes and make efforts to familiarize students by using these methods. Seminars are conducted regularly and power point presentations on these seminars give the students an exposure to ICT teaching and learning. We use the demo versions of software programmers in teaching economics like WinCom.

34. Participation in Institutional Social Responsibility (ISR) and Extension:

- Village Adoption, Pinnavoorkudy Tribal Belt, Kothamangalam conducted Socio- Economic Survey in the village under the leadership of the Department.
- Adopted 1.5 acres of land in the college Campus. It is named as M.P Varghese Tree Park under the leadership of the department, Medicinal Plants and Trees were planted in the tree park. The Department intends to covert this place into a centre for Organic Farming in future.

35. SWOC analysis of the department and Future plans

Strength:

- Experienced Faculty with 5 Ph.D holders and 1 M.Phil holder.
- 20 Research Scholars in the Department of which 15 are college lecturers.
- All junior teachers NET qualified.
- One major project completed.
- One minor project completed
- One minor project ensuing.
- 4 Books published.
- 9 Articles in International Journals and 2 articles in National journals

#### Opportunity:

- Good infrastructural Facility
- Highly enriched Library

#### Weakness:

- Poor quality of student intake.
- High absenteeism among students

#### Challenges

- To overcome lack of technological skill among the staff members by using research friendly software packages
- To enrich soft skill talents among the students

#### Future Plans

- To initiate inter-institutional linkages with national research institutes
- To promote research oriented activities among the staff and students in the department
- To organise more extended socio economic activities in the department



## DEPARTMENT OF ENGLISH

1. Name of the department : English

2. Year of Establishment : 1956

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

The Department offers open course English for Careers for fifth semester CBCSS Undergraduate students of the College.

5. Annual/ semester/choice based credit system (programme wise)

Programme	Pattern
B. A. English Language and Literature	Semester - Choice Based Credit System
M.A. English Language and Literature	Semester - Choice Based Credit System
Ph.D	Annual (Course Work is offered by the Dept.)

6. Participation of the department in the courses offered by other departments

The Department offers an open course English for Careers for fifth semester CBCSS Undergraduate students of the College.

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: 12

Name of Post	Sanctioned	Filled
Professors	-	-
Associate Professors	3	3
Asst. Professors	9	9

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	No. of Ph.D. Students guide d for the
Paul Mathew	M.A.	Asso.Prof. & HOD	Linguistics	30	-
K.P.Mary	M.A.	Asso.Prof.		28	-
Dr. Jose George	M. Phil Ph.D	Asso.Prof	Drama, Theatre and Performance studies	21	1
Anu George	M.A. B.Ed	Asst.Prof.	Eco Criticism	6	-
Aswathy Balachandran	M.A.	Asst.Prof.	Eco Criticism	4.5	-
Alphonsa C.A.	M.A.	Asst.Prof.	Feminism	4	-
Minnu James	M.Phil	Asst.Prof.	Cultural Studies	4	-
Dr. Anjaly Abraham	Ph.D	Asst.Prof.	Black Literature	4	-
Jessy Varghese	M.A. B.Ed	Asst.Prof.	Gender Studies	3	-
Justina George	M.A. B.Ed	Asst.Prof.		2	-
Sini K.S.	M.A. M.Ed	Asst.Prof.	Dalit Literature	2	-
Reeba Thomas	M.A. B.Ed	Asst.Prof.		2	-

11. List of senior visiting faculty

- Prof. Baby M. Varghese
- Dr. D. Radhakrishnan Nair

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

- Every year 7 hrs. is vacant for which a permanent faculty cannot be appointed as per the Govt. regulations. Hence temporary faculty handles 7 General English classes. ie., 3.5% of lectures are delivered by the temporary faculty.

13. Student -Teacher Ratio (programme wise)

- B A English: 34:1
- M A English:7.5:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification
Dr. Jose George	M. Phil. Ph.D
Anu George	M.A. B.Ed
Minnu James	M.A. M.Phil
Dr. Anjaly Abraham	M.Phil Ph.D
Sini K.S.	M.A. M.Ed

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.

9 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
Alphonsa C.A.	The Gender Wand: Sexist Constructs in the Harry Porter Series.	1,00,000
Minnu James	Visual/verbal space: A Study of Advertisements in Indian Life Style Magazines	1,00,000
Anjali Abraham	Political Expressions in the Novels of Bhagavaticharan Verma	1,00,000
Jessy Varghese	The Decoding of Gender and Language in Poetic Discourses: An Analysis of Tara Patels 'Single Women'	1,00,000
Anu George	Literature and Environment: An	40,000

	Ecocritical Reading of Mahasweta Devi's 'Arjun'.	
Reeba Thomas	A Time Tunnel to Historical Rediscovery: Historiographic Metafiction in the Novels of Margaret Atwood	40,000
Aswathy Balachandran	Echoing the Ecological Concerns in the Vedas: A Study on A K Ramanujan's Poetry	1,00,000
Justina George	Exploring the Underlying Patterns of Human Mind: A Psychoanalytic Study of Alice Munro's Short Stories.	1,30,000
Sini K S	Rising From Flames: A Panoramic View of Dalitayam in Indian Epics	1,45,000

18. Research Centre /facility recognized by the University

Department is an approved Research Centre affiliated to M.G. University. Actualised in July 1991, the Centre has to its credit 25 Ph. Ds. Currently 12 research scholars are pursuing their Ph.D in the centre.

19. Publications:

a) Publication per faculty:

Number of papers published in peer reviewed journals (national /international) by faculty and students :

Aswathy Balachandran

- "A. K. Ramanujan's Ecology: An Eco - critical Reading", *Research Lines* (ISSN 0975-8941), Devamatha College, Kuravilangad, Volume 1V No. 1-A, Jan-June 2011.
- "God as the Inner Voice: The Dilemma of the Indian Youth in Chetan Bhagat's *One Night @ the Call Center*", *Research Lines* (ISSN 0975-8941), Devamatha College, Kuravilangad, Volume 1V No 2, Dec 2011.

Minnu James

- "Holding Empty Names: A Study of *My Name is Red* and *The Name of the Rose*", *Indian Journal of Post Colonial Literatures* (ISSN 0974-7370), Newman College, Vol.12.2.dec 2012.
- "Questioning Culture and Ideology in *The Name of the Rose*", *Indian Journal of Post Colonial Literatures* (ISSN 0974-7370), Newman College, Vol.12.2.dec 2014.

Sini K S

- “The Angst of Becoming: Obi Okonkwo in Chinua Achebe’s *No Longer At Ease*”, *Journal of Teacher, Learner and Society* (ISBN 978 93 81423 00 4). M A College of Education, Thiruvithamcode, Jan- June Vol. 1, No. 1, 2012.
- 
- “Return of Warri(o)r: A Probe into the Corridors of Mollywood”, *Indian Journal of Post Colonial Literatures* (ISSN 0974-7370), Newman College, Vol.14.2.dec 2014.

Justina George

- “*Tristram Shandy: An Experimental Novel*” *Research Scholar* (ISSN 2249-6696), March Vol.4, No. 1, 2014

Alphonsa C A

- “Dispersed Identities and the Search for Home: A Postcolonial Reading of V.S. Naipaul’s *Magic Seeds*”, *Teresian Journal of English Studies* (ISSN 09756302), Vol. 4, No.1, Oct 2012.

Jose George

- Vayalanatakangalude Aadarabhoomika. *Keli: The Official Journal of Kerala Sangeeta Nataka Academy*. October 2011- January 2012.

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

Monographs: Nil

Chapter in Books:

Jose George: “Thulasivanam”. *Vayala: Natakaprabhashanangal*. Ed. E T Varghese. Rangachethana. Trissur.

Books Edited: Nil

Books with ISBN/ISSN numbers with details of publishers: Nil

Citation Index: Nil

SNIP: Nil

SJR: Nil

Impact factor: Nil

h-index: Nil

20. Areas of consultancy and income generated:

Name of Faculty	Consultancy	Income
Ms. Minnu James	Dissertation Editing, Jubilee Mission Hospital	Rs. 2000
Ms. Sini K.S.	Resource Person, NET, Maharajas College	Rs. 3000
	Selection Member, ASAP	Rs. 2000

21.

Faculty as members in

- a) National committees b) International Committees c) Editorial Boards.

Name of the Faculty	Committee
Aswathy Balachandran	Member, OSLE
Anu George	Member, AIACHE and TREE

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 and students

Name of the Student	Awards / Recognitions	Event
Nizamudeen Akbar	II Prize	Intercollegiate Quiz Competition organised by Cochin Chamber of Commerce
Arjun Unnikrishnan	III Prize	'Mock Press' in Sanskriti , organised by M. A. College of Engineering, March 2013
Alisha Shaji	A Grade	Group Folk Dance at M.G. University Youth Festival 2013
	II Prize	'Short Story' writing organised by M. A. College of Engineering, 2013
Anjana Unnikrishnan	II Prize	'Duet Song' in Sanskriti , organised by M. A. College of Engineering, March 2013 'Voice of Sanskriti 2013'
Afrah Ali	II Prize	'Short Story' writing at

		M.G.University Youth Festival 2014
Tasha Rose Mary George	I Prize	Inter Collegiate Group Dance Competition organised by Christ Knowledge City, 2014
Christina Savio	I Prize	‘Poster Making’ held at St. Thomas College, 2014
	II Prize	‘Debate Competition’ in the Inter Collegiate Techno-Cultural Fest organised by Christ Knowledge City, 2014
	II Prize	‘Start-Action Play’ organised as part of ‘Xav Virtuoso’ by St. Xavier’s College, Aluva
Arunima Cheriyan	I Prize	‘Poster Making’ held at St. Thomas College, 2014
Anju Jiffri	I Prize	‘Personality Context’ held at Ilahia College of Engineering
Basima Ali	III Prize	‘Personality Context’ held at Ilahia College of Engineering

24. List of eminent academicians and scientists / visitors to the department

- Prof. Baby M. Varghese
- Dr. D. Radhakrishnan Nair
- Veteran journalist and media person Sasi Kumar
- Dr. G. Rangarajan

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National: Nil

b) International: Nil

State Level Seminars:

- A state level seminar “Literature and Media” was organised by the department on 2010. Veteran journalist and media person Sasi Kumar inaugurated the academic venture. He enlightened the gathering on how to set standards discarding the notion text alone is ‘pure and informative’.

- A state level seminar on “Text, Translation and Transcreation” was organized by the Department on 17- 12-2014. Dr. Joseph Koypilly and Dr. Priya Jose Chaired the sessions.

25. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
BA English					
2010	816	43	18	25	88
2011	1106	39	23	16	89
2012	1486	45	17	28	Result awaiting
2013	1703	51	13	38	Ongoing
2014	1540	51	13	38	Ongoing
M A English					
2010	-	19	3	16	85
2011	-	12	1	11	75
2012	507	15	6	9	83
2013	592	15	4	11	Ongoing
2014	490	15	2	13	Ongoing

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.A. Programme	99%	1%	-
M.A. Programme	99%	1%	-



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Sl. No	National Level/State Level	Year	Reg. No.
1	NET – Asna Ali	March 2013	16300897
2	K-TET-Sijo Sebastian P.S	October 2013	
3	NET - Aparna Rajan	June 2012	16302426
4	NET - Divya George	June 2012	16300123
5	NET - Christin Shaji	June 2014	16300547
6	NET & JRF Sijo Sebastian P.S.	June 2014	16300584
7	NET & JRF - Vishnu Priya	June 2014	46300040

#### Student Progression

Student progression	Year	%
UGto PG	2010	69
	2011	61
	2012	60
	2013	84
	2014	-
PGto Ph.D.	6 nos.	-
Employed -Campus selection	2011	1
	2014	3
Other than campus recruitment	2010	11
	2011	11
	2012	3
	2013	2
	2014	4
Entrepreneurship/ self employment	2010	3

30. Details of Infrastructural facilities

- a) Library: 7499 books in the College library

The English Language and Literature section in the College Library comprises 25,000 volumes. Departmental library consisting of syllabus oriented books facilitates easy access.

- b) Internet facilities for Staff & Students:

Department has 2 systems, 3 laptops and 2 net books with internet facilities.

c) Class rooms with ICT facility:

II and III year degree classes and I PG class have ICT facility. Smart class is provided for the final year P.G. students.

d) Laboratories:

Department has Language Lab facility which can intake 20 students at a time.

31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	20	29	25	12	3
2	Higher education scholarship	3	1	0	0	0
3	Central sector scholarship	3	1	2	1	0
4	C H Muhammed Koya scholarship	3	0	6	4	0
	Total	29	31	33	17	3

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

- Personality Development and Soft Skills
- Spoken English Class
- Basic English Grammar
- NET Coaching
- Walk with the Scholar

33. Teaching methods adopted to improve student learning

Faculty adopt various teaching methods and instructional aids to suit the topic under discussion.

- Lecture Method
- Discussion Method
- ICT Facilities
- Web based Learning
- E- learning
- Scholar Support Programme
- Seminars, assignments, weekly test papers

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

College has adopted the tribal village Pinavoorkudi. Every year faculty and students provide Spoken English, Basic Grammar, Reading and Composition classes to the students. The students also participate in NSS/NCC, sports and cultural activities.

### 35. SWOC analysis of the department and Future plans

#### Strength

- Committed faculty
- Team spirit and synergy
- Teaching effectiveness enhanced by continuous evaluation
- Growing demand for programmes in English lit.
- Research centre with 25 Ph.Ds and 12 scholars currently pursuing research
- Department library
- IT infrastructure
- Regular conduct of parent- teacher meetings
- 10 members of the faculty awarded major or minor projects funded by U.G.C.
- Involvement of faculty in curricular and Co-curricular activities
- Language Lab
- 5 star status awarded by the Department of Higher Education for the efficient conduct of the Additional Skills Acquisition Programme of the State Government

#### Weakness

- Non-proximity to the city prompting students to choose colleges in the city as their first option
- Inadequate communication skills of students in English
- Lack of a Research Journal with ISSN
- Financial constraints in organising invited talks and lectures
- Few certificate courses

#### Opportunities

- Vibrant and academically ambitious young faculty
- Majority of the teachers pursuing their Ph.Ds adds to the academic and research atmosphere of the department
- Department has the potential to offer certificate courses in copy editing, journalism and communication skills.
- Being located in a rural area, department can utilise its resources for training students and staff of the various schools and other academic institutions in and around the town.

#### Challenges

- Rural background of the students
- Unfavourable student- teacher ratio

- Lack of campus placements in fields related to English language and Literature

#### Future Plans

- Organise National/International Seminars
- Arrange invited talks and lectures
- Upgrade departmental library
- Start add-on programmes
- Conduct Intercollegiate quiz/debate on literature based topics
- Extend departmental activities to include students of schools and institutions in the surrounding rural areas.

## DEPARTMENT OF MATHEMATICS

1. Name of the department : Mathematics
2. Year of Establishment : 1955
3. Names of Programmes / Courses offered:  
  
M.Sc. Mathematics (PG) and B.Sc. Mathematics (UG)
4. Names of Interdisciplinary 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 M G University for the UG Mathematics Programme ( 6 semester)
  - The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG Mathematics (4 semester).
6. Participation of the department in the courses offered by other departments:
  - The Department offers a Complimentary course for B.Sc. Physics, Chemistry and Statistics UG programmes
  - 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: 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	No. of Years of Experience
Smt. Suja A Jacob	M.Sc, M.Phil.	Asso.Prof.	Pure Maths	31
Smt. Mercy Varghese	M.Sc	Asso.Prof.	Pure Maths	27
Dr. Rajesh K Thumbakara	M.Sc. Ph.D	Asst.Prof.	Discrete& Fuzzy Maths	10
Smt. Latha S Nair	M.Sc. Ph.D	Asst.Prof.	Fuzzy Maths	10
Sri. Bino Sebastian V	M.Sc. M. Tech	Asst.Prof.	Mathematical Morphology	10
Smt. Susan Ray Joseph (on FIP leave)	M.Sc.	Asst.Prof.	Discrete Maths	7
Smt. Mary Elizabeth Antony	M.Sc	Asst.Prof.	Pure Maths	5
Smt. Manju Varghese (Leave vacancy)	M.Sc	FIP Substitute	Pure Maths	1

11. List of senior visiting faculty: Nil
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:
- UG – 20.2%  
PG – 5%
13. Student -Teacher Ratio (programme wise):
- B.Sc Mathematics - 16:1
  - M.Sc Mathematics - 4:1
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

1	Smt. Suja A Jacob	M.Sc. M.Phil.
3	Dr. Rajesh K Thumbakara	M.Sc. Ph.D
4	Dr. Latha S Nair	M.Sc. Ph.D
5	Sri. Bino Sebastian V	M.Sc. M. Tech (Ph.D thesis submitted)

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.

Minor research projects of UGC- 1

Grant received -2,75,000/-

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Sl.No	Name of the PI	Title of the project	Sanctioned Amount	Funding Agency
1.	Dr. Rajesh.K. Thumbakara	Generalized Graph and Fuzzy Graph Structures	2,75,000	UGC
2.	Dr.Rajesh.K. Thumbakara	A Generalized Study of Frames and its application to information theory	1,35,000	UGC
3.	Susan Ray Joseph	A study on solvable and supersolvable groups	1,25,000	UGC
4.	Mary Elizabeth Antony	Introduction of different topological concepts in the theory of frames	1,25,000	UGC

18. Research Centre /facility recognized by the University: No

19. Publications:

a) Publication per faculty : 1.88

Title of research paper	Journal of publication	Impact factor/Citation index/h-index	Year
Dr. Rajesh K. Thumbakara			
Intuitionistic Fuzzy Filters of Intuitionistic Fuzzy Coframes	Journal of Mathematics	-	2013
On Fuzzy ideal of fuzzy frames	Journal of fuzzy mathematics	-	2014
Soft graphs	Gen.Math.Notes	0.6 impact factor	2014
Dr. Latha S. Nair			
Rough Intuitionistic Fuzzy sets in a Lattice.	International Mathematical Forum	0.8 Impact factor Citation 8 h-index 3	2011
Interval valued $(\in, \in \vee q)$ Intuitionistic Fuzzy Sub lattices and Ideals	Advances in Theoretical and Applied Mathematics	-	2011
Rough Fuzzy Ideals in a Lattice.	Journal of Fuzzy systems and Rough Systems.	7citations	2011
Intuitionistic Fuzzy Sublattices and Ideals	Fuzzy Information and Engineering.	-	2011
Intuitionistic Fuzzy Equivalences and Congruences of a lattice	Journal of fuzzy mathematics	-	2012
Operations on intuitionistic fuzzy ideals of a lattice	Journal of fuzzy mathematics Journal of	-	2012
Rough ideals in a Lattice	Mathematics and Applied statistics.	-	2012
Intuitionistic fuzzy sets in a Lattice	Journal of fuzzy mathematics	-	2014
Bino Sebastian			



Gray level co-occurrence matrices: Generalization and some new features	International Journal of Computer Science Engineering & Information technology.	9 citations	2012
Mathematical morphology on hyper graphs using vertex –hyper edge correspondence	ISRN discrete mathematics	-	2014
Morphological filtering on hyper graphs (communicated)	Discrete applied mathematics	0.8 Impact factor	2014
Mary Elizabeth Antony			
Some notes on Second countability in the theory of frames	IOSRJ-M	-	2013

- Number of papers published in peer reviewed journals (national /international) by faculty and students : 15
- 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.)

Monographs: Nil

Chapter in Books: Nil

Books Edited: Nil

Books with ISBN/ISSN numbers with details of publishers: Nil

Citation Index: 7-9

SNIP: Nil

SJR: Nil

Impact factor: 0.6-0.8

h-index: 3

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

- a) National committees b) International Committees c) Editorial Boards:

Prof. Gracy Varghese

- Member of Staff selection committee of M.G University
- Member of the Experts committee for sanctioning New courses in colleges under M.G University.
- Life Member of Kerala Mathematical Association

Prof. Suja A. Jacob

- Member of Expert committee for restructuring Syllabus of M.Sc Mathematics, M.G University-2011-2013.
- Life Member of Kerala Mathematical Association

Prof. Mercy Varghese

- Life Member of Kerala Mathematical Association

Dr. Rajesh K. Thumbakara

- Member of Board of Studies of PG Mathematics, M.G University
- Member of Board of Studies of UG Mathematics, M.G University
- Question paper setter of Kerala Public Service Commission (KPSC)
- Question paper setter for Mathematics, Calicut University
- Question Paper setter – Mar Ivanious College ( Autonomous) M.Sc Mathematics II Semester
- Reviewer of International Journal of Machine Learning and Cybernetic(Springer)
- Life Member of Kerala Mathematical Association

Dr. Latha S. Nair

- Reviewer of International Journal of Fuzzy Systems
- Life Member of Kerala Mathematical Association

Prof. Bino Sebastian V.

- Member of the Passing Board for MCA, Cochin University.
- Life Member of Kerala Mathematical Association

Prof. Susan Ray Joseph

- Life Member of Kerala Mathematical Association
- Life Member of Academy of Discrete mathematics and Application
- Life member of Institute of Counselling and Transactional Analysis, Kalamassery.

Prof. Mary Elizabeth Antony

- Life Member of Kerala Mathematical Association
- Life Member of Indian Mathematical Society

## 22. Student projects

	Programme	Percentage
No. of in-house projects	B.Sc. Mathematics	100 %
	M.Sc. Mathematics	100 %
No. of Outside projects	B.Sc. Mathematics	0
	M.Sc. Mathematics	0

23. Awards / Recognitions received by faculty and students:

Name	Award	Year
Ann Gigi George.	Secured A+ with first position in CBCSS B.Sc Maths Exam of M.G University	2012-13
Soniya K.N	Secured A+ with 3 <sup>rd</sup> position in CBCSS B.Sc Maths Exam of M.G University	2013-14
Dr. Rajesh K. Thumbakara	Best Programme Officer of NSS, MG University	2010
Bony Kurian	First prize for Folk Dance and A grade for Group dance in the M.G University Youth Festival	2011-12
Bony Kurian	A grade for Folk Dance and A grade for Group dance	2012-13
Aparna Jayakumar	Second Prize in M G University inter collegiate Theakwondo competition	2014-2015
Aparna Jayakumar	Third Prize in M G University inter collegiate Theakwondo competition	2012-2013

24. List of eminent academicians and scientists / visitors to the department: Nil

SL.No	Visitor
1	Dr. E. Krishnan, Department of Mathematics, University College, Thiruvananthapuram
2	Dr. K. Murali Krishnan, Dept. of Computer Science and Engineering, NIT Calicut.
3	Prof. C.J Vijayan Kanagaraj, Vice Principal and Head, Dept. of Mathematics, Bishop Heber College, Trichy
4	Sri. R. Srinivasan, Actuarial Consultant, Gulf union Insurance and Reinsurance Company, Kingdom of Baharin.
5	Dr. Jayanthan A J, Department of Mathematics, Goa University
6	Dr. Sunny Kuriakose, Principal, Baselios Poulouse II Catholicos College, Piravom.

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

UGC sponsored Two Day National Seminar on 'Actuarial Science  
Cryptography and Geogebra' 14&15 March 2013.

b) State level seminars

Seminar on 'Mathematical Insights' on 9 September 2014.

c) International: Nil

26. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B. Sc. Mathematics					
2010	517	24	3	21	96
2011	611	19	6	13	89
2012	869	31	7	24	Result awaiting
2013	1024	39	7	32	Ongoing
2014	1135	37	7	30	Ongoing
M. Sc. Mathematics					
2010	-	19	2	17	81
2011	-	15	2	13	64
2012	484	15	2	13	69
2013	444	15	0	15	Ongoing
2014	355	15	1	14	Ongoing

\*M = Male \*F = Female

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	100	0	0
M.Sc	96	4	0

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	65
PG to M.Phil.	15
PG to Ph.D.	15
Ph.D. to Post-Doctoral	0
Employed	10
• Campus selection	60
• Other than campus recruitment	
Entrepreneurship/Self-employment	20

30. Details of Infrastructural facilities

a) Library: 3833 books in the College library

We have well furnished library with more than 3000 mathematics books and 10 national and international journals.

b) Internet facilities for Staff & Students:

Our department offers internet facility for UG and PG students in classrooms. The teaching staffs have been provided with four laptops, one netbook and 3 desktops. We have both board band and Wi-Fi internet connectivity.

c) Class rooms with ICT facility:

All our class rooms are provided with ICT teaching facility. In addition, our PG classrooms are Smart classrooms.

d) Laboratories:

We have a mathematical lab with 12 computers to give training for PG and UG students in various mathematical softwares. All our PG students and final year degree students make use of this lab for doing project works.

31. Number of students receiving financial assistance from college, university, government or other agencies:

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	38	47	37	11	1
2	Higher education scholarship	3	0	0	0	0
3	Central sector scholarship	4	2	1	1	0
4	C H Muhammed Koya scholarship	11	5	6	4	0
5	Suvarana Jubilee Scholarship renewal	2	4	4	2	0
6	Hindi scholarship renewal	0	4	0	0	0
Total		58	62	48	18	1

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts:

- UGC sponsored Two Day National Seminar on ‘Actuarial Science Cryptography and Geogebra’ 14&15 March 2013.
- One day seminar on ‘Mathematical Insights’ on 9 September 2014.
- NET coaching class for PG students.

33. Teaching methods adopted to improve student learning:

Special class for weak students, Regular class test, assignments and seminars

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Our teachers have actively participated in various extension activities.

- We have hosted the Regional Mathematical Olympiad on 7-12-2014.
- Taken initiatives in nurturing the scientific temper in school students by taking class in the programme “Manimala” organised by the college, taking general awareness class for to the students of tribal settlement at Kuttampuzha.
- Actively participated in the Clean campus Green campus mission
- Promoted Run Kerala Run campaign enthusiastically
- Most of our students are members in different clubs like NSS/NCC/Youth Red Cross/etc.
- Our teachers were resource persons for various seminars.
- Teachers are in charge of different clubs which organize programmes for the welfare of society.

35. SWOC analysis of the department and Future plans:

We have very good results in our UG and PG Programme. In the last 2 years our UG students got first and third positions for final year B.Sc Degree Exam at the university level.

### Strength

- High student enrollments in all our courses
- Well qualified and dedicated faculty members
- Use of latest technology in the classrooms for enhancing the effectiveness of teaching
- Encouragement for co-curricular and extra-curricular activities of students
- Owns a wide collection of reference books for students and faculty members
- Faculty members regularly undergo trainings to stay updated

### Weakness

- The department is yet to become a research centre
- Community engagement programs under the initiative of the department are minimal

### Opportunities

- Cooperate with the University/higher education departments in offering inter-disciplinary programs
- Imparting value education

### Challenges

- Competition from other aided and self financing colleges in luring top students
- Professional courses posing serious threat to traditional courses in colleges

### Future Plan

- To become a full fledged mathematics research center
- Conducting National seminars, workshop in mathematics every year.
- UGC/CSIR National Eligibility Test coaching for M.Sc Students
- Motivation program for B.Sc. student for higher studies
- Expand the college Library book collection
- Expand the department Library book collection
- Enrichment program for nearby school students
- Apply for minor & major projects
- Avail Faculty Deveopment Programme facility

## DEPARTMENT OF COMMERCE

1. Name of the Department : Commerce

2. Year of Establishment : 1966

3. Names of Programmes/courses offered:

- 1) B.Com Model I -optional subject Computer – started in 1966
- 2) M.Com Finance- optional subject Taxation – started -1981
- 3) M. Com International Business- started -2014

4. Name of interdisciplinary courses and the departments /units involved –

The Department offers open course ‘Fundamentals of Accounting’ 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 M G University for the UG Commerce (B Com Model I) ( 6 semester)
- The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG Commerce (M Com Finance) (4 semester).

6. Participation of the department in the courses offered by other departments

The Department offers an open course ‘Fundamentals of Accounting’ for fifth semester CBCSS Undergraduate students of the College.

7. Courses in collaboration with other universities,industries,foreign institutions etc: Nil

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. No of Teaching Posts: 9

Name of Post	Sanctioned	Filled
Associate Professors	1	1
Asst. Professors	8	5

M Com International Business (SF)

Name of Post	Sanctioned	Filled
Asst. Prof.	2	2



10. Faculty profile with name qualification, designation, specialization etc.

Name	Qualification	Designation	Specialization	No of years of Experience
Smt. Beena Skariah	M.Com, M.Phil	Asso. Prof.	Financial Management	29
Smt. Diana Ann Issac	M.Com, M.BA.	Asst. Prof.	Taxation (Finance)	4
Smt. Litha Mary Issac	M.Com, M.Phil	Asst. Prof.	Taxation (Finance)	4
Sri. Sajin Paul	M.Com, B.Ed.	Asst. Prof.	Finance	3
Smt. Feba Kurian	M.Com, M.BA.	Asst. Prof.	Taxation (Finance)	1
Smt. Jini Thomas	M.Com, B.Ed	Asst. Prof.	Taxation (Finance)	9 months
M Com International Business (SF)				
Ms. Shari Sadasivan	M.Com	Asst. Prof.		
Ms. Susan sunny	M.Com	Asst. Prof.		

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise by temporary faculty: 100% for M Com International Business

13. No of academic support staff (technical) and administrative staff sanctioned and filled: Nil

14. Student teacher ratio programme wise

B Com -25: 1

M Com Finance -7.5:1

M Com International Business- 6:1

15. Qualifications of teaching faculty with DSc/d.litt/Ph.D/MPhil/PG

Name	Qualification
Smt. SherlyP.George	M.Com., M.Phil
Smt.Beena Skariah	M.Com, M.Phil
Smt.Diana Ann Issac	M.Com, MBA
Smt.Litha Mary Issac	M.Com, M.Phil
Smt. Feba Kurian	M.Com, MBA

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Two minor research projects of UGC

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

- Minor research Project on ‘Role of Microinsurance in Enhancing Risk Management Capacity and Savings of the Underprivileged in Kerala’ (Rs. 1,20,000/-) with the financial assistance of UGC- Litha Mary Issac as PI.
- Minor research Project on ‘Role of Micro Entrepreneurs in Kerala’ (Rs.1,30,000/-) with the financial assistance of UGC - Jini Thomas as PI.

18. Research Centre /facility recognized by the University -Nil

19. Publications:

a) Publication per faculty: 1.56

Number of papers published in peer reviewed journals (national /international) by faculty and students

Diana Ann Issac -7

Litha Mary Issac – 5

Diana Ann Issac	
Equity in education under threat – Kerala experience	Vikas vani Journal, March 2012. 51-60
A Critique on Corporate Governance Practices in the Public Sector in India	Science and Society,10,1, 2012
Knowledge management and Industrial growth – A study on the small scale enterprises of Kottayam district, Kerala India.	Zenith – International Journal of Business Economics and Management Research (2012). Vol 2, 10, 38-63
India’s New Growth Saga in the Aftermath of Global Financial Crisis	Edited book published by Nirmala Academic and Research Publications for the Post Graduate Research Department of Commerce, Nirmala College, Muvattupuzha (2011)
Reflections on Post Crisis Global Scenario – Realities and Expectations	“Managing the Future” – Vol II, No. 2, July 2012
The Indian Banking Sector; The Road Ahead	South Asian Journal of Socio-Political Studies – Vol 13, No.1 2012
Outward Indian FDI – Origin, Recent Trends and Philosophy	Trade Wind Vol – 7 No.1 December 2012
Indian NBFC Sector Performance, Prospects and their inter connectedness with Banking System	KEGEES Journal of Social Science, Vol – 6 No.1 Jan 2014
Frugal Innovation – an emerging Business Paradigm	‘Contemporary Commerce Review’ ,Double blinded peer reviewed Half yearly journal of Cochin College.(Volume 4, No. 1 August 2014, ISSN 2319 – 3638) –
Litha Mary Issac	

MICRO- SIP Inclusion of low income households in capital market	MANAGING THE FUTURE( ISSN 0975-0045-Vol I-2,July 2011)
Micro insurance – Security and Savings to the under privileged	ACUMEN – Marian Journal of Commerce and Management. Vol 5 (1), 2012, 37-41
SHG-Bank Linkage Programme-A study on its role in Financial inclusion	Indian Commerce Bulletin-Peer Reviewed Research Journal - ( ISSN -0972-6187) Vol 13 December 2013
Impact of Large Scale Retailing:A factor analysis approach to explore diamensions of retailers problems in Kerala	Indian Commerce Bulletin –Peer Reviewed Research Journal( ISSN -0972-6187) Vol 14 December 2014(accepted for publication-Journal not yet released)
Strategic Management and Corporate Social Responsibilities	EXPLORATIONS-Double Blind Peer Reviewed and Edited Journal (Vol V-1 ISSN 2229-4783 January 2015

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

Monographs: Nil

Chapter in Books: Nil

Books Edited: Nil

Books with ISBN/ISSN numbers with details of publishers: Nil

Citation Index: Nil

SNIP: Nil

SJR: Nil

Impact factor: Nil

h-index: Nil

20. Areas of consultancy and income generated -Nil

21. Faculty as members in

- a) National committees      b) International Committees      c)  
Editorial Boards.

Diana Ann Issac, is the member of Core Committee in Commerce for Add on Courses at Mahatma Gandhi University

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/programme: **75%**

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: **25%**

23. Awards / Recognitions received by faculty and students

Ms. Diana Ann Issac got selected to prestigious FLAIR programme of Kerala Higher Education Department

24. List of eminent academicians and scientists / visitors to the department

- Dr. Gabriel Simon Thattil, Professor in School of Management and Director of IQAC at University of Kerala.
- Mr. Satyabrata Mohanty, CFA, Head-Hybrid Funds & Senior Fund Manager-Equity, Birla SunLife Asset Management Company Limited, Mumbai
- Dr. N.Ramalingam, Associate Professor, Gualati Institute of Finance and Taxation, Thiruvananthapuram

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

- A national seminar on ‘Emerging Trends in Banking and Finance’ with the financial support of UGC from 14 to 15 March 2012.
- A national seminar on ‘Recent Trends in Accounting and Taxation’, with the financial support of UGC from 6 to 7 March 2014.

b) International: Nil

26. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
<b>B Com Model I</b>					
2010	1176	48	19	29	94
2011	2396	49	22	27	96
2012	2614	47	24	23	Result Awaiting
2013	2726	50	21	29	Ongoing
2014	2424	50	25	25	Ongoing
<b>M Com Finance</b>					
2010	-	19	3	16	71
2011	-	14	6	8	92
2012	853	15	6	9	93

2013	874	14	3	11	Ongoing
2014	754	15	1	14	Ongoing
M Com International Business					
2014	110	15	3	12	Ongoing

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Com	100	-	-
M.Com	100	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Register number	Name	Year
16081287	Arya Gopi	13th June 2011
17080508	Sony Kuriakose	13 <sup>th</sup> June 2011
16080006	Ebin P Mani	15 <sup>th</sup> June 2012
16080077	Sharanya Pratapan	18 <sup>th</sup> September 2012
16080070	Neethu P .N	18th September 2012
16081387	Chitra K.G	25 <sup>th</sup> March 2013
16081471	Sulfia Meeran	13th June 2011
Defence Service : Dany Peter		

29. Student progression

Student progression Against % enrolled	2011-14	2010-13	2009-12	2008-11
UG to PG	62.5	61.7	63.83	61.25

PG to M.Phil.	-	-	-	-
PG to Ph.D.	-	6.67	-	-
Ph.D. to Post-Doctoral	-	-	-	-
Other professional qualifications	8.3	19	19	19
Employed				
• Campus selection	8.3	19	19	8.3
• Other than campus recruitment				
Entrepreneurship/Self-employment	12.5	6.4	12.8	8.3

30. Details of Infrastructural facilities

a) Library: 4740 Books in the College library

b) Internet facilities for Staff & Students:

Fully Wi-Fi enabled Department

c) Class rooms with ICT facility-All the class rooms are equipped

d) Laboratories- Nil

31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	57	92	80	29	2
2	Higher education scholarship	3	2	0	0	0
3	Central sector scholarship	19	9	57	52	0
4	C H Muhammed Koya scholarship	8	6	9	6	0
5	Suvarana Jubilee Scholarship renewal	3	18	15	13	0
6	Hindi scholarship renewal	3	3	3	0	0
	Total	93	130	169	100	2

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

- State level seminar on ‘Academic Research in Commerce and Management – Emerging Perspectives’ to enhance the research skills of students

33. Teaching methods adopted to improve student learning

- Smart boards for interactive teaching
- Use of laptops and projectors for PowerPoint presentations both by students and teachers

#### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

The Department of Commerce is keenly involved in all the major social responsibility initiatives of the college.

- Actively participated in the Clean campus Green campus mission
- Promoted Run Kerala Run campaign enthusiastically
- The Department has minimized the usage of plastic bags among students and faculty members as part of the Clean Campus Green Campus initiative.
- All the classrooms in the department have their own waste bins which are managed by the students themselves. Students are encouraged to take lead in the cleaning of their classrooms and are regularly monitored by the respective tutors.
- Students and the faculty members contribute generously to all the charitable activities undertaken in the college.
- Students have staged skit in nearby school for conveying the message of stopping crime against women.
- Students of have participated in a flash mob organized to spread awareness on the human rights violation.

#### 35. SWOC analysis of the department and Future plans

##### Strength

- High student enrollments in all our courses
- Well qualified and dedicated faculty members who maintain strong bonding with the students
- Closely connected with the alumni who are well placed across the globe
- Use of latest technology in the classrooms for enhancing the effectiveness of teaching
- Friendly working environment highly conducive for academic pursuits
- Encouragement for co-curricular and extra-curricular activities of students
- Owns a wide collection of reference books for students and faculty members

- Willingness of the faculty members to undergo trainings to stay updated

#### Weakness

- The department is yet to become a research centre
- The ethnic/racial/cultural diversity of students and faculty members are low
- Community engagement programs under the initiative of the department are minimal

#### Opportunities

- Make better use of online education opportunities and increase our visibility worldwide
- Cooperate with the University/higher education departments in offering inter-disciplinary programs
- Associate with professional bodies such as the Indian Commerce Association, Indian Accounting Association Institute of Chartered Accountants of India, Chartered Institute of Management Accounts and encourage faculty members to take up active membership
- Increase community engagement by forming alliances with NGOs and local bodies and encourage students to take up social causes

#### Challenges

- Competition from other aided and self financing colleges in luring top students
- Professional courses posing serious threat to traditional courses in colleges



## DEPARTMENT OF ZOOLOGY

1. Name of the department : Zoology
2. Year of Establishment : 1955
3. Names of Programmes / Courses offered  
: B.Sc. and M Sc Zoology (SF)
4. Names of Interdisciplinary courses and the departments/units involved
5. Annual/ semester/choice based credit system (programme wise)
  1. CBCSS B.Sc. Zoology Model 1
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

Name of Post	Sanctioned	Filled
Associate Professors	-	-
Asst. Professors	4	4

### M Sc Zoology (SF)

Name of Post	Sanctioned	Filled
Asst. Professors	4	4

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	Specialization	No. Years of Experience
Aby.P.Varghese	Msc, PhD	Asst.Prof.	Entomology	10 Years
Aji .C.Panicker	Msc, BEd, M.pil, PhD	Asst.Prof.	Fish Biology	13 Years

Selven.S	Msc, PhD	Asst.Prof.	Microbiology	7 Years
Binitha.R.N	Msc, Mphil, PhD	Asst.Prof.	Endocrine Disruption	4years
M Sc Zoology (SF)				
Dr. Sreedevi P R.	M.Sc., Ph.D.	Asst.Prof.	-	3 years
Ms. Asha Kunjappan	M.Sc.	Asst.Prof.	-	3 years
Ms. Blessy John	M.Sc.	Asst.Prof.	-	3 years
Ms. Josmy joy	M.Sc.	Asst.Prof.	-	1 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)  
 UG- 36:1  
 PG- 6:1
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled  
 Lab Attendant: 4
15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification
Aby.P.Varghese	M.Sc, Ph.D
Aji .C.Panicker	M.Sc, BEd, M.Phil, Ph.D
Selven.S	M. Sc, PhD
Binitha.R.N	M. Sc, MPhil, Ph.D

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received  
 5 Minor and 3 major research Projects
17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received
  - Biodiversity and Ecological status of Iringole sacred grove in Ernakulam

District ( Rs.60,000/-) with the financial support of UGC-Aji C Panicker as P.I.

- Birds are sensitive environmental indicators- A study of wetland birds of Dr. Salim Ali Bird Sanctuary, Thattekkadu Kerala (Rs.1,15,000/-) with the financial support of UGC- Aby P. Varghese as P.I.
- Conversation of Wetlands- A pilot study on the pollution status of Kuroor Thodu River in Kothamangalam, Kerala (Rs.60,000/-) with the financial support of UGC- Selven S. as P.I.
- Risk assessment of commonly used pesticide on the Rte of survival of indigenous culture fishes in Kerala (Rs.1,10,000/-) with the financial support of DST-Binitha R.N. as P.I.
- Ecological status of publically owned water resources (Community ponds and temple ponds) of Kunnathunadu Taluk in Ernakulam District (Rs. 4,51,000/-) with the financial support of KSCSTE- Aji C. Panicker as PI.
- Potential health concern and endocrine disrupting peoperties of commonly used antioxidant BHA ( butylated hydroxyanisole) ( Rs.22,79,000/-) with the financial support of DST- Binitha R.N. as P.I.
- Integrated biomarker response: a useful tool in environmental monitoring, an illustration using the freshwater teleost- *Anabas testudineus* (25,00,000/-) with the financial support of DST- Aji C. Panicker as P I.

18. Research Centre /facility recognized by the University: Nil

19. Publications:

- a) Publication per faculty: 3.33
  - b) Number of papers published in peer reviewed journals (national /international) by faculty and students
- Selven Subramanian and Rosamma Philip (2014) Bioaccumulation of copper in various tissues of *Fenneropenaeus indicus* and the influence of white spot syndrome virus infection. International Journal of Research in Zoology 4(2): 24-28
  - Selven Subramanian and Rosamma Philip(2013)Identification of haematological markers in shrimp health assessment from the immune profile of *Fenneropenaeus indicus* on  $\beta$ -1, 3-glucan administration and

White spot syndrome virus challenge Aquaculture International DOI 10.1007/s10499-013-9621-1

- Selven Subramanian and Rosamma Philip (2013) Glutathione-S-transferase as enzyme marker for health monitoring in *Fenneropenaeus indicus* under acute salinity perturbations and WSSV infection. International Journal of Research in Fisheries and Aquaculture 3(3): 71-77
- Selven Subramanian and Rosamma Philip (2013) Acid phosphatase as enzyme marker for health monitoring in *Fenneropenaeus indicus* under environmental perturbations and WSSV infection. International Journal of Research in Biological Sciences 3(3): 116-122
- Selven Subramanian and Rosamma Philip (2013) Antioxidant defence profile of hepatopancreas, gill and muscle tissue of *Fenneropenaeus indicus* subjected to acute salinity change and WSSV challenge International Journal of Research in Zoology 3(4): 32-40
- Selven Subramanian and Rosamma Philip (2012) Salinity induced haematological inflection in Indian white shrimp (*Fenneropenaeus indicus*)" Journal of Asian Fisheries Science 25: 170-179
- Selven Subramanian and Rosamma Philip (2012) Pharmacological level of copper induces the immune and antioxidant mechanisms of *Fenneropenaeus indicus* conferring better protection against white spot syndrome virus infection Aquaculture International DOI: 10.1007/s10499-011-9492-2.
- Selven Subramanian and Rosamma Philip (2012) Salinity a significant environmental factor for *Vibrio harveyi* virulence in *Fenneropenaeus indicus* Aquaculture Research, DOI: 10.1111/j.1365-2109.2011.03080.
- Thavarool Puthiyedathu Sajeevan, Selven Subramanian and Rosamma Philip (2010)  $\beta$ -Mercapto-ethanol-treated yeast showed better protection against white spot syndrome virus infection in Indian white shrimp *Fenneropenaeus indicus* Aquaculture Research 41 (10) : e715–e718.
- Thavarool Puthiyedathu Sajeevan, Douglas W Lowman, David L Williams, Selven Subramanian, Abdulaziz Anas and Philip Rosamma (2009) Marine yeast diet confers better protection than its cell wall component (1-3)- $\beta$ -d-glucan as an immunostimulant in *Fenneropenaeus indicus* Aquaculture Research 40, (15): 1723–1730.
- Binitha, R.N., Oommen, O.V., Francis Sunny., year 2010; Effect of sewage effluents on the enzymes of intermediary metabolism in a fresh water fish, *Anabas testudinens*. Ecotoxicol. Environ.Safety. (Paper Communicated.)

- Binitha, R.N., Oommen, O.V., Francis Sunny., year 2010; Effect of sewage effluents on the activity of enzymes of Osmoregulation in a fresh water teleost, *Anabas testudinens*. Aquat Toxicol. (Paper accepted and taken for review)

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.)

Monographs -Nil

Chapter in Books - 2

Books Edited- Nil

Books with ISBN/ISSN numbers with details of publishers- Nil

Citation Index - Nil

SNIP- Nil

SJR- Nil

Impact factor:

h-index - Nil

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards.

### **Aby.P. Varghese**

- Member of PG board of studies M G university
- Member of UG board of studies M G university
- Member of Vigilance Squard, M G university
- Question paper setter of Kerala Public Commission,
- Co-ordinator of National Green corps of Kothamangalam Education District
- State level judge for Inspire Award
- Member of committee to monitor the developmental activities of the Forest Department in Kothamangalam, Perumbavoor and Thodupuzha legislative assemblies.
- Surprise Exam Inspector for CBSE Examinations 2015.

22. Student projects

- Twenty one Post Graduate Projects supervised by Dr. Selven S.
- Seven PG projects completed with financial aid from KSCSTE under student project scheme.
- Two PG project works received best oral presentation awards in National seminars
- Eight Post Graduate Projects supervised by Dr. Binitha R.N.

- Two Post Graduate Projects supervised by Dr. Aby P. Varghese and the projects were completed with financial aid from KSCSTE under student project scheme

a) Percentage of students who have done in-house projects including inter departmental/programme

All the UG students carry out their projects in the Department itself.

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 and students

Dr. Selven .S Best NSS programme officer in MG University during 2014

24. List of eminent academicians and scientists / visitors to the Department

- Dr. K. Mani, PSG College of Arts and Science, Coimbatore,
- Dr. T.B. Suma (Scientist KFRI, Thrissur),
- Dr. V.S. Sugunan (Associate Professor, University College, Thiruvananthapuram),
- Dr. Karthik Ganesh (Selvamm Group of Institutions, Nammakkal)
- Dr. Valsamma Joseph, (Assistant Professor, CUSAT).
- Dr. Shaju Thomas, Associate Professor in Zoology, Nirmala College, Muvattupuzha.
- Dr. Giji K Joseph, Associate Professor in Zoology, Nirmala College, Muvattupuzha.
- Dr. Sajeevan T. P., Assistant Professor, CUSAT
- Dr. Shibu Vardhanan Y., Assistant Professor, University of Calicut

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

A National seminar on “Municipal solid waste management –Issues and Prospects” during the academic year 2012. It was conducted in collaboration with Pollution control club Kothamangalam funded by University Grants Commission, New Delhi.

A National seminar on “Molecular evolution and Phylogeny’, 2013 funded by University Grants Commission, New Delhi.

b) International

Nil

26. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B Sc Zoology					
2010	474	32	7	25	75
2011	607	39	9	30	79
2012	910	37	8	29	Result awaiting
2013	1112	42	5	37	Ongoing
2014	966	38	7	31	Ongoing
M Sc Zoology (Self Financing)					
2012	88	12	1	11	92
2013	139	12	1	11	Ongoing
2014	181	10	0	10	Ongoing

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
BSc Zoology	98%	2 (Lakshadweep)	Nil
M Sc Zoology	100%	Nil	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

Student progression	Against % enrolled
UG to PG	
2007-2010 6 out of 35	17.14
2008-2011 3 out of 30	10
2009-2012 12 out of 36	33
2010-2013 5 out of 28	17.8
2011-2014 10 out of 35	28.57
Employed	
• Campus selection	2014- 2 selected by WIPRO and 1 South Indian Bank
	2010- 4 Private jobs
	2011- 1 selected to Kerala Police
	2012 – 1 High school Teacher and 5 others joined private jobs
• Other than campus recruitment	2013- One Jointed Indian Army and 3 others Teaching
	2014- 2 Private jobs

## 30. Details of Infrastructural facilities

a) Library – 1645 Books in the College library

More than six hundred books are also available for reference in the Department

- b) Internet facilities for Staff & Students: LAN and WiFi facility available
- c) Class rooms with ICT - ICT enabled class rooms are available.
- d) Laboratories- well equipped, Laboratories with ICT facility.

The Department has set up a research Laboratory with sophisticated instruments funded by DST-SERB and UGC CPE scheme. The Instruments include APOS8 stereo Zoom Microscope with Camera (Leica), Research Microscope with Phase Contrast option and Camera (Leica), Cooling Microfuge (Eppendorf), Elisa Reader and washer ( Biorad), Vertical and Horizontal Electrophoretic apparatus with Blot, Electrical Homogenizer, Deep freezer, UV-visible spectrophotometer , Double distillation Unit etc.



31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	30	45	39	20	4
2	Higher education scholarship	2	2	0	0	0
3	Central sector scholarship	0	0	0	0	0
4	C H Muhammed Koya scholarship	9	5	9	4	0
5	Suvarana Jubilee Scholarship renewal	0	0	4	4	0
6	Hindi scholarship renewal	0	4	0	0	0
Total		41	56	52	28	4

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

- Career and soft skill development programme for Final year Degree students with UGC funding during 2013 and 2014
- Selected students were given training programme and seminars as part of Walk with Scholar Programme instituted by Higher education Department Kerala.

33. Teaching methods adopted to improve student learning

ICT enabled smart class rooms. LCD projector, student seminar presentations, Virtual Labs through internet etc. Wet Lab training for Molecular works

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Dr. Aby P. Varghese

- Associate NCC Officer of the College
- IQAC co-ordinator of the College
- Treasurer of Kothamangalam Pollution Control Club
- Co-ordinator of National Green corps of Kothamangalam Education District
- Founder Member of Centre for Diversity Studies, Muvattupuzha.
- Member of committee to monitor the developmental activities of the Forest Department in Kothamangalam, Perumbavoor and Thodupuzha legislative assemblies.
- Secretary, Road Safety Club

Dr. Aji C. Panicker

- Coordinator of Red Ribbon Club and Youth Red Cross

Dr. Selven S.

- NSS Programme Officer 2012-2014

Dr. Binitha R.N.

- Coordinator of WWS and SSP programmes of Kerala Higher Education Department

### 35. SWOC analysis of the department and Future plans

Strength:

- All faculty members are Ph.D. holders and actively involved in basic and applied research activities.
- The Department of Zoology so far received a research funding of Rs.56,21,000/- ( Rupees Fifty six lakhs twenty one thousand only) from various reputed national funding agencies
- A well equipped Laboratory with sophisticated instruments for molecular biology research.
- ICT enabled UG Laboratory with instruments for routine laboratory work.
- A well preserved Zoological Museum with stuffed and preserved specimens, models, charts and microscopic slides
- One Major project has been completed (Rs.451000/-) and two major projects are ongoing (Rs.47, 54,000/-)

Weakness:

- The Department of Zoology does not have an animal ethical committee and animal house
- Lack of space for further infrastructure development

Opportunity:

- Well equipped research laboratories in the College
- Ample scope for field research

Challenge:

- Semester system

- Students are day scholars and economically backward

Future plans:

- Establishing a research centre in Zoology
- Setting up of an animal house and constituting an animal ethical committee.
- Construction of aquaculture ponds for larval rearing.
- Establishing a virtual lab facility for students.

## DEPARTMENT OF SOCIOLOGY

1. Name of the department : Sociology
2. Year of Establishment : 1980
3. Names of Programmes / Courses offered : B A Sociology & M A Sociology (SF)
4. Names of Interdisciplinary courses and the departments/units involved  
  
The Department offers open course (Sociology of Tourism) 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 M G University for the UG Sociology Programme ( 6 semester)
  - The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG Sociology Programme ( 4 semester).
  -
6. Participation of the department in the courses offered by other departments  
  
The Department offers a Complimentary course for B.A English Literature programme and an open course (Sociology of Tourism) for fifth semester CBCSS Undergraduate students of the College.
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

Name of Post	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Asst. Professors	3	3

Name of Post	Sanctioned	Filled
Asst. Professors	2	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.Mridula Venugopal.S	M.A, Ph.d	Asst. Prof.	Urban Sociology	5 yrs
Ms.Diana Mathews	M.A,M.Phil,	Asst. Prof.	Agrarian Sociology	3 yrs
Ms.Pournami Davy	M.A. M. Phil	Asst. Prof.	Medical sociology	1 yr
M A. Sociology (SF)				
Ms. Sharon V. Balakrishnan	M.A.	Asst. Prof.	-	1 yr
Ms. Sabitha Thomsan	M.A.	Asst. Prof.	-	1 yr

11. List of senior visiting faculty- Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

106 hrs from July 15- Sep 28 2014 for B.A Sociology.

13. Student -Teacher Ratio (programme wise)

- BA Sociology –40:1
- MA Sociology - 6:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled - Nil

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

- Dr.Mridula Venugopal.S - M.A, Ph.d
- Ms.Diana Mathews - M.A, M.Phil
- Ms.Pournami Davy - M.A. M. Phil

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

2 Minor research project of UGC and 1 Major research project of ICSSR.

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

- Dr.Mridula Venugopal.S - Minor project on “Social Exclusion of Migrant Workers” – completed with the financial support of UGC (Rs. 80,000/-).
- Dr.Mridula Venugopal.S - Major Project on ‘Muzris Project of Kerala Government - Socio-Historical impact Assessment’ with the financial support of ICSSR( Rs.15 lakhs).
- Ms.Diana Mathews - Ongoing Minor Project “Changing Power Structure in Dual Career Nuclear Families – A study in Ernakulam district, Kerala” with the financial support of UGC (Rs .75,000/-).

18. Research Centre /facility recognized by the University - Nil

19. Publications:

a) Publication per faculty- 0.33

b) Number of papers published in peer reviewed journals (national /international) by faculty and students –

“Gerescophobia – An emerging Problem” published in Ageing and society – A multi Disciplinary Approach (Excel India Publishers) by Dr.Mridula Venugopal.S. (ISBN: 978-93-82062-84-4).

20. Areas of consultancy and income generated -Nil

21. Faculty as members in

f) National committees b) International Committees c) Editorial Boards.

Dr.Mridula Venugopal.S:

- 1. Life Member of Indian Sociological Society.
- 2.Life Member of Kerala Sociological Society

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.in Research laboratories/Industry/ other agencies -Nil

23. Awards / Recognitions received by faculty and students –

Dr.Mridula Venugopal.S:

- Executive committee member- All Kerala Sociological Society
- Board of studies Member-St .Teresa's College (Autonomous), Ernakulam
- Question Paper setter- Kannur University- Chairperson for UG BSW V semester (2011)
- Question Paper setter- Kannur University -Chairperson for UG I B.A Sociology (2011)
- Question Paper setter-Kannur University -Chairperson BSW (2012)
- Question Paper setter- St.Terasas College (Autonomous), Ernakulam. M.A I Semester
- Board of Studies Member (UG Subject Expert) - St.Terasas College (Autonomous) , Ernakulam.

24. List of eminent academicians and scientists / visitors to the department

- Dr.Anitha Kurup - Senior Professor, NIAS, IISC Campus,Bangalore, India
- Dr.Santhosh - Assistant Professor, Department of Humanities and Social Sciences, IIT Madras
- Dr.Kochurani- Associate Professor, Department of Economics, Bharat Matha College,Thrakkakara
- Dr.Lisy Jose - Director of Legal Industrial and Socio-Educational Society (LISS) and Kerala State Women's Commission Member

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

- A National Seminar on "Emerging youth cultures in the era of globalization" from 21 to 22 August 2014 with the financial support of UGC.

g) State level seminars

- A state level seminar on "Impact of Globalization on Marginalized sections" on 22 January 2010 with the financial support of the College Management.

- A state level seminar on “Social Stratification” on 3 Dec 2010 with the financial support of the College Management.

c) International: Nil

26. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
BA Sociology					
2010	497	47	28	19	62
2011	594	41	21	20	67
2012	832	47	19	28	Result awaiting
2013	759	52	22	30	Ongoing
2014	847	50	20	30	Ongoing
M A Sociology					
2014	100	5	2	3	Ongoing

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
BA Sociology	99	1(Lakshadweep)	-
M A Sociology	100	-	-

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	90



PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed • Campus selection • Other than campus recruitment	5
Entrepreneurship/Self-employment	2

30. Details of Infrastructural facilities a) Library: 1649 Books in the College library

b) Internet facilities for Staff & Students

Department is equipped with one desk top computer and two laptops. Broad band and Wi-Fi facility are also available in the Department.

h) Class rooms with ICT facility:

- Final year B A Class room have broad band connectivity.
- DLP projectors are installed in two class rooms

d) Laboratories: Nil

31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	23	41	45	13	5
2	Higher education scholarship	1	1	0	0	0
3	Central sector scholarship	1	0	1	0	0
4	C H Muhammed Koya scholarship	6	1	5	4	0
	Total	31	43	51	17	5

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts: Nil

33. Teaching methods adopted to improve student learning:

Lecture Method, Group Discussion, Seminars, Class test, Field trips, Project

work etc

34. Participation in Institutional Social Responsibility (ISR) and Extension:

Participation in philanthropic activities like visiting old age homes, palliative care centers, orphanages etc

35. SWOC analysis of the department and Future plans

Strength

- Well qualified teachers
- Best infrastructural facilities
- Regular and active PTA
- Well supportive Alumni
- Support from retired teachers
- Students are recipients of major scholarships
- Winners of SAF games, National, State and University sports competitions

Weakness

- Economically very poor students form the majority

Opportunity

- Healthy freedom and great opportunity for students and teachers to participate in seminars and other club activities
- Student enrichment program
- Remedial coaching
- PSC coaching and Free counseling opportunity

Challenges

- Autonomy of college
- Emerging self financing courses
- Lack of fund for inviting expert faculty from other universities

Future Plans

- Starting of a research centre in Sociology Department.
- Initial steps taken for foundation course on “Human Rights”.
- Continue our Philanthropic works with “Give Two Save Two” programme.
- Starts Add on course in collaboration with other Departments.
- Produce educated and well settled alumni as we have now.
- Continue the social service activities.

## DEPARTMENT OF STATISTICS

1. Name of the department : Statistics
2. Year of Establishment : 1982
3. Names of Programmes / Courses offered  
: B. Sc. and M Sc Statistics (SF)
4. Names of Interdisciplinary courses and the departments/units involved:  
Open Course offered to other Departments (Applied Statistics)
5. Annual/ semester/choice based credit system (programme wise)  
: B.Sc.Statistics (CBCSS) and M Sc Statistics (CSS)
6. Participation of the department in the courses offered by other departments: Nil
7. Courses in collaboration with other universities, industries, foreign institutions, etc.: The Department has collaboration with Geojit BNB Paribas, Cochin.
8. Details of courses/programmes discontinued (if any) with reasons: Nil
9. Number of teaching posts: 5

Name of Post	Sanctioned	Filled
Associate Professors	2	2
Asst. Professors	3	2

### M Sc Statistics

Name of Post	Sanctioned	Filled
Asst. Professors	2	2

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designation	No. of Years of Experience
Shiny Abraham	M.Sc, M.Phil	Asso. Prof.	27
Lovely Paul	M.Sc.	Asso. Prof.	29
Shiny John	M.Sc.Computer Science	Asst. Prof.	17
Sudha V	M.Sc.	Asst. Prof.	2yrs 6 months
M Sc Statistics (SF)			
Ms. Sari Thomas	M.Sc.	Asst. Prof.	1 Year
Mr. Jitto Jose	M.Sc.	Asst. Prof.	1 Year

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: M Sc Classes handled by Temporary faculty.

13. Student -Teacher Ratio (programme wise)  
 B.Sc. Statistics: 30:1  
 M Sc. Statistics: 6:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification
Shiny Abraham	M.Phil

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications: Nil

a) Publication per faculty: Nil

Number of papers published in peer reviewed journals (national /international) by faculty and students

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.)

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.

Kochumathew M Joseph

- Kerala Public Service Commission Subject expert for Statistics and allied subjects
- Resource person for Govt. of India sponsored
  - Socio Economics Caste Census
  - National Population Survey

Shiny John

Member, UG Board of Studies, Mahatma Gandhi University

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 and students

Shiny John received M.G University's NSS Programme officer's award, 2012-13

24. List of eminent academicians and scientists / visitors to the department

Dr.Abdul Sathar, Kerala University

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National Nil

b) International Nil

26. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B Sc Statistics					
2010	173	27	10	17	92
2011	282	28	14	14	81
2012	288	33	12	21	Result awaiting
2013	337	42	17	25	Ongoing
2014	315	34	5	29	Ongoing
M Sc Statistics					
2014	72	9	4	5	Ongoing

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
III B.Sc Statistics	100	-	-
II B.Sc Statistics	99	1	-
I B.Sc. Statistics	100	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?: One

29. Student progression

Student progression	Against % enrolled
UG to PG	99%
PG to M.Phil.	0
PG to Ph.D.	1
Ph.D. to Post-Doctoral	0
Employed	10
• Campus selection	15
• Other than campus recruitment	18
Entrepreneurship/Self-employment	18

30. Details of Infrastructural facilities a) Library: 1626 books in the College library

b) Internet facilities for Staff & Students: Yes

c) Class rooms with ICT Facility -2 classs

d) Laboratories-computer Lab: Computer Lab

31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	25	37	36	21	6
2	Central sector scholarship	0	0	1	1	0
3	C H Muhammed Koya scholarship	4	1	0	0	0
4	Suvarana Jubilee Scholarship renewal	0	1	1	1	0
	Total	29	39	38	23	6

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

- Seminar
- Special lectures

33. Teaching methods adopted to improve student learning:

- Class tests, Seminars, Assignment, quiz, c lass discussions

34. Participation in Institutional Social Responsibility (ISR) and Extension activities NSS, NCC,

35. SWOC analysis of the department and Future plans:

**Strength:**

Academically from the beginning itself the Department is showing excellent results. From 2009 to 2012 the Department got 100% pass percentage and in the 2013 year the department got 99% pass percentage. In the year 2010 just before introducing choice based credit and semester system(CBCSS) among the degree batches the Department bagged top four University ranks. Since then the students are scoring University top marks. More than 90% students are getting placement in various Institutions. In the modern era Statistics is an emerging subject which has a vital role in all disciplines.

**Weakness:**

After introducing the CBCSS the University changed the admission pattern and hence about 50% of admitted students are from Humanities stream and are not having any base in mathematics. The existing syllabus of Statistics is not giving any importance to the application side of Statistics. It is giving more importance to the theory only.

**Opportunity:**

The scope and applications of Statistics in our daily life is widening day by day. Statistics finds it application in all walks of life like health, education, marketing, sports, politics, astronomy, business, and economics and even in war.

**Threats:**

The public in Kerala is not aware about the growing demand of Statisticians in our day to day life.. Even the school students ,school teachers and parents are not aware that Statistics is an emerging subject and has a vital role and applications in all walks of life.



## DEPARTMENT OF BOTANY

1. Name of the department : Botany
2. Year of Establishment : 1965
3. Names of Programmes / Courses offered: B.Sc. & M.Sc. 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 (programme wise)
  - The Choice Based Credit and Semester System (CBCSS) of M G University for the UG Botany Programme ( 6 semester)
  - The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG Botany (4 semester).
6. Participation of the department in the courses offered by other departments  

The Department offers a Complimentary course for B.Sc Zoology programme and an open course (Horticulture and Nursery Management) for fifth semester CBCSS Undergraduate students of the College.
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: 4

Name of Post	Sanctioned	Filled
Professors	-	-
Associate Professors	1	1
Asst. Professors	3	3

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. Benny Jacob	M. Sc., Ph.D	Asso.Prof.	Cytogenetics	21
Smt. Aji Abraham	M. Sc., B. Ed	Asst.Prof.		10
Dr. Binu Antony	M. Sc., Ph.D	Asst.Prof.	Ecology	9.5
Dr. Siju Thomas T	M. Sc., Ph.D., B. Ed	Asst.Prof.	Plant Physiology	4

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

25% of Classes are handled by Guest Lectures

13. Student -Teacher Ratio (programme wise)

BSc Botany-24:1

M Sc Botany-5:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil

Name of post	Sanctioned	Filled
Herbarium Keeper	1	1
Lab Assistant	2	2
Administrative staff	-	-

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name of post	Qualification
Dr. Benny Jacob	M. Sc., Ph.D
Dr. Binu Antony	M. Sc., Ph.D
Dr. Siju Thomas T	M. Sc., Ph.D., B. Ed

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Two Minor Research Projects of UGC

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received –Nil

- Cytomorphological, Anatomical and Ethanomedicinal studies on Giant Fern (*Angiopteris evecta*) from Kerala (Rs.1,35,000/-), with the financial support of UGC- Dr. Benny Jacob as PI.
- Phytochemical Characterization of *Justica plumbaginifolia* J JACQ and *Desmodium Motorium* L (Rs.365,000) with the financial support of UGC- Dr. Siju Thomas T. as PI.

18. Research Centre /facility recognized by the University: Nil

19. Publications:

Publication per faculty: 0.25

Number of papers published in peer reviewed journals (national /international) by faculty and students

Aji Abraham, Lissy Mathew and Sarala Samuel: Pharmagognistic studies of the fruits of *Terminalia bellarica* (Gaertn.)Roxb. Journal of Pharmacognosy and Phytochemistry 2014; 3(2): 45-52

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

Monographs: Nil

Chapter in Books: Nil

Books Edited: Nil

Books with ISBN/ISSN numbers with details of publishers: Nil

Citation Index: Nil

SNIP: Nil

SJR: Nil

Impact factor: Nil

h-index: 0 to 2

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

- a) National committees
- b) International Committees: Nil
- c) Editorial Boards

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/ programme: 100% of UG Students are doing in-house

projects

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 and students: Nil

24. List of eminent academicians and scientists / visitors to the department

- Prof. Dr. K. Veluthambi, Head, Dept. of Plant Biotechnology, Madurai Kamaraj University
- Dr. G. M. Nair, Professor and Dean, Dept of Biological Sciences, Central University of Kerala, Kasaragod
- Dr. Dinesh A Nagegowda, Principal Scientist, CSIR-CIMAP Research Centre, Bangaluru
- Dr. Vaibhav A Mantri, CSSRI, Mandapam, Tamil Nadu

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National: Nil

b) International: Nil

26. Student profile programme/course wise:

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B Sc Botany					
2010	439	33	5	28	100
2011	658	33	5	28	86
2012	1029	36	8	28	Result awaiting
2013	1113	39	10	29	Ongoing
2014	1039	40	4	36	Ongoing
M Sc Botany					
2014	604	10	2	8	Ongoing

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
UG	97%	3%	-
PG	100%	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

29. Student progression

Student progression	%
UG to PG	25-30
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed • Campus selection	1

30. Details of Infrastructural facilities

*a) Library*

- 2073 books in the College library
- Copies of reference books are available at department library

*b) Internet facilities for Staff & Students*

- 9 Computers with internet connection are provided for students and staff in the Department.

*c) Class rooms with ICT facility*

- PG class is provided with a laptop, projector and Smart Board
- LCD projector is provided in third year UG class

*d) Laboratories*

- Well equipped UG and PG laboratories
- Phytochemistry laboratory with modern instruments

31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	31	35	32	15	6
2	C H Muhammed Koya scholarship	6	0	9	6	0
	Total	37	35	41	21	6

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts:

- Coaching for PSC examinations is provided to UG students with the help of external experts

33. Teaching methods adopted to improve student learning

- ICT enabled teaching methods are followed
- Assignments and Projects are given to students
- Field Study

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Students are involved in preparation of an Agro-biodiversity register of Pinavoorkudy Tribal Settlement

## DEPARTMENT OF HINDI

1. Name of the department : Hindi

2. Year of Establishment : 1955

3. Names of Programmes /  
Courses offered : B A Hindi

1. Names of Interdisciplinary courses and the departments/units involved

The Department offers open course (Film Studies) for fifth semester CBCSS Undergraduate students of the College.

2. Annual/ semester/choice based credit system

The Choice Based Credit and Semester System (CBCSS) of M G University for the UG Hindi Programme ( 6 semester)

3. Participation of the department in the courses offered by other departments

The Department offers a Common Course courses for B.A, B Sc and B Com programmes and B A Hindi programme and an open course (Film Studies) for fifth semester CBCSS Undergraduate students of the College.

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:5

Name of Post	Sanctioned	Filled
Professors	-	-
Associate Professors	3	3
Asst. Professors	2	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.K.Mohanan Pillai	M.A. M.Phil, Ph.D	Asso. Prof.	Journalism&Comparative Studies	24
Dr.Mini Varghese	M.A.M.Phil, Ph.D	Asso. Prof. & Head	Female Writing	20
Dr.Radhamoni Amma P. L.	M.A. M.Phil,Ph.D	Asso. Prof.	Satire	<u>18</u>
Dr. Sibi M M.	M.A. M.Phil, Ph.D	Asst. Prof.	Novels of krishnasobti	6
<u>Dr.Jinu John</u>	M.A. M.Phil, Ph.D	Asst. Prof.	Novels of bhagavaticharan verma	3.5

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)

- BA Hindi- 30:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled - Nil

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification
Dr.K.Mohanan Pillai	M.A. M.Phil, Ph.D
Dr.Mini Varghese	M.A.M.Phil, Ph.D
Dr.Radhamoni Amma P. L.	M.A. M.Phil,Ph.D
Dr. Sibi M M.	M.A. M.Phil, Ph.D
<u>Dr.Jinu John</u>	M.A, Ph.D

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received  
3 Minor research projects of UGC.



17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received -Nil
18. Research Centre /facility recognized by the University - Nil
19. Publications:
- a) Publication per faculty-
- a) Number of papers published in peer reviewed journals (national /international) by faculty and students –
- Anuseelan – Samakaleen Katha Sahithye mein Bharatiyatha(Cusat) – Sampradaykatha Banam Bharathuyatha – January 2010
  - Anuseelan – Samakaleen kavitha meim Bharatiyatha(cusat) – Bharatheeyata Ki Parikalpana Samakaleen Hindi Kavitha Mein.(January 2011)
  - Sahithya Mandal Pathrika \_ Keral Hindi Sahithya Mandal \_ Kochi. Ek Javan Kavi Ke Eindriy Anubhavom Ka Kaboolnaama.( January \_March 2011)
  - Dwibhashi Rashttra Sevak Asam RashttrrbshaPracharsamiti Ka Sahitya(kala sanskriti yak masik) - Malayalam Sameeksha Ke Prakhar Vaagar : Kuttikrishna Maarar( July – August 2011)
  - Akhar Parv – (Sahithy Vycharic Masik (New Delhi) Dr. K. Ayappa Panikar: Malayalam Ki Nayi Kavitha Ke Pradham HastaKshar.( December 2011)
  - Varthaman sahithy – (Sahithy Kala Aur Soch Ki Pathrika \_Aligarh) – Osarom Ke Aayine.(January 2012)
  - Chinthan-Srijan – Aastha Bharathi(Delhi) Sampradaykata Banam Bharatiyata.(January \_March 2012 ISSN0973-1490
  - Kavitha ka Varthaman – Vani Prakasan(New Delhi) Gum Nam Insanom Ki Avasadbhari Athmakadha(2012)
  - “Misbah”-Research Journal – M.E.S College , Nedumkandam. 2013 Jauary-June – ISSN 0976-2523
  - Topic –भगवतीचरण वर्मा के नारी पात्र – पारिवारिक संबंधों के संदर्भ में
  - “Meridian “ Journal from MES Asmabi College, Kodungallur .2013 December, ISSN 3378-750 (Nationai Journal of Interdisciplinary Studies and Research)

- Topic: जैनेन्द्रकुमार की रचना कुशलता 'पाजेब' और 'खेल' कहानी के सन्दर्भ में

c) Listed in International database: Nil

d) Monographs: Nil

e) Chapter in Books: 3

f) Books edited: 3

- Kavitha Ka Varthaman –Edited Criticism book of contemporary Hindi poems, published by Vani Prakashan, New Delhi -1, ISBN 978-93-5000-742-6 (compiled one Essay “GUM NAM INSANOM KI AVASADBHARI ATHMAKADHA”) Year 2011.
- Pratinidhi Malayalam Kahaniyam : Edited by Dr. P.K. Radhamani, Published by sastra sahitya Mandal, New Delhi-1, ISBN 978-81-7309-657-0 (PB) Year 2012. Compiled 5 stories Translated From Malayalam to Hindi.
- “Samakaaleen Hindi Sahity Mein Visthapan ki Samasya ki Abhivykti” –Edited by Dr. A.S Sumesh, ISBN : 978-81-8111-290-3, Publisher – Javahar Pustakalaya , Mathura (U.P) -281001, Year- 2014, Name of Chapter – “Bhagavaticharan Verma ke Upanyas ke Sandarbh mein Visthapan ka Adhyayan”

g) Books with ISBN/ISSN numbers: 2

h) Citation Index: Nil

i) SNIP: Nil

j) SJR: Nil

k) Impact Factor: Nil

l) h Index: Nil

20. Areas of consultancy and income generated -Nil

21. Faculty as members in

- i) National committees b) International Committees c) Editorial Boards.

Dr.K .Mohan Pillai

- Member of “Vikalp”, a registered literary organisation-national

Dr. Mini Varghese

- Member of “Vikalp”, a registered literary organisation-national

Dr.Radhamoniamma P L

- Member of “Vikalp”, a registred literery organisation-national,
- Chief editor of college magazine from 2004-2014,
- Advisory board member of NSS , M G University

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 and students - Nil

24. List of eminent academicians and scientists / visitors to the department-Nil

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

A one day state level seminar was conducted on 5th February 2015 with the financial support of the Management

c) International: Nil

26. Student profile programme/course wise:

Name of the Course	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
BA Hindi					
2010	180	37	12	25	<u>82</u>
2011	223	21	8	13	<u>72</u>
2012	307	35	15	20	<u>Result awaiting</u>
2013	291	37	14	23	<u>Ongoing</u>
2014	324	33	14	19	<u>Ongoing</u>

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
BA Hindi	<u>100</u>	=	=

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	<u>39%</u>
PG to M.Phil.	<u>13</u>
PG to Ph.D.	<u>4</u>
Ph.D. to Post-Doctoral	<u>NIL</u>
Employed • Campus selection • Other than campus recruitment	<u>40</u>
Entrepreneurship/Self-employment	<u>20</u>

30. Details of Infrastructural facilities

a) Library: 3874 books in the library

b) Internet facilities for Staff & Students-

Internet connectivity is available in the Department of Hindi and two class rooms.

j) Class rooms with ICT facility: 2

d) Laboratories: Nil

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	11	10	12	10	8
2	Central sector scholarship	0	0	0	0	0
3	C H Muhammed Koya scholarship	2	0	10	4	0
Total		13	10	22	14	8

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts

- Organized and conducted workshop for spoken English with external experts.
- Organized and conducted special lectures in English grammar with experts
- Conducted mock interview with external experts.

33. Teaching methods adopted to improve student learning

- Asking questions.
- Conducting test papers.
- Inspiring to ask questions.
- Participating in teaching.
- Assigning home assignments.
- Conducting class seminars.
- Remedial coaching for weak students.
- Reviewing and answering previous question papers.
- Making the students to enable in question paper setting.
- Revising syllabus after completing the portions.
- Computer aided Teaching for better effectiveness.

34. Participation in Institutional Social Responsibility (ISR) and Extension Activities

- Doing Remedial Coaching for Tribal students in the pinavoorkudy adoption Village from 2013 onwards at Govt. High School Pinavoorkudy.
- Distributed 30 books on Hindi grammar and communicative Hindi to students of higher classes.
- Donated 8 Tri lingual dictionaries and story books to the Govt. high school at pinavoorkudy for the tribal students.

35. SWOC analysis of the department and future plans

Strength

- All the Faculty members are Ph.D. holders

### Weakness

- 50 Percentage of the Students joining for B.A Hindi is economically and socially backward.

### Opportunities

- As Hindi is the national language of India, The Job opportunities for the students are high. So the students are happy in doing BA Hindi.

### Challenges

- We are facing difficulty in managing students of different levels within the same class.

### Future plan

- Publishing books

## DEPARTMENT OF HISTORY

1. Name of the department : History and Political Science
2. Year of Establishment : 1979
3. Names of Programmes / Courses offered : B.A History & M.A History (SF)
4. Names of Interdisciplinary courses and the departments/units involved

The Department offers open course (Environmental History in Indian Context) 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 M G University for the UG History Programme ( 6 semester)
  - The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG History ( 4 semester).
6. Participation of the department in the courses offered by other departments

The Department offers a Complimentary course for B.A Economics and Sociology programme and an open course (Environmental History in Indian Context) for fifth semester CBCSS Undergraduate students of the College.

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: Regular UG -4, Self financing PG -4

Name of Post	Sanctioned	Filled
Professors	-	-
Asso. Professors	-	-
Asst. Professors	4	3

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

UG Regular Faculty				
Name	Qualification	Designation	Specialization	No. of Years of Experience
Bince Mathew	M.A	Asst. Prof.	Subaltun History	10
Jani Chungath	M.A, M.phil	Asst. Prof.	Church History	2
Remia K	M.A, B.Ed	Asst. Prof.	Modern India	1

PG Self Financing Faculty				
Simi C V.	M.A	Asst Prof.	Ancient Indian History	1
Renjith	M.A,	Asst Prof.	Environmental History	-

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

25% of classes handled by Guest lecturer

13. Student -Teacher Ratio (programme wise)

- B A History-35: 1
- M A History-7:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification
Jani Chungath	M.A, M.phil

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

One major research project of ICSSR and two minor research project of UGC



17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

- Major Project “Muziris Heritage Project of Kerala Government: A Socio-Historical Impact Assessment” with the financial assistance of ICSSR - Bince Mathew as Co PI. Amount Rs.15,00,000/-
- Minor Project “History in the Palms: A Snapshot from the Palm leaves of the churches in Kerala” with the financial support of UGC- Jani Chungath as PI.
- Minor Project “Devakoothu: Women in Cultural History of North Malabar” with the financial assistance of UGC- Remia K as PI.

18. Research Centre /facility recognized by the University: Nil

19. Publications:1

- Publication per faculty :0.33
- Number of papers published in peer reviewed journals (national /international) by faculty and students

Jani Chungath: “Church as a Land Holder-Change in the dimension in the role of Arthat church in the 19<sup>th</sup> century” – Research Scholar, Vol II, No.III (ISSN 2249-6696)

- 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
- Monographs: Nil
- Chapter in Books: Nil
- Books Edited: Nil
- Books with ISBN/ISSN numbers with details of publishers: Nil
- Citation Index: Nil
- SNIP: Nil
- SJR: Nil
- Impact factor: Nil
- h-index: Nil

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees

Bince Mathew:

- Member, Indian Council of Historical Research ( ICHR), South Indian History Congress (SIHC)
- Member, UG board of studies, MG University

Jani Chungath:

- Member, Indian Council of Historical Research ( ICHR), South Indian History Congress (SIHC), Kerala Council of Historical Research (KCHR), Indian History Congress (IHC)

Remia K:

- Member, Kerala Council of Historical Research (KCHR)

b) International Committees: Nil

c) Editorial Boards: Nil

Bince Mathew:

Question Paper Setter of Kerala Public Service Commission

Jani Chungath:

Question Paper Setter of Kerala Public Service Commission

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 and students: Nil

24. List of eminent academicians and scientists / visitors to the department: Nil

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National:

A National Seminar on “Chinese Trade Networks and Mercantilism in Malabar during Medieval Period” was conducted with the financial support of UGC.

b) International: Nil

26. Student profile programme/course wise:

Name of the Course	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
BA History					
2010	472	48	26	22	88
2011	614	42	23	19	75
2012	836	49	30	19	Result Awaiting
2013	689	52	29	23	Ongoing
2014	760	48	24	24	Ongoing
M A History					
2014	54	4	2	2	Ongoing

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
UG	99%	1% (Lakshadweep)	-
PG	100%	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Defense Service: 3

29. Student progression

Student progression	Against % enrolled	
UG to PG	2013	25%
PG to M.Phil.	2012	10%
PG to Ph.D.	-	-

Ph.D. to Post-Doctoral	-	-
Employed		
• Campus selection	-	-
• Other than campus recruitment	2011	3 students
	2012	5 students
Entrepreneurship/Self-employment	2011	20%
	2012	15%
	2013	-

30. Details of Infrastructural facilities

- a) Library: 2746 number of books in the College library
- b) Internet facilities for Staff & Students: Wi-Fi and broad band connectivity with One Netbook and One Desktop computers.
- c) Class rooms with ICT: All class rooms are equipped with DLP projectors and computers. Broadband connectivity is provided for all final year class rooms.
- d) Laboratories: Nil

31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	18	41	45	19	3
2	Higher education scholarship	2	1	0	0	0
3	Central sector scholarship	0	0	1	1	0
4	C H Muhammed Koya scholarship	8	1	11	10	0
	Total	28	43	57	30	3

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts:

A National Seminar is organised on “Chinese Trade Networks and Mercantilism in Malabar during Medieval Period” with the financial support of UGC

33. Teaching methods adopted to improve student learning

- Project

- Observation
- Field Study

#### 34. Participation in Institutional Social Responsibility (ISR) and Extension activities

- Actively participated in the Clean campus Green campus mission
- Promoted Run Kerala Run campaign enthusiastically
- Department observes important International Days by exhibiting posters, charts and others
- All the classrooms in the department have their own waste bins which are managed by the students themselves. Students are encouraged to take lead in the cleaning of their classrooms and are regularly monitored by the respective tutors.
- Students and the faculty members contribute generously to all the charitable activities undertaken in the college.
- Collection and preservation of historical household utensils.
- Documented important historical places in the locality.

#### 35. SWOC analysis of the department and Future plans

##### Strength:

- Qualified teachers
- Active participation of PTA
- Support of Alumni
- Self financing PG Department
- Student participation in NSS, NCC and activities of all major clubs.
- Student Scholarships
- Student participation in Sports

##### Weakness:

- Students from poor economic back ground
- Students from poor social back ground

##### Opportunity:

- The College is located in the proximity of historical importance
- 28 tribal habitats are there in the neighbourhood

Challenges:

- Emerging self financing courses in the neighbourhood
- Opportunity of having an interface with experts in the subject

Future plans

- Self skill development programme.
- Establish Department Library.
- Start Departmental Research Journal.
- Start Certificate and Diploma courses in professional programmes.

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**DEPARTMENTS OF BIOTECHNOLOGY, BIOCHEMISTRY  
AND MICROBIOLOGY**

1. Name of the department : Biotechnology, Biochemistry and Microbiology

2. Year of Establishment : 2002

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

M.Sc. Biotechnology, M.Sc. Biochemistry and M.Sc. Microbiology

4. Names of Interdisciplinary courses and the departments/units involved:  
Nil

5. Annual/ semester/choice based credit system (programme wise)

Credit and Semester System (CSS) (4 Semester)

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

Name of Post	Sanctioned	Filled
Asst. Professors	13	13

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
Mrs. Nivya Mariam Paul	M. Sc	Ass. Prof.	Microbiology	7 Years

Elza John	M. Sc	Ass. Prof.	Microbiology	7 Years
Nayomi John	M. Sc	Ass. Prof.	Microbiology	6 Years
Dr. Anu Yamuna Joseph (On Leave)	M. Sc., Ph.D	Ass. Prof.	Biotechnology	4Years
Sweety Thomas	M. Sc	Ass. Prof.	Biotechnology	2Years
Sajna C	M. Sc	Ass. Prof.	Biotechnology	2Year
Sherin Jose	M. Sc	Ass. Prof.	Biotechnology	7 Months
Paul George (On Leave)	M. Sc	Ass. Prof.	Biotechnology	
Jaya (On Leave)	M. Sc	Ass. Prof.	Biotechnology	
Dr. Julie Jacob	M. Sc., Ph.D	Ass. Prof.	Biochemistry	5 Years
Ms. Elizabeth Jacob	M. Sc	Ass. Prof.	Biochemistry	6 Years
Ms. Ann Kocheriyil Joseph (On Leave)	M. Sc	Ass. Prof.	Biochemistry	3Years
Ms. Deepa G	M. Sc	Ass. Prof.	Biochemistry	5 Years

11. List of senior visiting faculty: Nil
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 100%
13. Student -Teacher Ratio (programme wise)
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil

Post	Sanctioned	Filled
Lab Assistant	3	3

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Name	Qualification	Designation	Specialization	No. of Years of Experience
Dr. Anu Yamuna Joseph (On Leave)	M. Sc., Ph.D	Asst. Prof.	Biotechnology	4Years
Dr. Julie Jacob	M. Sc., Ph.D	Asst. Prof.	Biochemistry	5 Years



16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

National - 2

No	Name of the Faculty	Minor/ Major	Funding Agency	Grant received
1	Dr. Julie Jacob	Minor	UGC	Rs 1,35,000
2	Ms. Ann Kocheriyil Joseph	Minor	UGC	Rs 2,00,000
3	Nayomi John	Minor	UGC	1,40,000

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received -Nil

18. Research Centre /facility recognized by the University: Nil

19. Publications: 24

- \* a) Publication per faculty: 2

- Deby Anna Augustine and Anu Yamuna Joseph, (2014). Isolation and Characterization of NBS-LRR Resistance Gene in Banana (*Musa AAB cv. Nendran*). *International Journal of Advanced Biotechnology and Research(IJBR)*: 5 (3): 353-358
- Elza John, Neethu P Shaju and Anu Yamuna Joseph, (2014). Prevalence of Plasmid Borne Ampc Gene in Multi- Drug Resistant Freshwater and Soil Bacteria. *IOSR-JESTFT* 8 (4): 1-08.
- Anne Mary Sajan, Joe Joseph, Greeshma Jose and Anu Yamuna Joseph, (2013). Variation in RASSF1A Hypermethylation in Breast Cancer Patients under Various Stages of Treatment. *Adv Bio Tech*: 12(07): 18 – 21.
- Joseph AY, Rasool TJ, (2009). High frequency of connexin26 (GJB2) mutations associated with nonsyndromic hearing loss in the population of Kerala, India, *Int. J. Pediatr. Otorhinolaryngol.* 73, 437—443.
- Joseph AY, Babu VS, Dev SS, Gopalakrishnapai J, Harish M, Rajesh MD, Anisha S and Mohankumar C. (2008). Rapid detection and characterization of Chikungunya virus in febrile patients, from Kerala, India by RT-PCR. *Indian Journal of Experimental Biology*, 46: 573-578.
- Joseph AY, Rasool TJ (2003). Role of selected mutations in exon 28 and 39 of Myosin15 gene in autosomal recessive nonsyndromic sensorineural deafness among affected South Indian families. *Am J Med Genet* July 1; 120 A (1):136-8.

- Joseph AY, Ramesh Menon U, Rasool TJ (2000) .Mutation at exon 39 of myosin15 is rare or absent among people with profound sensorineural deafness in Kerala. *Current Science*, 78(5): 553-554
- Partial protein purification and evaluation of in vitro antibacterial activity of folded and partially unfolded lactalbumin and lactoglobulin from attappady breeds of goat.. Proceedings of the UGC Sponsored Workshop on “Molecular Identification and computational Biology” Held at Dept. of Biosciences, MES College, Marmapally, Dec 16-20, 2013. Pp 43-51. ISBN 978-81-923985-5-6.
- Vishnu, K.V.,Parvathy,P. and Julie Jacob.(2014) evaluation of anticancer activity of two medicinal plants from western ghats.In: Perspectives on Biodiversity of India.volume I (Biju Kumar,A.,Rajendran,P.G,Peethambaran,C.K., Eds), Centre for Innovation in Science and Social Action,Thiruvananthapuram,India,pp1-4
- G Deepa, Arun Kumar T Thulasidasan, Ruby John Anto, J Jisha Pillai, GS Vinod Kumar; Cross-linked acrylic hydrogel for the controlled delivery of hydrophobic drugs in cancer therapy; *International Journal of Nanomedicine* 7 (2012) : 4077 – 4088(Impact Factor- 4.5)
- Lekha Nair. K, Arun Kumar T Thulasidasan, G. Deepa, Ruby John Anto, J Jisha Pillai, GS Vinod Kumar; Purely aqueous PLGA nanoparticulate formulations of curcumin exhibit enhanced anticancer activity with dependence on the combination of the carrier; *International Journal of Pharmaceutics* 425 (2012): 44-52 (Impact Factor- 3.79).
- Deepa G, Ashwanikumar N, Pillai JJ, Kumar GS; Polymer nanoparticles- a novel strategy for administration of Paclitaxel in cancer chemotherapy; *Current Medicinal Chemistry* 36 (2012): 6207 – 13 (Review) (Impact Factor – 4.239)
- Nivya Mariam Paul, Anjali Mohan, Elza John, Nayomi John , Ajitha AR, Shanti A Avirah. Phytochemical Screening and Evaluation of the Antimicrobial Potential of *Coleus ambonicus*. *World Journal of Pharmaceutical Research*.Vol 3, Issue 2, 2014, p2811-2826.
- Elza John, Neethu P Shaju, Anu Yamuna Joseph. Prevalence of plasmid borne ampC gene in multidrug resistant freshwater and soil bacteria. *IOSR Journal of environmental science, toxicology and food technology*. Vol 8, Issue 4, April 2014, p01-08.
- Sherin Jose, Anisha CS, Mary Mathew K, O Aniel Kumar and Rao YS. 2014. ISSR markers as a tool for assessing genetic diversity in Small cardamom. *International Journal of Tropical Agriculture*, 32: 465-467.

- Mary Mathew K, Sherin Jose, YS Rao, U. Gupta and J. Thomas. 2014. Optimization of genomic DNA extraction from fresh and dry leaves of Large Cardamom (*Amomum subulatum* Roxb) for diversity analysis. *Indian Journal of Biotechnology*, 13:221-224.
- Mary Mathew K, Pradip Kumar K, SwapnaSasidharan, Anisha C S, Sherin Jose, RemyaLekshmi and Rao Y S (2014). Biotechnology Research on Spices, In: Basics of Horticulture, Ed K V Peter, Publs NIPA, New Delhi.
- Sherin Jose, Mary Mathew K, Rao YS, Kuruvilla KM and Sudarshan MR. 2013. Identification of variety specific ISSR markers in small cardamom (*Elettaria cardamomum* Maton). *Journal of Plantation crops*. 41(2): 233-237.
- Sherin Jose, SwapnaSasidharan, RemyaLekshmi, Ragina VC, Anisha CS, Mary Mathew K and Rao YS. 2013. Virus indexing of black pepper (*Piper nigrum* L.) against CMV and PyMoV. *Advances in Plant Sciences* 26(II): 317-320.
- Remya Lekshmi, Sherin Jose, Anisha CS, Swapna Sasidharan, Mary Mathew K and Rao YS. 2013. Genetic diversity in large cardamom (*Amomum subulatum* Roxb) using ISSR markers. *Advances in Plant Sciences* 26(II): 347-351.
- PA Nazeem, Sherin Jose, NK Sheeba, M Soumya, Anju Baby, PG Sadhan Kumar and Nirmala Devi. 2011. "Differential gene expression for bacterial wilt incidence in tomato (*Solanum lycopersicum* L.) revealed by cDNA AFLP analysis". *Physiological and Molecular Plant Pathology*, 76: 197-203.
- RenuKushwah, PA Nazeem, S Manjula, Sherin Jose and R Keshavachandran. 2011. Differential gene expression in relation to drought tolerance in Black Pepper (*Piper nigrum* L.). *Journal of Plantation Crops* 39(1):224-227.
- SwapnaSasidharan, Anisha CS, Sherin Jose, RemyaLekshmi, Mary Mathew K and Rao YS. 2013. Rapid isolation of DNA and optimization of PCR protocols for molecular marker analysis in a dioecious tree spice, nutmeg (*Myristica fragrans* Houtt.). *Advances in Plant Sciences* 26(II): 297-300.
- CS Anisha, Remya Lekshmi, Ragina VC, Swapna Sasidharan, Sherin Jose, Mary Mathew K and Rao YS. 2013. Optimization of RNA isolation protocol from black pepper (*Piper nigrum* L.) for RT-PCR amplification. *Advances in Plant Sciences* 26(II): 309-311.

\* 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

\* Monographs: Nil

\* Chapter in Books

- S. Anisha, Anu Yamuna Joseph and C. Mohankumar; Identification of a novel lactoferrin variant in Milk of Bos indicus Vechur Breed: Bioresources for Food Security and Rural Livelihood, Edited by G.K. Kulkarni and B.N. Pandey, Narendra Pub, 2010, ISBN-13: 9789380428048.
- Mary Mathew K, Pradip Kumar K, Swapna Sasidharan, Anisha C S, Sherin Jose, Remya Lekshmi and Rao Y S (2014). Biotechnology Research on Spices, In: Basics of Horticulture, Ed K V Peter, Publs NIPA, New Delhi,

\* Books Edited: Nil

\* Citation Index: Nil

\* SNIP: Nil

\* SJR: Nil

\* Impact factor: Nil

\* h-index: Nil

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

- a) National committees
- b) International Committees: Nil
- c) Editorial Boards

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/ programme: 95% of PG Students are doing in-house projects
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 5%

23. Awards / Recognitions received by faculty and students
- Ms.Geethanjali S from second year MSc Microbiology received cash prize for poster competition regarding World Ozone Day celebrated at Cochin University of Science & Technology, Kochi.
  - Bibin and Melvin Philip from second year MSc biotechnology received cash prize for poster competition regarding World Ozone Day celebrated at Cochin University of Science & Technology, Kochi.
24. List of eminent academicians and scientists / visitors to the department
- Dr. Muhammed Hatha (Reader, CUSAT)
  - Dr. Punnen Kurian Venkadathu, Director, Tropical Institute of Ecological Sciences, Kottayam
  - Dr. Parvathy A, Scientist B, NIO, Cochin
  - DR. N.R Kamini Senior Scientist, CLRI Chennai
  - Dr. M Thangavel, Head, Sree Narayana Guru College, Coimbatore
  - Dr. Sherine Sonia Cubeluio, Senior Scientist, CMLRE, Kochi
  - Dr. Satheesh Mundiur, RGCB, Thiruvananthapuram
  - Dr. Sona S Dev, School of Science and technology, Nigeria
  - Dr. P M Shareef, College of Fisheries, Panangadu
  - Dr. Santhosh Kumar, RGCB
  - Dr. Tessy Iype, AIIMS, New Delhi
  - Dr. K V Lalitha, CIFT, Cochin
  - Dr. A mukhopadhyay, DST, New Delhi
  - Dr. Seetha k, Syngene, Bangalore
  - Dr. H Krishnan, CCMB, Hydrebad
  - Dr. E Sreekumar, RGCB, Thiruvananthapuram
  - Dr. Hariharan S, RCC, Thiruvananthapuram
  - Dr. H Devaraj, University of Madras
  - Dr. D Karunakaran, IIT Madras
25. Seminars/ Conferences/Workshops organized & the source of funding
- a) National
- UGC sponsored Seminar on “Clinical Applications of Molecular Biology” organized by the Department of Biotechnology in

collaboration with the Departments of Microbiology & Biochemistry on 10 February 2011.

- UGC sponsored seminar on “Clinical Applications of Molecular Biology” organized by the Departments of Microbiology, Biochemistry & Biotechnology on 3 & 4 February 2012.
- UGC sponsored seminar on “New frontiers in Molecular Biology” organized by the Departments of Microbiology, Biochemistry & Biotechnology on 12 & 13 December 2013
- UGC sponsored National Seminar on “New Vistas in Microbial Sciences” on 16 & 17 October 2014

#### State level seminars and workshops

- State level seminar and workshop on ‘Biological Techniques’ organized by Departments of Microbiology, Biochemistry & Biotechnology, on November 30, December 1 & 2, 2010
- State level seminar and workshop on ‘Biological Techniques’ organized by Departments of Microbiology, Biochemistry & Biotechnology, on 14, 15 & 16 December 2011
- KSCSTE Sponsored State level seminar & workshop on “Biological Techniques” organized by Departments of Microbiology, Biotechnology and Biochemistry, on 9, 10, 11 January 2013.
- State level seminar and workshop on ‘Biological Techniques’ organized by Departments of Microbiology, Biochemistry & Biotechnology, on 27, 28, 29 November 2013
- State level seminar and workshop on ‘Biological Techniques’ organized by Departments of Microbiology, Biochemistry & Biotechnology, on 3, 4, 5 February 2015
- A state level seminar on ‘Brain awareness’ was organized in collaboration with the Departments of Zoology, on 18 March 2011

b) International: Nil

26. Student profile programme/course wise:

Name of the Course	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
M. Sc. Biotechnology					
2010	-	15	3	12	93

2011	-	15	1	14	87
2012	-	19	1	18	87
2013	61	14	2	12	Ongoing
2014	55	7	1	6	Ongoing
M. Sc. Microbiology					
2010	-	24	2	22	83
2011	-	19	0	19	95
2012	-	19	2	17	95
2013	139	13	1	12	Ongoing
2014	102	13	0	13	Ongoing
M. Sc. Biochemistry					
2010	-	16	2	14	88
2011	-	6	1	5	100
2012	-	15	1	14	100
2013	101	13	2	11	Ongoing
2014	76	4	0	4	Ongoing

\*M = Male \*F = Female

## 27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
M. Sc. Biochemistry	100	-	-
M. Sc. Microbiology	99	1	-
M. Sc. Biotechnology	98	2	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Sl. No.	Name	Course	Year	Awards/Fellowships
1	Binshad B	M.Sc Biochemistry	2012	UGC-CSIR- NET
2	Aswathy Udayan	M.Sc. Microbiology	2013	UGC-CSIR- NET
3	Neetha R.L	M.Sc.Biotechnology	2013	UGC-CSIR-JRF

29. Student progression

Student progression	Against % enrolled
PG to M.Phil.	2
PG to Ph.D.	3
Ph.D. to Post-Doctoral	
Employed • Campus selection	5
• Other than campus recruitment	4
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities

*a) Library*

1199 books in the College library

Copies of reference books are available at department library

*b) Internet facilities for Staff & Students*

Computers with internet connection are provided for students and staff in the Department.

*c) Class rooms with ICT facility*

PG class is provided with a laptop, projector and Smart Board

*d) Laboratories*

Well equipped PG laboratories



31. Number of students receiving financial assistance from college, university, government or other agencies

Post Metric Scholarship	8
C H Muhammed Koya scholarship	6

32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts:

- HACCP two day training programme is provided to PG students with the help of external experts.
- Lecture on Fundamentals of Immunology by Dr.H.Krishnaprasad, Professor, AIMS, New Delhi

33. Teaching methods adopted to improve student learning

- ICT enabled teaching methods are followed
- Assignments and Projects are given to students
- Field Study

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Students are involved in preparation of an Agro-biodiversity register of Pinavoorkudy Tribal Settlement

- Imparted training in Biological techniques to under graduate students from various colleges.
- Demonstrated laboratory methods to High School students from Mar Athanasius International School
- Imparted awareness on modern Biological techniques to School students

35. SWOC analysis of the department and Future plans

Strength

- Modern infrastructure
- Full fledged bacteriology lab
- Inoculation room
- Mycology Lab
- Sterilization & Decontamination room
- Dedicated & trained faculty members.

### Weakness

- Inadequate Government funding for research & infrastructure development

### Opportunities

- Research & Extension Activities, Student Projects

### Challenges

- Lack of job opportunities in the State of Kerala

### Future Plans

- Full fledged Research Centre, Impart training and awareness programmes in biochemistry for empowerment of students from rural areas.

## DEPARTMENT OF ACTUARIAL SCIENCE

1. Name of the department : Actuarial Science (Self Financing)
2. Year of Establishment : 2012
3. Names of Programmes/Courses offered : M.Sc Actuarial Science
4. Names of Interdisciplinary courses and the departments/units involved:  
Nil
5. Annual/semester/choice based credits system (programmewise):  
  
The Post Graduate Credit and Semester System (PGCSS) of M G University for the PG Actuarial Science (4 semester).
6. Participation of the department in the courses offered by other departments:  
Nil
7. Courses in collaboration with other universities, industries, foreign institutions, etc.  
  
The Department collaborates with the PG. Department of Actuarial Science, Bishop Heber College, Trichy in conducting seminars, workshops and awareness programmes.
8. Details of courses/programmes discontinued (if any) with reasons: - Nil
9. Number of teaching posts: 4

Name of Post	Sanctioned	Filled
Asst.Professors	4	4

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)

Name	Qualification	Designation	No.of Years of Experience
Ms. A. Ezhilarasi	M.Sc.	Asst. Prof.	2
Mr. Senthil Kumar	M.Sc.	Asst. Prof.	2
Ms. Shalini Binu	MBA	Asst. Prof.	1
Ms. Silla Mathew	M.Sc.	Asst. Prof.	0

11. List of senior visiting faculty: -1

Prof. C J Vijayan Kanakaraj, Former Head, PG. Department of Actuarial Science, Bishop Heber College, Trichy

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: - 100%

13. Student-Teacher Ratio (programmewise): 7: 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: -Nil

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG.: Nil

16. Number of faculty with ongoing projects from a)National b)International funding agencies and grants received: - Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: - Nil

18. Research Centre/facility recognized by the University: - Nil

19. Publications: Nil

a) Publication per faculty:

Number of papers published in peer reviewed journals (national /international) by faculty and students: Nil

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

Monographs: Nil

Chapter in Books: Nil

Books Edited: Nil

Books with ISBN/ISSN numbers with details of publishers: Nil

Citation Index: Nil

SNIP: Nil

SJR: Nil

Impact factor: Nil

h-index: Nil

20. Areas of consultancy and income generated: Nil
21. Faculty as members in
- a) National committees  
Ezhilarasi .A
- Member of Institute of Actuaries of India
- S.Senthil Kumar
- Member of Institute of Actuaries of India
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: - Nil
23. Awards/Recognitions received by faculty and students: Nil
24. List of eminent academicians and scientists/visitors to the department:
- Prof. C. J. Vijayan Kanagaraj
  - Sri. R. Srinivasan
25. Seminars/Conferences/Workshops organized & the source of funding
- a) National:
- National Seminar on Actuarial Science, Cryptography and Geogebra with the financial assistance from UGC
- b) International: Nil
26. Student profile programme/coursewise:

Name of the Course	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
M Sc Actuarial Science					
2012	-	4	-	4	100
2013	-	4	-	4	Ongoing
2014	29	14	7	7	Ongoing

\*M=Male \*F=Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
M.Sc. Actuarial Science	100%	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.:

- Two students passed Actuarial Science Entrance Test (ACET) to become a member of Institute of Actuaries of India
- One student cleared one paper in Faculties of Actuaries, London

29. Student progression

Student progression	Against enrolled	%
UG to PG	-	
PG to M.Phil.	-	
PG to Ph.D.	-	
Ph.D.to Post-Doctoral	-	
Employed		
• Campus selection	1	
• Other than campus recruitment	1	
Entrepreneurship/Self-employment	1	

30. Details of Infrastructural facilities

a) Library:

Department library with 66 books in addition to the books in college library

b) Internet facilities for Staff & Students: Wi-Fi and broadband connectivity

a) Class rooms with ICT facility:

Class rooms are equipped with smart board and DLP projectors

d) Laboratories: Nil

31. Number of students receiving financial assistance from college, university, government or other agencies: - Nil

32. Details on student enrichment programmes (special lectures /workshops /seminar) with external experts:

Coaching for ACET, IAI, IFAI, participated in national level seminar conducted by Bishop Heber College, Trichy.

33. Teaching methods adopted to improve student learning:

- PPT presentation by both students and staff
- Periodical tests and regular internal assessments
- Technical classes for doing the projects

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Nil

35. SWOC analysis of the department and Future plans:

Strength

- Good Infrastructure
- Copyright materials from ActEd Company,UK.
- Good collection of books in department library.
- Laptop and internet facilities were provided.
- Regular assessment is conducted to evaluate students' performance.

Weakness

- Class rooms don't have desktops
- No books in library for our department.
- No special recruitment provided for our department.

Opportunity

- Wide scope of job opportunities in insurance companies banks, investment firms and Universities.

Challenges

- Competition from students of CA/ICWA/MBA
- Students need to clear exams conducted by IAI and faculty of actuaries to get placement in reputed companies.
- Less awareness about the course

Future Plans:

- Conduct classes in SPSS and other software with Statistics Department
- Undertake internship programs for students during the course.

**DEPARTMENT OF COMMERCE (SF)**

1. Name of the department : Commerce (Self-financing)
2. Year of Establishment : 1996
3. Names of Programmes / Courses offered : B.Com Model III (Tax: Procedure and Practice)
4. Names of Interdisciplinary courses and the departments/units involved  
Applied Statistics
5. Annual/ semester/choice based credit system  
  
The Choice Based Credit and Semester System (CBCSS) of M G University for the UG B. Com Model III (Taxation) Programme ( 6 semester)
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

Name of Post	Filled
Associate professors	2
Asst. professors	3

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Sl. No	Name	Qualification	Designation	Specialization	Exp. Years
1	V.P.Gangadhara Nair	M.Com, M.Phil	Asso. Prof. (Rtd)	Taxation	28
2	Jacob K Mathew	M.Com, M.Phil	Asso. Prof. (Rtd)	Operation Research	29
3	Sheeba Stephen	M.Com	Asst.Prof.	Finance	15
4	Maria Daney	M.Com, MBA	Asst.Prof.	Finance	5



5	Simi Varghese	M.Com, B.Ed.	Asst.Prof.	Finance	5
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11. List of senior visiting faculty- Nil
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

All the classes are handled by contract faculty

13. Student -Teacher Ratio (programme wise)

B. Com Model III (Taxation) - 24:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled - Nil
15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Sl. No.	Name	Qualification
1	V.P.Gangadharan Nair	M.Com , M.Phil
2	Jacob K Mathew	M.Com, M.Phil
4	Maria Daney	M.Com, MBA

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil
17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil
18. Research Centre /facility recognized by the University - Nil
19. Publications: Nil

- a) Publication per faculty:
- b) Number of papers published in peer reviewed journals (national /international) by faculty and students:
- c) Listed in International database:
- d) Monographs:
- e) Chapter in Books:
- f) Books edited: Nil
- g) Books with ISBN/ISSN numbers :
- h) Citation Index:

- SNIP:  
 j) SJR:  
 k) Impact Factor:  
 l) h Index:

20. Areas of consultancy and income generated -Nil

21. Faculty as members in

- k) National committees : Nil  
 b) International Committees: Nil  
 c) Editorial Boards.

V.P.Gangadharan Nair: Magazine Editorial Board D’paul  
 Institute of Science & Technology Angamaly

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.in Research laboratories/Industry/ other agencies. : 7%

23. Awards / Recognitions received by faculty and students - Nil

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) State level seminars: Nil

c) International: Nil

26. Student profile programme/course wise:

Name of the Course	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B Com (SF)					
2010	179	38	29	13	95
2011	931	39	23	16	95

2012	1037	39	18	21	Results awaiting
2013	735	38	26	12	Ongoing
2014	799	38	23	15	Ongoing

\*M = Male \*F = Female

27. Diversity of Students

Year of Admission	% of the Students from the same state	% of the Students from the other state	% of the Students from abroad
B Com Model III	100%	-	-

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

Year Of Pass Out	UG to PG	Employed			Total
		Campus selection	Other than Campus recruitment	Self employment	
2010	28	-	2	3	33
2011	28	-	8	2	38
2012	37	-	-	2	39
2013	36	-	1	1	38
2014	36	2	-	1	39

30. Details of Infrastructural facilities

a) Library: 2725 Books in the College library

b) Internet facilities for Staff & Students

Class rooms with ICT facility:

d) Laboratories: Nil

31. Number of students receiving financial assistance from college, university, government or other agencies

SI No.	Scholarship	2014	2013	2012	2011	2010
1	Post Metric Scholarship renewal	17	43	56	21	7
2	Central sector scholarship	7	4	27	24	0
3	C H Muhammed Koya scholarship	1	0	3	3	0
4	Suvarana Jubilee Scholarship renewal	2	12	10	10	0
Total		27	59	96	58	7

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

33. Teaching methods adopted to improve student learning:

Power Point Presentation

34. Participation in Institutional Social Responsibility (ISR) and Extension:

1. SWOC analysis of the department and Future plans

Strength

- The College has a dedicated faculty
- Good management which preserves teacher's dignity and values

Weakness

The socio-economic background of many of the students (some of them are first and second generation learners) admitted in the College is responsible for poor language competence (both in their mother tongue as well as English). This leads to an unsatisfactory level of comprehension and communication, particularly in the first two semesters

Opportunities

- Many corporate prefer commerce graduates than other Graduates.
- Growing demand for commerce graduates with tally

Challenges

- Incorporation of new changes in the field of commerce in the Commerce curriculum.

- Attractive new courses in other fields may reduce the strength in Commerce education.

#### Future plans

- To arrange entrepreneurs meet to give training for Final B.Com students
- To arrange a practical awareness class to KVAT to Second B.Com Students

## DEPARTMENT OF MALAYALAM

1. Name of the Department: Malayalam
2. Year of Establishment: 1955
3. Names of Programmes /Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D. etc.): Nil
4. Names of Interdisciplinary courses and the departments/units involved:  
Nil
5. Annual/semester/choice based credit system (programme wise): Nil  
The Department offers common courses for the Under Graduate students of B.A, B Sc and B Com Programmes.
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

Name of Post	Sanctioned	Filled
Asst. Professors	2	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
Smt. Asha Mathai	M.A, B.Ed.	Asst. Prof	Novel Studies	5
Smt. Seena John	M.A, MPhil, B.Ed.	Asst. Prof	Language Studies	5

11. List of senior visiting faculty: Nil
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 50%

13. Student-Teacher Ratio (programme wise): 240:1

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
Smt. Seena John	M.A, MPhil, B.Ed.

16. Number of faculty with ongoing projects from a) National b)International funding agencies and grants received.: Two

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	Asha Mathai	Ecofeminism in the Novels of P Valsala	45,000	UGC
2	Seena John	Female body and its Narration in Malayalam Short stories	60000	UGC

18. Research Centre/facility recognized by the University: Nil

19. Publications:

b) Publication per faculty

Name of the author	Title of research paper	Journal publication of	Year
Asha Mathai	Puthukavithayde Manveeru	Grandhalokham	2015
	Puthukavitha Sydhanthikavayanay um Visakalanavum		2014

Seena John	Akshara Sangalpanam Tholkappiyathil- Samakalika Bhashapadanathile Aksharasankalpnathe Munniruthiyulla Charcha		2014
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b. Number of papers published in peer reviewed journals (national/international) by faculty and students: Nil

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 in-house projects including interdepartmental/programme: NA

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: Nil

24. List of eminent academicians and scientists /visitors to the department:



1	Sri. Kureppuzha Sreekumar
2	Sri. V. Madhusoodanan Nair
3	Dr. Sunil.P.Ilayidam, Asso. Prof. in Malayalam,S.S.U.S.Kalady.
4	Dr. Scaria Zacharia, Rtd. Head, Dept. of Malayalam, S.S.U.S. Kalady.
5	Dr. Harikumar .S.Director, DSS, M.G.U. Kottayam, and Assistant Professor, School of Letters.
6	Dr. Mary Matilda, Sp. Gr. Principal, Maharaja's College, Eranakulam.
7	Dr. J. Prameela Devi, Member, Women's Commission, And Asso. Prof. Dept. of English, N.S.S. College, Vazhoor
8	Dr. K.M.Sheeba, Asso. Prof. Dept. of History, S.S.U.S. Kalady.
9	Dr. P Geetha, Asso. Prof. Dept. of Malayalam, Govt. Sanskrit College, Pattambi
10	Ms. Sophy Jacob, Child Development Project Officer, Kothamangalam.
11	Dr. V.P. Markose, Asso. Prof. Dept. of Malayalam, U.C. College, Aluva
12	Dr. Aju .K. Narayanan, Asst. Prof. Dept. of Malayalam, U.C. College, Aluva
13	Dr. Muse Mary George, Asso. Prof. Dept. of Malayalam, U.C. College, Aluva
14	Dr. Aju K. Narayanan, Asst.Prof .Dept. of Malayalam, U.C. College, Aluva
15	Dr.N.Ajayakumar, Asso. Prof. Dept. Of Malayalam, S.S.U.S. Kalady

25. Seminars/Conferences/Workshops organized & the source of funding

a) State

- Sreshttabhashaykku aadaram-Seminar conducted by Dept. of Malayalam in collaboration with Taluk Library
- Malayalathinte paattuvazhi-Arangilum aniyarayilum-One day Seminar conducted by Dept.of Malayalam

b) National

UGC sponsored Two Day workshop on 'Women Empowerment' 14 & 15 September 2012 in Collaboration with Department of Students Services, M G University Kottayam

c) International: Nil

26. Student profile programme /coursewise: Nil

27. Diversity of Students: NA

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? NA

29. Student progression: NA

30. Details of Infrastructural facilities

a) Library: 7914 books in the College library

b) Internet facilities for Staff & Students: The teaching staffs have been provided one desktop and have internet connection at the department staff room.

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: NA

32. Details on student enrichment programmes (special lectures /workshops /seminar) with external experts:

33. Teaching methods adopted to improve student learning:

We used to give special class for weak students and try to bring them up at least to the average level

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 well fare of society.

## DEPARTMENT OF PHYSICAL EDUCATION

1. Name of the department : Physical Education

2. Year of Establishment : 1956

3. Name of the program / Courses offered : Nil

4. Name of the 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 – NA

6. Participation of the department in the courses offered by other department –

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, etc. - Nil

8. Details of courses /programs discontinued (if any) with reasons - Nil

9. No of teaching posts:2

Name of Post	Sanctioned	Filled
Associate Professor	1	1
Assistant Professor	1	1

10. Faculty profile with name, Qualifications, Designations, Specialization, (D.Sc, D.Litt, Ph.D, M.Phil.etc)

Name	Qualifications	Designation	No.of Years of Experience
Mathews Jacob	MPed, M.Phil, NIS Diploma in Volleyball coaching	Asso.Prof.	21
Haary Benny Chettiamkudiyil	MPed,M.Phil (IIndRank), NIS Diploma in Football coaching	Asst.Prof.	1year

11. List of senior visiting faculty

- Sri T. P Ouseph, Former Indian Coach (Athletics)
- Sri P I. Babu, Former Faculty of Mar Athanasius College (Athletics)
- Sri. Baiju Joseph, Coach, Kerala Sports Council (Athletics)
- Sri Raju P. R., Football Coach

12. Percentage of lectures delivered and practical classes handled (Program wise) by temporary faculty:

10% of extra work is handled by external coaches, appointed by management.

13. Student teacher ratio (programme wise): 800:1

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.

Sl.No	Name	Qualification
1	Mathews Jacob	MPed, M.Phil, NIS Diploma in Volleyball coaching
2	Haary Benny Chettiamkudiyil	MPed, M.Phil( IInd Rank), NET, NIS Diploma in Football coaching

16. No of faculty with ongoing projects from a) National b) International Funding agencies and grants received. - Nil

17. Departmental projects funded by DST-FIST; UGC; DBT; ICSSR etc. and total grants received - NA

18. Research Centre / faculty recognized by the university. Nil

19. Publications: Nil

a) Publication per faculty:

Number of paper published in peer reviewed journals (National/International) by faculty and student

Number of publications listed in International Database ( forEg. Web of science, Scopus, Humanities International Complete, Dara Data base – International social science Directory, EBSCO host, etc. )

Monographs

Chapter in books

Book 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.

22. Student Project: Nil

- Percentage of students who have done in house projects including inter department / programme
- Percentage of students placed for projects in organizations outside the institutions i.e. in research laboratories/ Industry/ other agencies

23. Awards / Recognitions received by faculty and student

State Level awards

The College has received recently the prestigious Award for the *Best College in Sports* for the year 2013-14.

Prof. P I Babu, former Head of the Department of Physical Education is awarded the Best Teacher of Physical Education by the Government of Kerala in 2013.

International Achievements

- Ms. Anilda Thomas, the pride of Mar Athanasius College, was a member of the Indian Team to participate in the Commonwealth Games held at Glasgow Scotland in 2014. She participated in the Asian Track and Field meet held at Pune in 2013 representing Indian Team (4x400 Relay) and won Gold Medal. She also participated in the World Athletic Championship (Moscow) 2013 and Asian Indoor Athletic Championship Hangzhou (China) 2013.
- Ms. Sheena N.V. was selected to the Indian Team of Asian Athletic Championship but she did not represent since she was participating in the World University Games held at Kazan, Russia in 2013. She represented India in Triple Jump in the Indoor Athletic Championship held in Hangzhou, China.

- Ms. Arunima P.M. was selected to the Indian Team for the Junior SAF Athletic Meet held at Ranchi in 2013 (won Silver Medal in 4 x 400 meters relay).
- Ms. Tiana Mary Thomas of the college secured Gold Medal in 4 x 400 meters relay in South Asian Federation Games held at Dhaka and Silver medal in 4 x 400 meters relay in the Asian Indoor Games held at Hanoi, Vietnam, in November 2009 and represented India in the Asian Indoor Athletic Meet held at Qatar. She also participated in the Common Wealth Games held at New Delhi and in the Asian Games held in China in 2010.
- Mr. Vishnu Prasad represented India in the Common wealth Chess Championship held at Chennai in 2013.
- Mr. Justin Jose, former student represented India in the World Arm Wrestling Championship held at Spain and Won a Gold and a Silver medal in 2012 and also represented India in the World Arm Wrestling Championship held at Punjab and won a Silver medal in 2013.
- Mr. Anshad A. of the College was selected to the Junior Indian Volleyball Team in the year 2010.

#### Recognitions by government

- In recognition of our achievements in sports, *Sports Authority of India* (SAI) selected Mar Athanasius College as its Extension Centre.
- The Kerala Govt. has sanctioned Sports Hostel for Athletics, Football and Volleyball.
- Kerala Cricket Association sanctioned and laid an Indoor Cricket Nets with floodlit facilities for the college (free of cost).

#### State and University Level Achievements of The College

- The College Athletic Team won the Championship for Men & Women in the College Games organized by the *Sports Council of Kerala* (2013-14).
- The College Athletic team became champions in the Mahatma Gandhi University Athletic Meet in the Men's section in 2010, 2011, 2012, 2013 and 2014.
- The College Football team won the M G University Inter Collegiate Football Championship in 2012 and Runner up in 2011 and 2013.
- The College Volleyball team was University Champions in 2011 and 2012 and placed second runner up in 2010.
- The College Cross Country team was the M G University Champions in 2010

24. List of eminent academicians and scientists / visitors to the department – Nil

25. Seminars / Conferences / Workshops organized & the sources of funding - 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

S.No.	Stage I	No
1	Football Field 110x75 m	1
2	Volleyball Court (including wooden and synthetic multipurpose stadium)	3
3	Basketball Court (including wooden and synthetic multipurpose stadium)	3
4	Badminton Court (wooden)	3
5	320 m Training Track with 2 Jumping Pits, High Jump Mat and all Throwing Sectors with Fencing with floodlit facilities	1
6	<ul style="list-style-type: none"><li>▪ Fitness Centre and Weight Training Hall</li><li>▪ Medicine Balls – 25 nos</li><li>▪ Lifting Barbells – 08 nos</li><li>▪ Swiss Balls – 20 nos</li><li>▪ More than 1000 kg weight</li><li>▪ Barbell Sets</li><li>▪ Core Balancing Bars</li><li>▪ Horizontal bars, Wall Bars, Parallel Bars etc.</li><li>▪ Gymnastic mats</li><li>▪ Yoga Mats</li><li>▪ Video analysis facilities</li><li>▪ Facilities for Recreation Games</li><li>▪ Facilities for Tennis and Chess</li></ul>	1
7	Cricket Centre Wicket	1
8	Cricket Indoor Nets	2
9	Handball Court	1
10	Hills for Training	2
11	Boys and Girls Warm-up Area	1
12	Multi- purpose Indoor Stadium – 11,000 sq. ft.	1

13	Indoor Shooting Range 30x 20x 4 m	1
14	8 Lane Swimming Pool with dimension of 50x 25x 2 m	1

31. Number of students receiving financial assistance from college, University, Government or other agencies

YEAR	State government	Sports Authority of India	College Management
2010-11	-	10	50
2011-12	-	12	50
2012-13	-	15	60
2013-14	13	12	60
2014-15	25	1	45

32. Details on students enrichment programmes (special lecturers/workshop/seminar) with external experts - Nil

33. Teaching method adopted to improve students learning

Theory sessions

Use of seminar presentation by each student, debates and group discussions, power point presentations by students, test paper, question and answer method and continuous evaluation by teachers.

Practical sessions

Use of trial and error method is adopted for the improvement of students.

34. Participation in institutional social responsibility (ISR) and extension activities.

Participation in philanthropic activities like visiting old age homes, Palliative care centers, orphanages etc.

35. SWOC analysis of the department and future plans

Strengths

- Effective financial support of Management
- Modern Sports Equipments and Infrastructure
- Competent teaching and coaching faculty
- Best coaches and trainers are appointed on contract basis
- National and International Level recognition in Sports



- Demand pressure for admission in Sports Quota
- Financial support by SAI and Kerala Sports Council
- Encouraging new generation courses

#### Weaknesses

- Deficiency in fund for activities
- Staff quarters
- Sports hostel for boys
- Lack of refreshment facility
- Shortage of supporting staff
- Lack of effective waste management

#### Opportunities

- Collaboration with National and State Organizations
- Organize National and State seminars
- Utilization of alumnae
- Introduction of International standard equipment's.
- Accessibility of standard track and field
- Opportunities for experimental Research

#### Threats

- Competition from self-financing professional colleges and institutions
- Inconsistency of Government regulations
- Lack of sufficient funds

#### Future plans

- Initiate degree and PG courses
- Start diploma and certificate programmes
- Achieve an Olympic Medal within ten years
- Collaboration with other universities
- Interaction of students with international sports persons
- Create an excellent Training Center

## ANNEXURE I

### CERTIFICATE OF MINORITY INSTITUTION



भारत सरकार

राष्ट्रीय अल्पसंख्यक शैक्षणिक संस्था आयोग

GOVERNMENT OF INDIA

NATIONAL COMMISSION FOR MINORITY EDUCATIONAL INSTITUTIONS

प्रथम तल, जीवन तारा भवन, ५, संसद मार्ग  
पटेल चौक, नई दिल्ली - ११०००१  
1st Floor, Jeevan Tara Building, 5, Sansad Marg  
Patel Chowk, New Delhi - 110001

Dated.....


ON CONSIDERATION OF THE DOCUMENTARY EVIDENCE PRODUCED BEFORE THE COMMISSION, THE COMMISSION IS SATISFIED THAT FOLLOWING INSTITUTIONS NAMELY:-

Sl. No.	File No.	Name of the Institutions
1.	F. No. 999 of 2007	Athanasius College High School, Kothamangalam College P.O., Kothamangalam, Dist. Ernakulam, Kerala.
2.	F. No. 1000 of 2007	Mar Baselios College of Teacher Education, Kothamangalam College P.O., Kothamangalam, Dist. Ernakulam, Kerala.
3.	F. No. 1002 of 2007	Mar Athanasius College of Arts and Science, Kothamangalam College P.O., Kothamangalam, Dist. Ernakulam, Kerala.

MANAGED BY THE MAR ATHANASIVS COLLEGE ASSOCIATION, ARE MINORITY EDUCATIONAL INSTITUTIONS WITHIN THE MEANING OF SECTION 2(g) OF THE NATIONAL COMMISSION FOR MINORITY EDUCATIONAL INSTITUTIONS ACT 2004. CONSEQUENTLY, IT IS HEREBY DECLARED THAT THE AFORESAID INSTITUTIONS ARE MINORITY EDUCATIONAL INSTITUTIONS COVERED UNDER ARTICLE 30 OF THE CONSTITUTION OF INDIA.

GIVEN UNDER MY HAND AND THE SEAL OF THE COMMISSION ON THIS 27<sup>TH</sup> DAY OF OCTOBER, 2009.



  
(R. RENGANATH)  
SECRETARY

राष्ट्रीय अल्पसंख्यक शैक्षणिक संस्था आयोग  
NATIONAL COMMISSION FOR  
MINORITY EDUCATIONAL INSTITUTIONS  
भारत सरकार, नई दिल्ली  
Govt. of India, New Delhi

ANNEXURE II

CERTIFICATE OF UGC RECOGNITION: 2(f) and 12 (B)

236351, 23232701, 23237721 234116, 23235733, 23232317 23236735, 23239437, 23239627		विश्वविद्यालय अनुदान आयोग बहादुरशाह जफर मार्ग नई दिल्ली-110 002 UNIVERSITY GRANTS COMMISSION BAHADURSHAH ZAFAR MARG NEW DELHI-110 002
Extension No. 413 (CPP-I Colleges)		
UGC Website: <a href="http://www.ugc.ac.in">www.ugc.ac.in</a>	SPEED POST	
F. No.1-1/2004 (CPP-I)		23 <sup>rd</sup> September, 2009
The Principal, Mar Athanasious College, Kothamangalam, Dist. Ernakulam, <b>Kerala.</b>		
<b>Sub: - Recognition of Mar Athanasious College, Kothamangalam, Dist. Ernakulam, Kerala under Section 2 (f) &amp; 12 (B) of the UGC Act, 1956.</b>		
Sir, With reference to your letter dated 17.09.2009 on the above subject, I am directed to say that the name of <b>Mar Athanasious College, Kothamangalam, Dist. Ernakulam, Kerala</b> is included in the list of Colleges maintained under Section 2(f) & 12 (B) of the UGC Act, 1956 under the head Non - Government Colleges teaching upto Post Graduate Degree. The College is also eligible to receive Central assistance under Section 12 (B) of the UGC Act.		
Yours faithfully,  (Sunita Gulati) Section Officer		

## ANNEXURE III

### CERTIFICATE OF CPE PHASE I

Dr. P. Prakash  
Joint Secretary



विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग  
नई दिल्ली-110 002  
UNIVERSITY GRANTS COMMISSION  
BAHADURSHAH ZAFAR MARG  
NEW DELHI-110 002  
Ph : 011- 23231814  
Fax: 011- 23235729

D. O. No. F. 12-1/2008 (NS/PE)

March, 2010

18 MAR 2010

Dear Sir/Madam

At the outset, I would like to congratulate you, your staff, students and your management for the unique honor of 'CPE' status bestowed on your college.

You may be happy to know that your College is one among the 149 Colleges identified under the scheme "**Colleges with Potential for Excellence**" (CPE) during phase-III. I do hope that you would have received the letter sent to your Vice-Chancellor **and copy marked to you in this regard**. The information regarding your college selection and other details have also been posted on the UGC website ([www.ugc.ac.in](http://www.ugc.ac.in)).

**Kindly arrange to send a certificate to the fact that the data provided by your College in the proposal are factually correct, if not sent earlier. It may be noted that in case it is found to be incorrect at a later stage then the CPE status conferred on your college may be revoked, as per the provisions of the CPE XI plan guidelines. Your Action Plan proposal shall be processed only on receipt of this certificate.**

**You may kindly note that the Expert Committee will be visiting to your College for an on-the-spot evaluation shortly, the details of which will be sent to you in due course. Therefore, I request you to kindly prepare an Action Plan as per prescribed proforma given in the XI Plan (CPE) Guideline in ANNEXURE-II and prepare ten copies of the same for placing before the Expert Committee. You may kindly note that 60% of your Budget need to be spent on Non-Recurring and 40% on Recurring items. Since the tenure of the scheme is only for XI Plan period, no building component be included in the Budget.**

Contd...2/-

(Principal 149-CPE College approval letter)

The allocation for your college will be as per the financial assistance indicated in the guidelines. Therefore, you may prepare your budget only for 2009-2010, 2010-2011 and 2011-2012.

In case your college has been awarded Autonomous status after the submission of your proposal to UGC under CPE scheme, kindly arrange to send a copy of the UGC letter conferring Autonomous status to your college.

Pending the above exercise, an ad-hoc grant on the basis of proportionate ratio of the allocation has been released to your college separately. **However, the "on account" grant may be utilized only after receiving the approval of your budget**, which will be communicated after visit of the Expert Committee.

**Kindly indicate your E-Mail ID and Telephone Nos. (Office, Residence and Mobile) for easy communication**

**Receipt of this letter may please be acknowledged.**

With regards,

Yours sincerely,



**(P. Prakash)**  
Joint Secretary

✓  
The Principal  
Mar Athanasius College,  
Kothamangalam College,  
P.O., Ernakulam Dist., Kerala – 686 666  
**(Kerala)**

## CERTIFICATE OF CPE PHASE II

डॉ. के. पी. सिंह  
संयुक्त सचिव

**Dr. K. P. Singh**  
Joint Secretary

F. No. 20-25-75/2010-2014 (NS/PE)



अभिलेखन विभाग

*SPEED POST*

विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग, नई दिल्ली-110 002  
**UNIVERSITY GRANTS COMMISSION**  
BAHADURSHAH ZAFAR MARG,  
NEW DELHI-110 002  
दूरभाष/Phone : 011-2323 9597  
फैक्स/Fax : 011-2323 6347

January, 2014

The Principal,  
Mar Athanasius College,  
Kothamangalam College,  
P.O., Ernakulam Dist., (Kerala) – 686 666.

17 FEB 2014

Sir/Madam,

This is with reference to the Interface Meeting held on 06-12-2013, with the Expert Committee on "Colleges with Potential for Excellence" (CPE) to review the progress/performance of your College during the previous Phase and to consider the proposal of your college for continuation for the next phase CPE/CE and finalize the item-wise budget and Action Plan under the Scheme.

You may be happy to know that on the recommendations of the Expert Committee, UGC has approved the status of College with Potential for Excellence (CPE) for your college for a period of five years under the scheme. The CPE status will be effective from 1<sup>st</sup> April, 2014 to 31<sup>st</sup> March, 2019.

Based on the recommendation of the Expert Committee, the following budget has been approved for your College under the "Colleges with Potential for Excellence" (CPE) Scheme for a period of 5 years.

Non-Recurring (Capital Assets – Code 35)		
S. No.	Budget Head	(Amount in lakhs)
1.	Lab up-gradation	70.00
2.	Language Lab equipment	-
3.	Teaching Aids	05.00
4.	Library Automation	05.00
5.	Computers	05.00
6.	Software's	05.00
7.	Internet Connectivity	02.00
8.	Up-gradation of class rooms/seminar halls (No Renovation)	03.00
9.	Any other activities (please specify) –Office automation	05.00
Total:- ((Rupees one crore only))		100.00

Recurring (Grant-in-aid General – Code 31)		
S. No.	Budget Head	(Amount in lakhs)
1.	Lab consumables	15.00
2.	Books & Journals	10.00
3.	Internet services	02.00
4.	Maintenance of equipments	05.00
5.	Enrichment of teachers	08.00
6.	Any other activities (please specify) –Sports Activities	10.00
Total:- ((Rupees fifty lakh only))		50.00

Grand Total NR+R = Rs. 150.00 lakh (Rupees one hundred fifty lakh only)

Contd... 2/-

123/14  
12/14


A copy of the Report of the Expert Committee is also attached for your information and record. The observations and recommendations of the Committee may be kept in view while implementing the Scheme. Also, the scheme may be implemented as per the spirit of the Scheme and in accordance with provisions laid down in the guidelines for XII Plan which are available on UGC website ([www.ugc.ac.in](http://www.ugc.ac.in)).

As informed to you during the interaction, the CPE funds should not be used in respect of un-aided/self-financing departments/courses in your College. A certificate to the effect that the above instruction has been complied with may kindly be sent immediately.

It was also observed during the discussion that certain colleges are still working as a Composite College. In such cases, the CPE funds should be used only for the Degree/P.G. programmes and not for the "+2" programme. A certificate to this effect may also kindly be sent to this office and appropriate action should be taken to delink '+2' programmes from the college at the earliest.

With regards,

Yours faithfully,

  
(Dr. K.P. Singh)  
Joint Secretary

Encl: As above

## ANNEXURE IV

### CERTIFICATE OF DST-FIST



Dr. A Mukhopadhyay  
Adviser/ Scientist 'G'  
SERC Division  
Email: [tsd@nic.in](mailto:tsd@nic.in)  
Phone: 26590445  
26602193 (direct)  
Fax: 011-26602193

सर्वोच्च निकाय  
विज्ञान और प्रौद्योगिकी विभाग  
विज्ञान और प्रौद्योगिकी विभाग  
इकोनॉमिक अवर नगर खारौली रोड नई दिल्ली - 110016

GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE & TECHNOLOGY  
Department of Science & Technology  
Technology Bhawan, New Mehrauli Road, New Delhi-110016

SR/FST/ College-077

15 February 2012

Subject: Your Proposal under "FIST Program - 2011" [399]

Dear Sir,

This is in connection with the aforesaid proposal submitted by your College for support 'College as a Whole' under the FIST Program of DST. We are happy to inform you that the aforesaid proposal has been identified for support in Level - 0 category by the DST based on the recommendations of the FIST Advisory Board (FISTAB). The details of the recommendations for 5 years duration of the project are given below:

**To strengthen Teaching and Research Facilities in all Science departments of the College.**

**E – Rs 32 lakh (Items to be identified for Teaching Facilities by the College) and Rs 30 lakh for items to be identified for Research Facilities.**

**NW – Rs 7 lakh (for Setting up Computer Lab)**

**Books – Rs 3 lakh**

**Renovation of Lab – Rs 5 lakh (for making e-Learning Room)**

**Maintenance – Rs 3 lakh**

**Total : Rs 80.0 Lakh**

Towards overall and holistic development, the College is requested now to finally identify the items including equipments within the recommended budget keeping in view all the Science or Engineering departments in the College, whatever the case may be, required for augmentation of Teaching and Research facilities and firm-up specifications/ configurations of each Equipment, Computational & Networking facility in Computer Lab, Infrastructure Facilities like 'Books' & 'e-Learning Lab' as recommended above for acquiring by the College. **The equipment identified for one department or one group of departments will not be acceptable for support. The type of equipment and its specifications/ configurations finalized now by the College would not be possible to change during the course of implementation of the said project.** For enabling us to process the case further, including the release of 1<sup>st</sup> installment of grant now, you are requested to please submit the following documents **latest by before 20<sup>th</sup> March 2012 (Tuesday)**:

- 1) One Budgetary Quotation from Equipment supplier (all-inclusive i.e. Custom Duty, Bank & other Charges) for all Equipment identified by the College within the recommended budget for Teaching as well as Research facilities. Please ensure that the budgetary cost is not an inflated one with respect to its specifications given.
- 2) Details plans for implementation of the 'Networking and Computational Facilities' (NW) under the support as per guidelines mentioned in the Terms and Conditions at **Annexure - I**.
- 3) Details & their cost estimates of Items recommended for 'e-Learning Lab' and 'List of Books' under Infrastructure Facility.

To  
Dr. B. K. / Samu  
11/3/12  
21-2-12



- 4) For implementation of the project, the College shall constitute a 'Project Implementation Group (PIG)' having Principal of the College as the Chief of PIG who shall be responsible & accountable for its implementation during the project duration of 5 years. The composition of the 'PIG' shall be informed to DST by the College.
- 5) The College shall provide details of Saving Bank Accounts to handle the project grants including Bank Account Number, Bank's IFSC (11 digit) code, Branch Details along with a Photocopy of the Blank Cheque for the account operated by Principal/ Director of the College/ Institute may also be provided to facilitate the transfer of grants through ECS Transfer System.

The Terms and Conditions (**Annexure - I**) of DST-FIST Program is available at the Website: [www.fist-dst.org](http://www.fist-dst.org). Please download 'Terms & Conditions' and submit the same on completion of all formalities along with above-said documents to DST.

**The College is requested for sending all documents at one stage instead of two or three stages by Post only. Incomplete documents submitted by the College would be unable to process for releasing grants and the matter would be kept pending maximum for six months, beyond which recommendations for the College deemed to be withdrawn automatically for considering support under DST-FIST Program.**

We look forward for kind cooperation from you in this regard and if any clarifications are needed, please feel free to contact us. **Please submit the following documents before 20<sup>th</sup> March 2012 (Tuesday). All documents will be required to send by Post. Documents may not be sent by E-mail for releasing fund.**

With best regards.

  
(A. Mukhopadhyay)

To

**Principal,**  
Mar Athanasius College,  
Kothamangalam-686666,  
Kerala

[Note: E – Equipment, NW – Networking & Computational Facility, IF – Infrastructure facility, M – Maintenance]

**ANNEXURE V**

**CERTIFICATE OF TRIBAL CONCENTRATION**

K.Dis.47464/03/A3.

Colleterate, Ernakulam  
Kochi-30, Dtd.15.09.2003.

**CERTIFICATE**  
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Certified that the Mar Athanasius College, Kothamangalam is situated in Kothamangalam Block (Block-ID KL03005) in Ernakulam District, which is identified as an area of tribal concentration.

This certificate is issued based on the publication of the Department of Youth Affairs and Sports, Ministry of Human Resource Development, Govt. of India, New Delhi, titled "Grants for Creation of Sports Infrastructure, 1995".



District Collector  
Ernakulam

To  
The Principal  
Mar Athanasius College,  
Kothamangalam

ANNEXURE VI

CERTIFICATE OF NAAC ACREDITATION



**राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्**  
विश्वविद्यालय अनुदान आयोग का स्वावल सस्थान  
**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  
Mar Athanasius College  
Kothamangalam, affiliated to Mahatma Gandhi University, Kerala as  
Accredited<sup>1</sup>  
at the A level<sup>2</sup>.  
(among the Affiliated/ Constituent Colleges)*

*Date : October 01, 2002*



*Dr. Praveen*  
Director

1. This certification is valid for a period of 5 (five) years with effect from the academic year 2002 - 2003.  
2. An institutional score (%) in the range of 55-60 denotes C grade, 60-65 - C<sup>+</sup> grade, 65-70 - C<sup>++</sup> grade,  
70-75 - B grade, 75-80 - B<sup>+</sup> grade, 80-85 - B<sup>++</sup> grade, 85-90 - A grade, 90-95 - A<sup>+</sup> grade, 95-100 - A<sup>++</sup> grade.

## Quality Profile

Name of the Institution: *Maz Athanasius College*  
Place: *Kothamangalam, Kerala*

Criterion	Criterion Score (C <sub>i</sub> )	Weightage (W <sub>i</sub> )	Criterion X Weightage (C <sub>i</sub> x W <sub>i</sub> )
<i>I. Curricular Aspects</i>	80	10	800
<i>II. Teaching-learning and Evaluation</i>	85	40	3400
<i>III. Research, Consultancy and Extension</i>	85	05	425
<i>IV. Infrastructure and Learning Resources</i>	85	15	1275
<i>V. Student Support and Progression</i>	85	10	850
<i>VI. Organisation and Management</i>	85	10	850
<i>VII. Healthy Practices</i>	90	10	900
		100	<b>Σ C<sub>i</sub>W<sub>i</sub> = 8500</b>

$$\text{Institutional Score} = \frac{\Sigma C_i W_i}{\Sigma W_i} = \frac{8500}{100} = 85.00$$

*Inalickai*  
Director

## CERTIFICATE OF NAAC REACREDITATION





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 : Mar Athanasius College

Place : Kothamangalam, Dist. Ernakulam, Kerala

Criteria	Weightage (W <sub>i</sub> )	Criterion-Wise Grade Point Averages (Cr, GPA)	W <sub>i</sub> X Cr, GPA
I. Curricular Aspects	050	3.00	150
II. Teaching-Learning and Evaluation	450	3.00	1350
III. Research, Consultancy and Extension	100	3.55	355
IV. Infrastructure and Learning Resources	100	3.65	365
V. Student Support and Progression	100	3.60	360
VI. Governance and Leadership	150	3.23	485
VII. Innovative Practices	050	3.00	150
Total	$\sum_{i=1}^7 W_i = 1000$		$\sum_{i=1}^7 W_i \times Cr, GPA = 3215$

$$\text{Institutional Score} = \frac{\sum_{i=1}^7 (W_i \times Cr, GPA)}{\sum_{i=1}^7 W_i} = \frac{3215}{1000} = \boxed{3.22}$$

Grade =

Descriptor =

Date : March 28, 2010



*HARISHMI*  
Director

- This certification is valid for a period of Five years with effect from March 28, 2010
- An institutional CGPA on 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

BC/92/BAE/13

## ANNEXURE VII

### PEER TEAM REPORT OF NAAC ACCREDITATION (CYCLE 1)

**Draft Peer Team Report on the  
Institutional Accreditation of the  
Mar Athanasius College, Kothamangalam – 686 666,  
Ernakulam District, Kerala**

#### **Section 1: Preamble**

The following contains only the general remarks of the Peer Team about the performance of the College and in its several areas of its operation. Detail remarks and suggestions on the seven criteria recommended by the NAAC follow the preamble.

Mar Athanasius College, founded in 1955 in a very humble manner, is a College organized and run by a trust that can be called a missionary organization. An educational institution run by such an organization, builds up a range of expectations, which may not always work in favour of a detached judgement of its performance on various fronts. A Peer Team coming to look at its achievements may, on the one hand, find everything much better than what it had expected and be overwhelmed by what it sees, or, on the other, may be disappointed when it detects the slightest deviations from the preconstructed expectations. The present Peer Team is acutely aware of these two unwanted possibilities, and has therefore resolved to steer clear of them. All the members of the Team have personal experiences of how such an institution is run, and how, in comparison, other non-missionary institutions show less impressive achievements as a rule. This Team, therefore, decided not to allow any preconceived notion to get the better of its judgement, arrived at by physical inspection of the features and functioning of the College. The excellent *Self Study Report* submitted by the College has provided a wealth of information for the Team to work on, and after a three-day visit to the College, taking stock of the work done by its various departments and administrative segments, interacting with the members of the Trust, the Principal, the teachers of the Departments, the students and the non-teaching staff, (both administrative and ministerial), and after personally visiting the classrooms, laboratories, a museum, a botanical garden, a herbal garden, the canteen, a high school run by the trust, the playfields and the newly constructed women's hostel, the Team is in a position to present its observations about the successes (or otherwise) of the College in its wide range of activities.

As has been noted above, the beginning of Mar Athanasius College was quite humble. The Team has seen a photograph of how the College began in a hutment. From that beginning it has, one must admit, come a long way, and recorded a progress that will hardly be matched by any other similar institution. The College is located within a campus of 63.34 acres of land and it now has several imposing buildings, including a five-storied library building. It conducts 15 Undergraduate and 6 Postgraduate programmes. In the latter there are 3

Research Centres granted by the UGC and its affiliating University i.e., Mahatma Gandhi University. The College also offers vocational training in several areas at both UG and PG levels. It has 6 departments in the Science faculty, 7 in the Arts and 1 in the Commerce. There are 100 permanent and 16 temporary teachers, and 1 part-time teacher. At present there are 1456 students enrolled in various courses. The Physical Education department takes care of the training and performance of its students in various sports and games, and it has also shown excellent results in terms of prizes and awards won by the students of the College. The Library is fully computerized, and computers have been installed in every department, some departments, like physics and commerce, having computer centers of their own, doing sophisticated work on them, beside using them as mere teaching or administrative aids.

The number of teachers seems quite adequate. The number of Ph.Ds. among the teachers could have been larger, but the Team has noted considerable increase in the number of Ph.Ds. from 1990 to 2001. The ratio of teachers and non-teaching staff has a look of balance. The size of student population is also not too large to make the imparting of quality education difficult and its ratio with that of the teachers is, in addition, quite satisfactory. However, the results of the last two batches of UG and PG students appearing in their final University examinations, leave some room for introspection, as the rate of failure in some of the departments is not encouraging, although the large number of successful candidates obtaining First Class is commendable. A few of them, moreover, have received University ranks, which is quite creditable for the College. The Team feels that some measures need to be taken to arrest the amount of failure in the University Examinations. The Team is happy to find that, in spite of inadequate support from the State Government the College is not in any way financially threatened, and it can depend on funds coming from other charitable sources. The Team notices that the College does not have a Health Centre for the students and requests the authorities to give some attention to establishing one. From the "Analysis of the Self Study Report" the Team is also worried by the comments that politics has in the recent past often dislocated the normal routine of the College. The Team raised this issue of teaching days lost due to students' strikes in its interaction with the students on 11.06.02, and was assured to hear that things have improved since, thanks to the cooperation received from the students, parents and political parties.

The College applied for NAAC evaluation in April 2002, sending its Letter of Intention to the NAAC Headquarters, which responded duly by forming and sending a Peer Team consisting of Prof. Pabitra Sarkar, Vice Chairman, West Bengal State Council of Higher Education as Chairman, and Prof. S. K. Dhawan, Joint Director, Directorate of Collegiate Education, Government of Himachal Pradesh, Prof. Y. Azeez Ahmed, Principal of Al Ameen College of Arts, Science and Commerce, Bangalore, Karnataka and Prof. Anne Mary Fernandez, Department of Economics, Holy Cross College(Autonomous), Tiruchchirappalli, Tamil Nadu as members. Mr. B. S. Ponmudiraj, Academic Professional, NAAC facilitated and helped the Peer Team during the visit. The Team made three visits to the College premises on three days during June 10, 11 and 12, 2002 and, as mentioned above, conducted a thorough examination of the



statement and facts presented in the *Self-Study Report* by looking at the physical assets of the institution, interacting with members of the teaching and student community as well as those of parents and alumni. Its session with the management of the college was also very fruitful.

### **Criterion-wise Analysis**

#### **Criterion I: Curricular Aspects**

Mar Athanasius College, Kothamangalam Ernakulam, District, Kerala is affiliated to Mahatma Gandhi University. The College is located in a rural area having tribal concentration. It is running UG, PG, Ph.D. courses and also some courses like advanced diploma in Computer Applications, diploma in Office Automation, certificate courses in MS office, Speed Typing and Computer-aided Phonetics. The College is offering B.A., B.Sc. and B.Com. courses. In B.A., the main subjects are Economics, English, History, Sociology and Hindi and the subsidiaries are Political Science, World History, Sociology, History of Indian Culture, Correspondence and Secretarial Practices and Economics. In B.Sc., the students can take up Mathematics, Statistics, Physics, Physics (Vocational), Chemistry, Botany and Zoology as one of the main subjects and choose subsidiary out of Chemistry, Computer Science, Mathematics, Physics, Botany and Zoology. In B.Com., there are three courses viz., two vocational courses sponsored respectively by the University and State Government including a regular course.

In all these courses the student is offered limited choice. The subject combination does not give much of elbow room. Subjects like Public Administration, Geography, Psychology etc. are not being offered. Similarly in Science Subjects with Mathematics as main, one can opt for Statistics and Physics only. However, as in the case of Commerce, so in Physics also the students have an option of conventional or vocational courses. The College follows semester as well as annual systems. However, semester system has been introduced in PG classes from this academic session, and will, hopefully, replace the annual system in the near future.

A few postgraduate courses are available for the students. In order to prepare the students for the competitive cyber market, courses in Computer Applications are being offered. Keeping in mind the vocational needs of the students, vocational courses like B.Com. (Vocational), Physics (Vocational), PGDCA and 5 diploma / certificate courses are being run. A student can get simultaneous admission in any of the diploma / certificate courses. This facility offers students an opportunity to acquire an additional skill.

The College regularly organizes lectures, seminars, workshops etc., on relevant academic and social issues. It also conducts Nature Camps and activities like trekking hill climbing, paragliding etc. Students are involved in conducting surveys on socio-economic aspects in collaboration with local self-governments and social organizations. Such activities bring the students close to the people of the community and help them in understanding their problems, thereby achieving the mission and objectives of the institution. How far the College has

been successful in moulding the character and careers of the students cannot be measured in the absence of any feedback mechanism.

The College has established contact with the industry. It is undertaking research projects for industrial units and providing expertise in the field of preservation of Ecology, Pollution Control etc. Innovation in curricula framing are almost nil as, in these matters, it follows the norms and guidelines of the University to which it is affiliated.. The teachers and students attend seminars on interdisciplinary subjects.

The College has organized 10 seminars on different subjects from 1998 to date, which indicates the eagerness of the faculty to keep pace with development that are taking place in the various disciplines and to make up to an extent the lack of multi-disciplinary content in the curriculum.

### **Criterion II: Teaching, Learning and Evaluation**

Admissions are made through a simple method based on the academic record and interview. Students' skill and knowledge are periodically assessed through class tests, assignments, etc. The College has the provision of continuous assessment of students, through which weaker segment of students is identified and given extra coaching through remedial classes, counselling etc. The advanced learners are also identified through the continuous evaluation process. They are made to interact with research scholars, given challenging assignments, called upon to participate in group discussions with their teachers and are motivated to give seminars. These activities help building self-confidence among the students.

The teachers are encouraged to prepare teaching plans at the beginning of the session. Along with that, seminars, projects, class tests and continuous assessment tests are actively undertaken in consultation with the HOD. There is constant monitoring and mid-course correction at the departmental and College levels. The proforma used for such assessment is adequate enough to assess the performance of the teacher.

The teaching in College is learner-centered and to supplement the lecture method, various activities such as debates, group discussions, project work, seminar and workshops etc., are held. The scholars in various fields are invited and the students interact with them. The College has the facilities of a reprographic unit and other electronic equipments, which are being used as teaching aids. Certain computer packages have also been developed. The Institution has an Internet connection.

The College tries its best to conform to the UGC norms of the minimum number of teaching days. The students are kept informed about the evaluation methods. The College keeps record of all the academic and extra curricular activities of the students and keeps on monitoring the progress made during the academic

year. Eminent subject experts are invited to deliver lectures on various relevant topics.

The teachers are encouraged to attend refresher courses, orientation programmes, seminars, conferences, workshops, etc. Forty-two teachers have so far participated in national and international level programmes in the last two years and one of them was a resource person. Systematic appraisal of the teachers' performance are carried out. It includes self-appraisal by teachers and feedback from the students. As in the year 2000-2001, the Evaluation Report of the students should have more parameters than just the three used in the next year's Report. The principal discusses the result of these assessments with the teachers. This analysis of strength and weaknesses helps in improving the teacher's efficiency and effectiveness.

To keep the teachers informed about the developments in their field of expertise the College conducts refresher courses, seminar, workshops and conferences in coordination with UGC and AIACHE. Thirty-three of such programmes were conducted during 1999-2002. The College is a member of all India Association of Christian Higher Education and also an institutional member of British Council Library. It keeps liaison with IISc and RRL for guidance, research etc. The College is using ICT in assessing the performance of students, teachers and has also developed packages through which various topics are taught.

### **Criterion III: Research, Consultancy and Extension**

The College actively promotes research culture among its faculty and students. This is done through the sanction of study leave under various UGC plan-oriented schemes such as the FIP and TFS. The College management facilitates research by providing seed money to its faculty for research. In order to operate this scheme, research committees are formulated to critically review project proposals of the faculty. Teaching schedules are also made flexible for the faculty involved in research. As a consequence of the various enabling measures, the College has been successful in developing a research focus for its faculty during the last decade. At present 52% of the faculty have research degrees and are actively involved in various ongoing research activity either in the form of projects undertaken or in the form of research guidance. Currently, there are 21 ongoing projects with a funding support of Rs.13 lakhs. Further, an additional 25% of the faculty is engaged in studies leading towards obtaining research degrees. Three departments in the College viz. the Departments of English, Chemistry and Physics have risen to the status of research departments and are recognized as research centers by Mahatma Gandhi University. These departments are offering both full-time and part-time Ph.D. courses. There are 4 full-time and 20 part-time scholars currently carrying on Ph.D. research in the College. Three more departments, viz., Economics, Hindi and Sociology have applied to the university for recognition as research centers. In most of the departments, the staff has published in academic journals, both national and international. The postgraduate students undertake research through project work, which is a part of the academic curriculum prescribed by the university. Research culture is also promoted amidst the under graduate students through

various assignments and projects involving special community-based studies and surveys.

The College provides scope for its teachers to offer consultancy services. The Department of Chemistry is offering consultancy services to firms and industries like Herbal Supplements Pvt. Ltd. and Hyrange Wood Industry. Three faculty members from this Department have been honored with Young Scientist Awards. Many teachers from the College are engaged in providing teachers' training, personality development, communication skill training etc to various higher secondary schools and other local institutions. Most of the consultancy services are offered on an honorary basis, thus the contribution through consultancy to the College finances is meager. There is still more scope for the College to use its consultancy expertise to strengthen its linkages with industries, firms and local institutions, which will actively contribute to the generation of resources for research and development activities.

The College undertakes extension activities on an elaborate scale. The services offered are in the areas of community development, social work, health and hygiene awareness, adult education, literacy program, blood donation camp, eye donation campaign, AIDS awareness and environment awareness campaigns. There is a faculty member, who coordinates the extension activities of the College. In addition, several faculty collaborate in facilitating the functioning of various clubs and bodies like the Social Service League, Planning Forum, Nature Club, NSS, NCC, Counseling Cell, Women's Cell, Blood Donors Forum etc., which carry out significant development work with and for the community. The College has been instrumental in facilitating the growth of non-governmental organizations like OFFER, OPTEK and OPNR to protect farmer's rights, promote technical education in Kerala and protect local people from nuclear radiation respectively. The Science exhibitions conducted for the benefit of local schools and the special studies made on Gram Sabhas and local tribal communities, all indicate that in the functions of the College, there is a healthy linkage between curriculum, research and extension activities. Thus the College is actively contributing to the development of the region both by way of imparting scientific education to the youth and by transmitting the fruits of research to the users in the field of agriculture, industry and services.

#### ***Criterion IV: Infrastructure and Learning Resources***

The College is situated on a scenic and sprawling 63.34 acres of campus, which houses a High School and an Engineering College as well. The physical infrastructure consists of a College building comprising spacious classrooms, halls, laboratories, computer centers, the College chapel, a five-storied library complex, a non-residential student center, a canteen, a women's hostel (to be commissioned shortly), a post office, play grounds, parking space for vehicles, etc. The infrastructure is adequately maintained by utilizing funds provided by the state Government, UGC, College Management, Alumni Association and Parent Teachers Association. The campus is kept clean and green through the efforts of the Botany Department, Nature Club, NCC and NSS units, which include the maintenance of the Botanical Gardens, Social Forestry Program and

Horticultural Project. The College attempts to optimize the utilization of infrastructure by offering the facilities at the College to industrial units, researchers, staff and students of neighboring institutions, external project teams like the World Bank team. Self-financed diploma and certificate courses are also offered using the existing infrastructure.

The College library is housed in a spacious five-storied complex. It has a collection of 46,457 books, 120 journals, 80 periodicals and 800 reference books. The library is fully computerized and provides Internet, e-mail and surfing access to the faculty and students. In addition, reprography, audio and videocassettes, inter library-borrowing facilities, interconnectivity with other libraries along with a book bank are also made available. The circulation of books is assisted by special software programs, which simultaneously undertake book and serial mapping so as to provide a reading profile of the faculty and students and prevent the possibility of misuse of the facilities. There is a separate Audio Visual unit in the library equipped with a television set, dish antenna etc., to receive satellite channels and presentation equipments like OHP and DLP projectors. An advisory committee facilitates the working of the library. The library functions for 6 days a week and is kept open between 9.30 am and 5.00 pm.

The College has a computer center run as a non-profit body with the aim of providing qualitative computer training to the students and the faculty. The center has 18 computers with Internet and multimedia facility, two printers and a UPS of 1 KV. Apart from imparting computer training to B.Com Vocational students, it also offers a Post Graduate Diploma in Computer Applications affiliated to Xavier Board of Computer Education (XBCE), Mangalore. A Diploma course in Office Automation, lab facilities to students of other departments and free Internet access to students of various courses are made available at the Center. The Physics Department has a Computer Center with 12 machines functioning in a network. The English Department has a computer training division with 5 personal computers. All the 15 Departments of the College have computers of their own. The College has developed 10 computer-based packages, which are used as aids in the teaching and evaluation processes.

The College has spacious playgrounds and is in the process of constructing a stadium. The sports infrastructure provides facilities for training students in football, volleyball, karate and chess. Free nourishing food is provided for athletes. The College has hosted zonal, state and national inter-university events in football and cross-country racing. As a consequence of the incentives provided, the students of the College have brought in rich laurels by winning trophies and championships for football and karate in state and national sports events respectively.

Currently there are no medical services available to the students. However, medical reimbursement facility from the Government of Kerala is available to staff members and their dependents. A hostel for women students has just been constructed and it is awaiting commission from the ensuing academic year.

In general, the Peer Team felt that the College has taken a number of initiatives to expand the infrastructure facilities of the institution so as to provide an ambience for imparting quality education in keeping with the current technological needs.

### **Criterion V: Student Support and Progression**

The College is located in a rural area 60 kms away from the City of Kochi and hence it has prepared itself to face the challenges poised by the students hailing from a rural background. At the undergraduate and postgraduate levels approximately 85% and 35% of successful students respectively who have passed out have managed to find employment. About 85.3% have students enrolled, appear for qualifying exams. Many members of the alumni of the College occupy high positions both in the central and state government administration, as also in media, fine arts, music, health and technology etc.

Data on number of students who have appeared and been successful in UGC-NET Examinations, as in GATE, IAS, GRE and many others are not available. However, it is creditable that the College has really produced persons of high caliber and scholarship. However, a feedback mechanism on the performance of the teachers exists in the College.

The College has a regular feature of publishing the prospectus highlighting all aspects of the College life. The Central, State Governments, the Management and other agencies award scholarships to needy and under privileged students. It is heartening to note that the College provides free studentships to the toppers at the Higher Secondary level in the local schools, thus encouraging the local youth to excel in academics and continue their education at the College.

A number of prizes and endowments are awarded to students who secure highest marks in various disciplines. In the last two years an average of 640 students have received financial aid and an additional 500 students have received KPCR Scholarships. This is an indication of the incentives provided to the scheduled caste and scheduled tribes by the college to facilitate their integration into the main stream of Indian polity.

The College has many associations which conduct extra curricular activities and has instituted best performance award to motivate active participation of students and teachers. A Counselling Centre was instituted during 2000-2001 under the supervision of a reputed Clinical Physiologist and several counseling sessions were conducted. It is gratifying to recall that many staff members are actively engaged in counseling students on academic matters and career opportunities. It is unfortunate that the college has not thought of instituting an employment cell and placement cell.

There is an Alumni Association formed very recently. The College has indoor and outdoor recreational facilities for staff and students. Very recently the College has acquired Audio-Video facilities with multimedia options, which are being used by the library staff to project encyclopedia and other programmes

like filming of educational films to the College community. The College has the Science Forum headed by the Principal. This Forum is involved in conducting IT Quiz, Power Quiz, Science Quiz, Seminars on management of biological weapons and an exhibition was organized under its auspices. Around 3000 students of 70 higher secondary schools participated in these events. Apart from the above activities, the College has a Film Club, Adventure Club and Fine Arts Club and Quiz Club whose activities are a regular feature. A notable presence is that of a Womens' Cell which discusses issues related to womens' rights, women empowerment and gender equality. This Cell has invited prominent women rights activists. Students are given ample opportunities to develop their IQ and oratory skills in order to facilitate an all round development of their personality.

#### ***Criterion VI: Organization and Management***

The College has a College Council consisting of Principal, Head of all Departments and two elected members of the teaching staff. The objectives of this Council are 1) internal co-ordination, 2) Maintenance of discipline of students, 3) Assessment of infra structural needs, and 4) Redressal of staff and students grievances. This body has been effective in resolving problems related to the above.

A committee has recently been set up to suggest improvement in the organization and the managerial functioning. The committee has identified 18 functional programmes concerning buildings, IT and other amenities required by the College community. There is also a committee to monitor work efficiency of the non-teaching staff aimed at bringing speedy disposal of files through office automation and computer training.

The College Calendar is also prepared in detail by a Committee formed for the task. A three-day training programme for the ministerial staff was conducted for its members' developing individual and inter-personal management skills.

The teaching positions are filled as per the UGC norms, University Statutes and Orders issued by the State Government from time to time. The College has freedom and resources to appoint ad hoc temporary teachers.

The prescribed term fees for various courses are not sufficient to manage and maintain laboratories and to meet the increasing costs of laboratory materials. However, the College is has little freedom for changing its fee structure. The recurrence of deficit budgets may be avoided by making due revisions in it, and the Management should therefore approach the Government for reviewing the fee structure in the interest of maintaining modernized updated laboratories and other facilities. There is an internal audit mechanism. The Management provides welfare programmes to both teaching and non-teaching staff by extending soft loans to those who apply for it and the source is the Mar Athanasius College Staff Credit Society.

## **Criterion VII: Healthy Practices**

- ✓ The College has a constructive approach to certain areas of academic interest like evaluation of teachers and has given primacy to the implementation of managerial equipments, particularly computerization of attendance, office, records, library amenities and all departmental documents.
- ✓ Departments of Physics, Commerce and the Library have their own software programmes which have increased the efficiency in the respective areas of functioning.
- ✓ There is a self-appraisal format for teachers which is a very important academic tool to improve the effectiveness of the teacher.
- ✓ There is also another format that evaluates the teacher's performance by the students.
- ✓ The Departments of Chemistry, Zoology and Statistics have interactions with neighbouring industries.
- ✓ The Peer Team felt that the College has taken commendable strides in promoting a vibrant research culture among its faculty and students.
- ✓ The College has international and national linkages with AIACHE and Indian Colleges Forum.
- ✓ The College has succeeded in organizing complementary self-financing courses like B.Com.(Vocational) and PG Diploma in Computer Applications.
- ✓ The College has conducted seminars and workshops on social and moral issues, and has organised nature camps and AIDS awareness campaign. It has also participated in literacy programmes, blood and eye donation campaign, etc., aimed at creating value-based personality in the students.
- ✓ Civic responsibilities are highlighted through the activities of NSS and NCC units, specially by inculcating discipline and social consciousness. NCC cadets and NSS volunteers have done a good job within the vicinity of the surrounding rural areas.
- ✓ A Career Guidance Cell has just been started.
- ✓ The College is honestly and effectively working towards attaining its goal and mission of bringing attitudinal change through both academic and co-curricular activities for building a better and a prosperous society.
- ✓ The College is committed to serving the depriving sections of the society.
- ✓ The College has floated OPTEK to mobilize public opinion, conducive to change its educational policy towards technical education.
- ✓ The College administration has designed many programmes on IT, numerical skills, communication skills etc.
- ✓ The PTA has conducted an opinion poll against agitations in campus which has created an academic atmosphere favouring normalcy.
- ✓ The College has established an internal evaluation system and has a Planning Forum which has been successfully functioning for the last four decades.
- ✓ Departmental bulletins and a College magazine are published fairly regularly. One issue of the latter was awarded the Best College Magazine Prize.
- ✓ Bar Coded multi-purpose identity cards for both staff and students is a positive feature.



In view of the above healthy practices, the team feels that the College has taken quite a few appreciable steps recently. There is evidence of positive thinking on the part of Management who wants to give a new thrust to the life of the College.

### **Section 3: Overall Analysis and Suggestions**

The Team has been quite satisfied with the overall performance of the College in all the areas it has given attention to. Still, there are a few suggestions that the Team felt should be made to its various bodies, in order to direct it to further progress and expansion. Below are some such suggestions, which do not pretend to be comprehensive or conclusive in any way.

- The College should try to provide a wider choice to the students in some more main subjects.
- More efforts should be made to introduce need-based courses under the self-financing scheme.
- Computer courses must be brought up to date.
- The College should organise counselling sessions at the time of admission, in order to help the students in selecting their subjects. At present only English department is providing such a facility for those who intend to take up English Literature as the main subject.
- ICT facility needs to be strengthened further and fully utilized.
- It was also felt that the infrastructure in the College, particularly relating to purchase of books, journals, and funds for maintenance of the research departments needed to be enhanced in order to sustain the current thrust of the faculty and students in the area of research.
- Computers may be maintained in a dust-free environment with adequate anti-virus software protection.
- The College needs an auditorium (which is visualized in the near future) and a men's hostel.
- The College needs to expand its sources of financial support.
- The Peer Team members felt that the undergraduate and postgraduate laboratories in the science departments needed modernization.
- It further was felt that a health-care facility should be made available to the students.
- Initiatives could also be taken by the departments of Mathematics and other humanities disciplines to equip their departments with teaching modules and models, charts, maps etc., which would make teaching more learner-centred.
- The lighting arrangements in some of the classrooms and the furniture provided needs attention.
- The existing infrastructure in the departments could also be made use of to provide additional vocational diploma and certificate courses aimed at providing self-employment of students. These courses could be conducted during weekly holidays and after the current working hours of the College. Courses that were incidentally mentioned in the course of discussion were Forestry and Forest Management, Pisciculture, Apiculture, Mushroom Cultivation etc.

- The Guest Lecturers, the students felt, suffer in comparison with the full-timers, in terms of effective teaching.
- Some of the teachers, avowed authorities in their respective fields, should write for the young in Malayalam, in order to popularize their subjects and widen their base.

*Names and Signatures of the Peer Team*

**1. Prof. Pabitra Sarkar (Chairman)**

**2. Prof. S. K. Dhawan (Member)**

**3. Prof. Y. Azeez Ahmed (Member)**

**4. Prof. Anne Mary Fernandez (Member)**

**Name and Signature of the Head of the Institution**

## ANNEXURE VIII

### PEER TEAM REPORT OF NAAC ACCREDITATION (CYCLE 2)

#### PEER TEAM REPORT ON THE INSTITUTIONAL ACCREDITATION OF

MAR ATHANASIUS COLLEGE, KOTHAMANGALAM, KERALA – 686 666

<b>Section I: GENERAL</b>	
1.1 Name & Address of the Institution:	Mar Athanasius College, Kothamangalam, Kothamangalam College, P.O. Kothamangalam, Ernakulam Dist, Kerala – 686 666
1.2 Year of Establishment:	14-07-1955
1.3 Current Academic Activities at the Institutions (Numbers)	Arts / Science / Commerce and Management
• Faculties / Schools:	
• Department / Centres:	Arts (including languages) – 06 Science – 09 Commerce – 02 Any other – 02
• Programmes / Courses offered:	PG - 11, UG - 13, Ph.D - 04, Certificate Course - 05 (UGC sponsored) under Everonn Learning Centre - 06 Total – 39
• Permanent Faculty Members	81
• Permanent Support Staff:	53
• Students:	UG - 1379 PG - 237 Ph.D - 23 Total - 1639
1.4 Three Major features in the institutional Context (As perceived by the Peer Team):	<ul style="list-style-type: none"><li>• Multi-faculty College located in rural area with tribal concentration (MHRD).</li><li>• The college provides quality higher educational opportunity for backward sections of the society.</li><li>• The college has state-of-the-art infrastructural facilities.</li></ul>
1.5 Dates of visit of the Peer Team ( detailed visit schedule may be included as given below):	28 <sup>th</sup> to 30 <sup>th</sup> December, 2009
1.6. Composition of the Peer	

Team which undertook the on-site visit:	
Chairperson	Prof. B.Hanumaiah, Vice –Chancellor, Dr. Babasaheb Bhimrao Ambedkar University, Vidya Vihar, Rai Bareli Road, Lucknow – 226025, UP
Member Co-ordinator	Dr. B.S. Srikanta, Principal Grade-I, RBNM’s First Grade College, No.12, Annaswamy Mudaliar Road, Bangalore – 560 042, Karnataka
Member	Prof. Beena Inamdar, Principal, Kashibai Navale College of Commerce, Erandwane, No.14, Gananjay Society, Swapnajat, Pune – 411038, Maharashtra.
Section II: CRITERION WISE ANALYSIS	Observations (Strengths and/or Weaknesses) on Key-Aspects
2.1 Curricular Aspects:  2.1.1 Curricular Design & Development	<ul style="list-style-type: none"> <li>• Vision and Mission of the college clearly stated.</li> <li>• Academic programmes are in tune with institution’s goals and objectives.</li> <li>• Integration of ICT is done within the constraints of the affiliation system.</li> <li>• Establishment of Academic Technology Centre is worth mentioning.</li> <li>• The College has design syllabus at M.Sc. Actuarial Science, Master of Finance and Control, Restoration Ecology and Bio-Medical Instrumentation.</li> </ul>
2.1.2 Academic flexibility:	<ul style="list-style-type: none"> <li>• The college offers academic programmes both at UG and PG levels. Ph.D programmes are offered in four departments.</li> <li>• UGC sponsored Add-on courses (05) at the certificate level are offered.</li> <li>• Six self financed courses are offered out of which full-time MBA, MCA courses are offered under the convergence scheme of IGNOU.</li> <li>• The institution follows the annual</li> </ul>

	<p>system at UG level and semester system at PG level as per the university regulations. But semester system is introduced from 2009-10 at UG Level as per the University's regulations.</p>
2.1.3 Feedback on Curriculum	<ul style="list-style-type: none"> <li>• The college obtains feedback on curriculum from students, alumni, parents and peers.</li> </ul>
2.1.4 Curriculum Update	<ul style="list-style-type: none"> <li>• The suggestions obtained from the stake holders are submitted to the affiliating University for appropriate action.</li> <li>• Major syllabus revision of the UG courses was done in 2007-08, PG course was done in 2001-02.</li> <li>• Some of the teachers have served as Members of the Board of Studies in the University.</li> </ul>
2.1.5 Best Practices in Curricular aspects (if any)	<ul style="list-style-type: none"> <li>• Designing of curriculum for the add-on courses</li> <li>• The college has conducted good number of national, state and regional level seminars and guest lectures during the last 7 years.</li> <li>• The college has established Virtual class room in 2005</li> </ul>
2.2 <i>Teaching – Learning &amp; Evaluation:</i>	<ul style="list-style-type: none"> <li>• Transparent admission process followed.</li> </ul>
2.2.1 Admission Process and Student Profile:	
2.2.2 Catering the diverse needs:	<ul style="list-style-type: none"> <li>• The college is yet to formalize strategy for improvement of slow learners</li> <li>• The college provides access to all categories of students including differently abled and achievers in sports.</li> <li>• Some efforts are made to implement Mentor system in the college.</li> <li>• Advanced learners are encouraged with awards.</li> </ul>
2.2.3 Teaching – Learning Process:	<ul style="list-style-type: none"> <li>• Teaching learning process is satisfactory.</li> <li>• ICT integration in teaching – learning is fair.</li> <li>• Interactive sessions, group discussion, project based learning, computer assisted learning and seminars conducted. Field</li> </ul>

	work, industrial visits, exhibition, quiz, etc. are encouraged to inculcate experiential learning.
2.2.4 Teacher Quality:	<ul style="list-style-type: none"> <li>• Qualified teachers are handling the classes. Out of 81 permanent teachers, 37 teachers have Ph.D degree and 24 teachers have M.Phil degree. 17 teachers have passed UGC NET / SLET.</li> <li>• Teachers update their knowledge by attending the seminars, workshops, orientation and refresher courses.</li> <li>• The college has also organized number of seminars / workshops at national and state levels for effective dissemination and updation of knowledge.</li> <li>• During the last 7 years, 21 teachers have obtained Ph.D, 4 teachers have obtained M.Phil degrees.</li> </ul>
2.2.5 Evaluation Process and Reforms	<ul style="list-style-type: none"> <li>• Attendance of students is automated.</li> <li>• Evaluation process is transparent.</li> <li>• Evaluation methods communicated to the students.</li> </ul>
2.2.6 Best Practices in Teaching-learning and Evaluation (If any):	<ul style="list-style-type: none"> <li>• Satellite learning facility for students.</li> <li>• Establishment of ICT enabled training centre and Network Resource centre for staff and students.</li> <li>• Conduct of good number of seminars and workshops.</li> </ul>
2.3 <i>Research, Consultancy &amp; Extension:</i>	<ul style="list-style-type: none"> <li>• Research culture amongst faculty is promoted.</li> <li>• Publication by faculty.</li> <li>• Collaborative research.</li> <li>• The college has established instrumentation centre for facilitating research work.</li> <li>• Four departments are recognized as Research Centres by the affiliating university.</li> <li>• 14 recognized Ph.D guides are working in the College.</li> </ul>
2.3.1 Promotion of Research:	
2.3.2 Research and Publications Output:	<ul style="list-style-type: none"> <li>• Good number of research papers published since the last accreditation.</li> <li>• Projects, both minor and major sponsored by UGC, undertaken by the staff.</li> <li>• One teacher is awarded 'Excellence' award for meritorious research work.</li> </ul>

	<ul style="list-style-type: none"> <li>• Two teachers awarded young scientists' awards.</li> </ul>
2.3.3 Consultancy:	<ul style="list-style-type: none"> <li>• The college offers free consultancy to various governmental, NGO's and industrial units for waste management.</li> <li>• Utilisation of plastic waste for surfacing of roads is promoted by the college.</li> <li>• Analysis of water samples of the nearby river conducted on behalf of town municipality.</li> <li>• Organic farming promoted by the College.</li> </ul>
2.3.4 Extension Activities:	<ul style="list-style-type: none"> <li>• Active involvement of teachers and students in extension activities is ensured through NSS, NCC, YRC and other clubs.</li> <li>• Conduct of blood donation camps health camps, aids awareness programmes, cancer detection, epidemic prevention campaign and others.</li> <li>• College neighbourhood network is established by starting Manimala and Vrikshasamarppanam programmes.</li> <li>• The college has promoted organic farming techniques.</li> </ul>
2.3.5 Collaborations:	<ul style="list-style-type: none"> <li>• The institution has established linkages with IGNOU for MBA and MCA programme</li> <li>• The institution has links with other research centres , universities and NGO's for carrying out research and extension activities.</li> </ul>
2.3.6 Best Practices in Research, Consultancy and Extension (If any):	<ul style="list-style-type: none"> <li>• Promoting research culture among staff and students.</li> <li>• Consultancy</li> <li>• Community services</li> </ul>
<p>2.4 <i>Infrastructure and Learning Resources :</i></p> <p>2.4.1 Physical Facilities for Learning:</p>	<ul style="list-style-type: none"> <li>• College located in rural area has an area of 67.18 acres with a built up area of 27,212.69 Sq. mts. The college building accommodates 65 Class rooms, 21 Laboratories, Research Centres, Library, Instrumentation Centre, Network Resource Centre, Academic Technology Centre, Everonn Learning Centre, Seminar</li> </ul>

	<p>Hall etc.</p> <ul style="list-style-type: none"> <li>• Excellent sports facilities are provided which included indoor stadium and outdoor stadium, gymnasium and other courts.</li> <li>• The college has established Cricket and Athletic Academies also.</li> </ul>
2.4.2 Maintenance of Infrastructure:	<ul style="list-style-type: none"> <li>• The college has spent Rs.7 crores since the last accreditation towards development and maintenance of infrastructure.</li> <li>• The college provides separate budget for maintenance of infrastructure.</li> </ul>
2.4.3 Library as a Learning Resource:	<ul style="list-style-type: none"> <li>• The Central Library has a total of 56,731 books and 1711 reference books.</li> <li>• The College subscribes 46 journals and 53 periodicals.</li> <li>• The library is completely computerized. It has reprographic facility, book bank facility and broad band internet connection.</li> <li>• Library working hours to be increased.</li> <li>• Library staff strength to be enhanced.</li> </ul>
2.4.4 ICT as Learning Resources:	<ul style="list-style-type: none"> <li>• The college has 132 computers with internet facility.</li> <li>• The college has established Academic Technology Centre where the staff and students can develop computer aided teaching materials.</li> <li>• All the departments have computers with broad band internet connection.</li> <li>• The college also has provided Network Resource Centre. The College has recently provided one digital class room with internet facility to each department which has to be further strengthened and effectively used.</li> <li>• The college has its own website through which important notices and circulars are made available.</li> </ul>
2.4.5 Other Facilities	<ul style="list-style-type: none"> <li>• Excellent sports facilities, air conditioned Auditorium, Hostels for both boys and girls, Bio-gas Plant, Waste Water Treatment Plant, Canteen, Post Office, Co-operative Store.</li> </ul>
2.4.6 Best Practices in the development of	<ul style="list-style-type: none"> <li>• The management's commitment towards development of physical</li> </ul>



Infrastructure and Learning Resources (If any):	infrastructure.
2.5 <i>Student Support and Progression:</i>  2.5.1 Student Progression:	<ul style="list-style-type: none"> <li>• Catering to rural based socio and economically disadvantaged sections of the society.</li> <li>• Need based courses are offered.</li> <li>• Pass percentage in the college is higher than the University results.</li> <li>• The college experiences a drop out rate of 2.72% in UG and about 1% in PG.</li> <li>• During the last 5 years, 16 students have passed NET examinations.</li> <li>• The college has initiated Each One Teach One Scholarships, sports, PTA scholarships, Alumni scholarship, Learn and Earn schemes to avoid drop out rates.</li> </ul>
2.5.2 Student Support:	<ul style="list-style-type: none"> <li>• The institution disseminates information to the students through prospectus and other publications.</li> <li>• The college provides various scholarships to deserving and needy students.</li> <li>• The college provides subsidized Canteen facility, Reprographic facility, Counseling services</li> <li>• The college conducts Add-on courses at subsidized fees.</li> <li>• The college has Counseling and Placement Centre.</li> <li>• Enabling unit available for disable students.</li> </ul>
2.5.3 Student Activities:	<ul style="list-style-type: none"> <li>• The institution has established alumni association which is active and supports the activities of the college.</li> <li>• The college encourages its students to participate in sport, games, cultural activities both at institutional and inter collegiate levels.</li> <li>• The college also conducts several extension activities.</li> <li>• Students have brought laurels to the institution in sports and cultural activities at both international and national levels.</li> </ul>
2.5.4 Best Practices in Student Support	<ul style="list-style-type: none"> <li>• Giving cash incentives and gold medals to rank holders and inter university,</li> </ul>

and Progression (If any):	<p>state and national level players.</p> <ul style="list-style-type: none"> <li>• Sports scholarship worth Rs.12.5 lacs given.</li> <li>• Financial assistance to injured students.</li> </ul>
2.6 <i>Governance and Leadership:</i>	<ul style="list-style-type: none"> <li>• Imparting quality education in tribal dominated area.</li> <li>• Participative management.</li> <li>• Regular review of the progress.</li> </ul>
2.6.1 Institutional Vision and Leadership:	
2.6.2 Organizational Arrangements:	<ul style="list-style-type: none"> <li>• Decentralized administration.</li> <li>• Activities are monitored and coordinated at three levels.</li> </ul>
2.6.3 Strategy development and deployment:	<ul style="list-style-type: none"> <li>• Constitution of various committees.</li> <li>• Empowerment of faculty.</li> <li>• Timely appointment of teachers.</li> </ul>
2.6.4 Human Resource Management:	<ul style="list-style-type: none"> <li>• The institution has internalized system of assessment of staff.</li> <li>• Academic environment conducive for enhancement of performance by staff created in the college.</li> <li>• Faculty development programmes are conducted regularly.</li> </ul>
2.6.5 Financial Management and Resource Mobilization:	<ul style="list-style-type: none"> <li>• Mobilization of funds through self financing courses.</li> <li>• Generous contribution from the management.</li> <li>• Good number of Projects.</li> </ul>
2.6.6 Best Practices in Governance and Leadership (If any):	<ul style="list-style-type: none"> <li>• Constitution of various committees.</li> <li>• Regular Review.</li> <li>• The college has obtained substantial amount of grant from UGC.</li> </ul>
2.7 <i>Innovative Practices:</i>	<ul style="list-style-type: none"> <li>• Constitution of co-ordination committee.</li> </ul>
2.7.1 Internal Quality Assurance system:	<ul style="list-style-type: none"> <li>• Students attendance is maintained.</li> <li>• Regular improvemental infrastructure.</li> </ul>
2.7.2 Inclusive Practices:	<ul style="list-style-type: none"> <li>• Financial help by the college to socially and economically backward sections.</li> <li>• No gender bias.</li> <li>• Social awareness amongst the students and staff created.</li> </ul>
2.7.3 Stakeholder Relationships:	<ul style="list-style-type: none"> <li>• Regular meetings.</li> <li>• Parent teacher meeting.</li> <li>• Academic environment.</li> <li>• Co-curricular activities.</li> <li>• Starting new courses.</li> </ul>
Section III: OVERALL ANALYSIS	Observations (Please limit to five major ones for each and use telegraphic language)

	(It is not necessary to denote all the five bullets for each).
3.1 Institutional Strengths:	<ul style="list-style-type: none"> <li>• College has excellent infrastructure.</li> <li>• Proactive management.</li> <li>• Qualified teachers.</li> </ul>
3.2 Institutional Weakness :	<ul style="list-style-type: none"> <li>• Absence of interdisciplinary programmes.</li> <li>• No provision for Autonomy.</li> <li>• Majority of the Ph.D degree holders are working only in few departments.</li> <li>• Students hail from economically weaker sections.</li> </ul>
3.3 Institutional Challenges :	<ul style="list-style-type: none"> <li>• Networking of campus for effective ICT use.</li> <li>• Attracting students from other states.</li> <li>• Networking with other professional agencies for offering distance and online education.</li> <li>• Teaching methodology to be reinforced in some departments.</li> </ul>
3.4 Institutional Opportunities:	<ul style="list-style-type: none"> <li>• Creditable expertise available for consultancy</li> <li>• Designing of academic programmes in consultation with industries.</li> <li>• Designing of agricultural based courses.</li> <li>• Intensifying career guidance and placement services.</li> </ul>
<p>Section IV : Recommendations for Quality Enhancement of the Institution (Please limit to ten major ones and use telegraphic language) ( It is not necessary to indicate all the ten bullets)</p> <ul style="list-style-type: none"> <li>• Steps need to be taken to popularize skill based and value addition courses.</li> <li>• ICT teaching learning need to be integrated in all the departments.</li> <li>• ICT training to be provided to the teachers.</li> <li>• Innovative teaching methods to be adopted.</li> <li>• Teaching learning process is to be further systematized.</li> <li>• Research culture to be promoted among all the departments.</li> <li>• More opportunities to be provided for personality development of students.</li> <li>• Steps to be taken to arrange transportation facility to students coming from far off places.</li> <li>• Optimum utilization of available infrastructure.</li> <li>• Health care facilities to be augmented.</li> <li>• The College should take steps to admit more number of students belonging to SC/ST category.</li> <li>• Remedial coaching to be formalized.</li> </ul>	

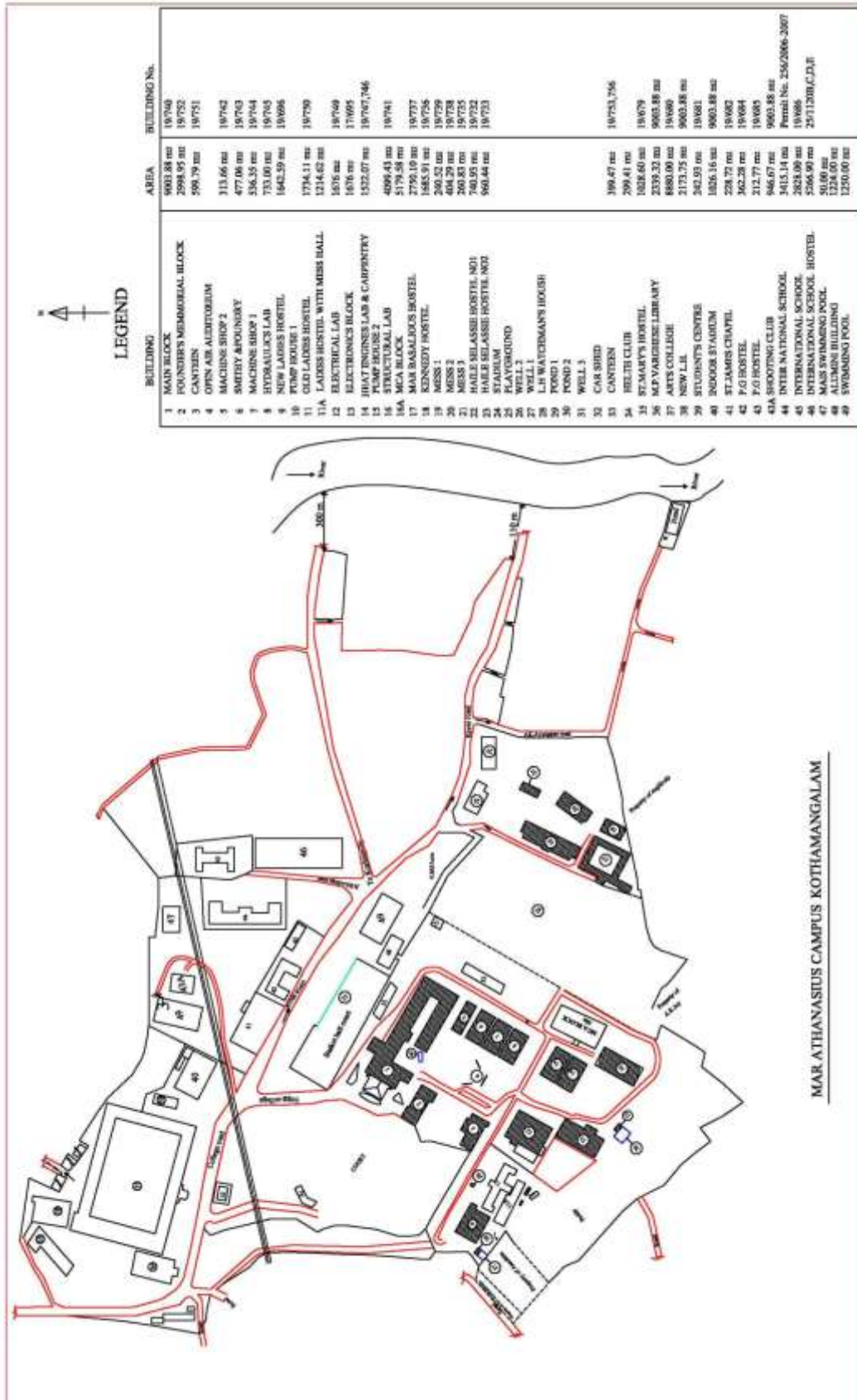
- Financial assistance for organizing seminars/conferences at the departmental level to be enhanced.
- All the teachers need to be involved in the activities of the College.
- Opportunities at the teaching level to be provided for candidates belonging to SC/ST category as per the prevailing rules.

Name Signature with date

1. Chairperson : Prof. B.Hanumaiah
2. Member Co-ordinator / Member : Dr. B.S. Srikanta,
3. Member : Prof. Beena Inamdar,

Signature of the Head of the Institution  
with date & Seal

## ANNEXURE IX



**MAR ATHANASIVUS COLLEGE**

KOTHAMANGALAM COLLEGE P.O., KERALA - 686666

Phone: 0485-2822378, Telefax: 0485-2822512

www.macollege.in

e-mail: mac@macollege.in



PRINCIPAL

COLLEGE WITH POTENTIAL FOR EXCELLENCE  
REACCREDITED AT 'A GRADE' BY NAAC

**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 Peer team will validate the information provided in this SSR during the peer team visit.

Kothamangalam

18 June 2015



*Devi*  
Principal

## MAR ATHANASIUS COLLEGE

KOTHAMANGALAM COLLEGE P.O., KERALA - 686666  
Phone: 0485-2822378, Telefax: 0485-2822512  
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e-mail: mac@macollege.in



PRINCIPAL

COLLEGE WITH POTENTIAL FOR EXCELLENCE  
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### CERTIFICATE OF COMPLIANCE

This is to certify that **Mar Athanasius College, Kothamangalam** fulfils 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 be 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.

Kothamangalam  
18 June 2015



*Devi*  
Principal