SREE NARAYANA MANGALAM COLLEGE

MALIANKARA P.O. 683516
MOOTHAKUNNAM, ERNAKULAM (Dist), KERALA

SELF STUDY REPORT

Submitted to

THE NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
BANGALORE - 560010

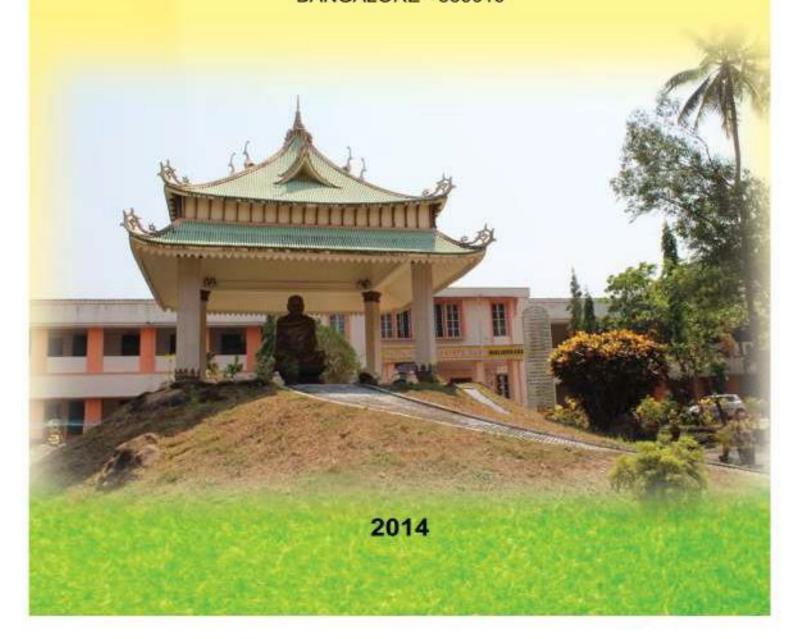


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SNM Collehe Maliankara Maliankara P O Moothakunnam Ernakulam District KERALA – 683516

To

The National Assessment and Accreditation Council Bangalore

Sir/ Madam,

Greetings from SNM College Maliankara!

It is a matter of great pleasure to forward the Self Study Report (SSR) of the college to NAAC for reaccreditation.

SNM College Maliankara is situated in a coastal village at north eastern boundary of Ernakulam district in Kerala. This backdrop is ideal for its mission of translating the principles of equity and excellence in the sphere of tertiary education. The overwhelming majority – around 90 %- of the student population of the college are from socially and economically backward segment of the society and the college has taken up the daunting challenge of transforming such learners into globally competent and socially committed promising youth who can take over the democratic leadership of the nation.

The college is affiliated to Mahatma Gandhi University and owned by a century old no profit organization 'HMDP Sabha', which is committed to the principles of Sree Narayana Guru, who was a saint and social reformer during the cultural renaissance of Kerala in the last century. Under his leadership the weak and underprivileged got organized to grow strong. He also invoked them to attain liberation through education. The college also attempts to attain the same by rendering his teachings into the instructional principles of cooperation and collaboration.

The institution had a humble beginning as a junior college way back in 1964 in a set of thatched sheds. It offered Under Graduate courses in 1972 and

Post Graduate courses in 1983. The college was granted the status of a research centre in 2011 by Mahatma Gandhi University. It got affiliated by the UGC under acts 2(f) and 12 B in 2000 and later in 2008 was accredited by NAAC with grade 'B'. This was followed by periodic introduction of new PG and UG courses both in regular and self financing streams. And now after all these slow but steady steps of progress the college has grown into an impressive institution of higher education with more than fifteen hundred students offering seven post graduate courses and nine undergraduate courses. Besides, the departments of Botany and Chemistry have excellent facilities for research supported by the financial assistance of FIST-DST of the Government of India.

The college is now preparing itself to meet the new challenges posed by globalization and internationalization of education. The faculty recognizes that the world is increasingly becoming flat in terms of educational and employment opportunities and the mission of the college is to help the youth to grow into a successful generation to take global leadership with their feet fixed firm on our cultural and ethical identity. As the college prepare itself for the reaccreditation by NAAC, the institution and its stakeholders feel that they are progressing in this direction. We just remain grateful to NAAC for that.

Yours truly

M.R Usha Principal

EXECUTIVE SUMMARY

CRITERION I: CURRICULAR ASPECTS

S.N.M. College focuses on the empowerment of the underprivileged and weaker sections of the rural society through education. The college's Mission, Vision and Objectives are targeted towards achieving this aim. As it is situated in a rural and economically backward area, the college offers ample educational opportunities to the minority groups, including a majority of girls. Standing within the framework of affiliated university, the college meticulously develops action plans for effective implementation of the curriculum. Teachers are encouraged to impart the curriculum through innovative teaching methods such as ICT enabled instructional strategies, presentations, assignments, discussions, workshops, seminars, industrial visits, computer education apart from regular/traditional teaching methods.

The College sends the teachers to participate in the meeting/ workshop/ seminar organized by the University to update knowledge on curriculum and to improve teaching practices. The college also encourages research aptitude among teachers by encouraging them to participate in the research oriented activities and availing them necessary leave facilities for the conduct of research .Faculty members of various departments actively participate and contribute to the design and development of the curriculum prepared by the university by being a part of the Board of Post Graduate and Under Graduate studies of M.G. University. The institution conducts periodic tests, seminars and assessments for ensuring the successful achievement of the objective of curriculum.

The college aims at a holistic development of the students –of body, mind and spirit. Field trips, industrial visits and community development programmes are conducted to ensure social service. These activities facilitate the development of sportsman spirit, leadership quality, divergent and independent thinking, and eco sensibility. Different Certificate/ Skill-based add-on courses are offered by the institution to realize the goals and objectives

of the institution and for learner enrichment. Sree Narayana Study Courses has been offered by Department of Malayalam. The Department of Commerce offers courses like Tax Practioner Course, Accountant Course and Licence for Consultation for students. Global competency among the students is enhanced through the exposure to ICT techniques and communication skills. Various interdepartmental programmes are conducted to make the students sensitive to the social, political, economical, ethical and scientific issues of the time.

The institution gathers feedback from parents and students at the end of each semester to ensure the stated objectives of curriculum and adopts corrective measures based on it. The feedback from the stake holders are used for multiple purposes. Firstly it is taken as a criterion in area of improving infrastructural facility for the teaching learning process. Secondly the suggestions are noted for modifying the instructional design or the class room process. Through informal discussion and interaction with parents/ guardians/ stakeholders too, the curriculum is constantly evaluated.

CRITERION II: TEACHING-LEARNING AND EVALUATION

The college adhere strictly to the rules and regulations of the university for student admissions. Forty percent (40%) of the students are recruited as general merit quota by the university through online process. The remaining sears are divided in bunches of twenty percentage each in categories of management, management community and SC/ ST student quotas. Owing to the costal and rural backdrop of the institution, an overwhelming majority of the learners – about 90%- come from socially and economically backward communities. It has indeed helped the college making headway in its commitment to the principle of equity though, it has placed daunting challenges too. The college has to lead a student population troubled by their unimpressive socio cultural identity to the heights of the educational goals like productive skills in their respective disciplines and arm them with skill sets needed to be successful in the age of globalization. This requires a redesigning of the conventional curricular practices. This is exactly what the college has

attempted. The college follows the teachings of Sree Narayana Guru to design its instructional design. The Guru wanted the underprivileged in the society to get organized to grow strong. Translating his ideas into educational terms the college adopted cooperative and collaborative learning as the basis of teaching. The less confident learners will find themselves more comfortable in such classroom climate.

The teaching learning process of the college begins by each department making their student profile. This includes a socio cultural survey and an aptitude / proficiency test. This is followed by remedial or bridging instruction. According to the design the function of the departments is three dimensionalknowledge creation, knowledge dissemination and knowledge extension. For knowledge creation the faculty is constantly encouraged to do research, publish / present papers, update knowledge and skills taping Open Educational Resources and use whatever means available for productive professional development. Knowledge dissemination is the actual teaching / learning process in the classroom. Here the teachers follow a combination of different strategies like focused instruction, guided instruction, cooperative learning and independent learning. During these steps of instruction the learner isprogressively given more and more responsibility of his learning ultimately leading him to the status of an independent learner. Teachers are encouraged to use web and multimedia to make learning more effective, efficient and engaging. Every module is taught with advance organizers and pre-stated objectives. And it is followed by the feedback from the learners on the basis of the objectives and how teacher was helpful in attaining them. The unsuccessful learners are given remedial support and the advanced learners are directed to web based learning. The progress of the learners is monitored by a well knit tutor and mentor system. Internal evaluation is continuous based on the performance of the learners in individual and collaborative activities in the classroom. The learners can evaluate themselves too. Learners' performance is recorded and communicated to the parents regularly. As a prominent group of stake holders, the parents' suggestions are welcomed for

changes and modifications in instruction. A grievance redressal forum looks into the unaddressed issues of the learners.

The departments extend their proficiency in two directions. They organize programmes for the students of other departments on areas of knowledge with interdisciplinary significance. The true extension programmes to the society should take the learners to the level of productive knowledge of their disciplines. Besides the departments, the student organizations like NCC and NSS are also committed to such activities.

This instructional design for teaching, learning and evaluation is far from being perfect as any educational attempt could ever be. It is subjected to consistent attempts for revision and modification. Moreover, any such attempt requires contemporary ICT infrastructure to be truly effective. The college is constantly in the lookout for infrastructural development within the resource limits of a rural institution.

Instructional design of the college



CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

"Teaching without research is likely to make you stereotyped, outdated and stale. Updating knowledge for the purpose of teaching is not enough, it must be applied to seek and find undiscovered truths" (Dutta Roy, 2009).

After the last accreditation in 2008, research consultancy and extension activities have been marked with distinguishable achievements. Six faculty members have been awarded with PhD degrees in their respective subjects from various universities of Kerala. One teaching staff submitted thesis and awaiting for the open defence. There are eight teachers registered for their research degrees during this tenure and successfully conducting their investigations. In 2011, the PG departments of Botany and Chemistry have been upgraded as centres of research by Mahatma Gandhi University. Since then five research scholars joined under the research department of Botany under the guidance of Dr. C.N. Sunil and one student in the research department of Chemistry under the guidance of Dr. B. Sleema. Besides these, five students registered under the guidance of Dr. K.K. Thampi of the department of Mathematics, in research centres outside this college. The department of Botany is maintaining a herbarium of more than five thousand (5000) specimens and hopefully will get a status of National Herbarium by the Botanical Survey of India, soon. All these are showing the inquisitiveness of institution towards the research.

The faculty members and students are regularly participating/ presenting their findings in various seminars/symposia of national and international repute. This would help them to get exposures, exchange their knowledge and to develop professional friendships. The PTA has been providing cash prizes to those who publish the papers in reputed peer reviewed and impact factor journals as a token of appreciation. All departments are furnished with computers and internet facility for the smooth functioning of research and allied activities. Most of the laboratories are equipped with sophisticated instruments. The Fund for the Improvement of Science and

Technology (FIST) by the Department of Science and Technology, Govt. Of India has been allocated a major financial assistance for the up-gradation of laboratories and purchase of many sophisticated instruments including the imported ones. This would be completed in near future and after the instalment of all these, research departments will be ready for fruitful innovations in science. The journal of Current Studies published by the college brings out the works of eminent scientists and scholars every year. Many teachers are applied for major and minor research projects under UGC and other funding agencies. Many students are bagged with best paper awards in national workshops and seminars. No official MOUs with research centres have been signed yet. The procedures are ongoing for the official collaboration with MSSRF (MS Swaminathan Research Foundation) and WGHF (Western Ghat Hornbill Foundation) by the department of Botany. The enthusiasm of faculty and students for obtaining new avenues in research is highly appreciable and is the wealth of our institution.

Institution commemorates Independence Day and Republic Day under banner of NCC and NSS units. All faculty members and student community participating in this and thus creates a national integrity. In addition to this the whole college and the NSS volunteers participate in the Clean Campus Drive conducted periodically. The NSS and the NCC conduct residential camps to groom leadership quality of the students and organizing blood donation camps, visits to old age homes, hospitals, etc to encourage social responsibility among the students. A Blood Donors' Club created in college by the NSS and NCC units and students along with teachers donates blood to IMA and other needy patients in hospitals. NCC cadets are given palliative care training by experts in these fields. The Youth red Cross (YRC) is also functioning in the college and the students enrolled are participating in camps organized by the district Red Cross Unit.

Nature Club, Women's Cell, SreeNarayana Study Centre, Career Guidance and Placement Cell, Counseling and Guidance Cell, Science Forum, Students Support Cell, Welfare Club, Legal Literacy Cell, Arts and Cultural Club, Film and Drama Club, Vivekananda Yoga Club, Health and Fitness club

are the forums functioning inside the College and they are promoting various activities in social and academic sector.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

The planning and implementation of the infrastructural facilities of the college is done by the management according to the recommendations guidance and assistance from the College managing council, college council, and PTA. The college has 51 + 2 class rooms for educational purpose. Each teaching department has computers with broadband internet facility, laptop, LCD projectors and screens to facilitate system aided teaching.

The college has an air-conditioned, fully equipped Seminar Hall with a seating capacity of 200 plus. Apart from this, there is a mini seminar hall for the Department of Mathematics and a computerized Technology Room cum Language Lab, equipped with audio-visual aids for the Department of English. There are Computer labs for Physics, Zoology, Economics, Mathematics and Commerce self-financing departments.

Department of Botany is maintaining a herbal garden with medicinal plants and a Green House. Both Departments of Botany and Chemistry have research centers. These departments have research lab cum research rooms near the respective departments.

There are separate infrastructural facilities for the NSS, NCC and Physical Education. The college has additional facilities for gymnasium, communication skills development, and yoga classes and indoor games. For the cultural and other activities of the students the college has an auditorium with the seating capacity of 800. There is an activity hall of capacity 200 plus available to the students for extracurricular activities like the film show, union activities etc. It's also used for additional purposes like examination and language classes. In addition to this, there is an auditorium of seating capacity of 1500 plus, maintained by the management for all the educational institutions under it.

The college library is computerized and digitalized. It has a total area of 5100 Sq.ft. and a total seating capacity of 100. It has internet access facilities for both faculty and students and has INFLIBNET accessibility. The library has installed a suggestion box to get the feedback from the students.

The campus has Wi-Fi connection within the office and its surroundings and in library, protected by password. Technology rooms in the college are used for online learning along with library. The departmental seminar technology class rooms are arranged in the college for enriching the learning process. Students can access OER (Open Educational Resources) and can enjoy the free video teaching. The training programmes have been conducting for students and staffs by the library to ensure recent information on e- journals and INFLIBNET. The FIST scheme of Department of Science and Technology has been allocated for the construction of an air-conditioned centralized Research Lab along with the purchase of sophisticated instruments required for research purposes in the departments of Botany, Physics and Chemistry.

CRITERION V: STUDENT SUPPORT AND PROGRESSION

As stated in the vision and mission of the college, the institution is very keen in bringing the students to the forefront of the society. The students are admitted to various aided courses through Centralised Allotment Process adopted by the M.G.University. As soon as the course begins, the students are given an orientation programme and a bridge course which helps the student to familiarize the course programme. They are also given an aptitude test to know their knowledge level in the subject. Based on this, the students can be categorized as slow and advanced learners.

The charge of a batch is given to a particular tutor. Tutor will have all the details of a student and monitors the academic performance of the student closely. Remedial coaching is given to the weak students. Mentoring and guidance are given to all the students by the tutor. Differentially abled students are given special care and attention by the teachers.

The students are encouraged to participate in various competitions in the state and national level especially in the area of sports. The college has an active NSS unit, NCC, redcross and women cell. There is a discipline committee under women cell to check any act of misbehavior towards girls. The college have an anti ragging squad and anti ragging committee to prevent and punish those who indulge in ragging. Various other cells like Grievance redressal cell, counselling and guidance cell, student support cell, student entrepreneurship scheme are there to ensure the welfare of students. A career guidance and placement cell is working in the college to help the students for their future job opportunities. These different cells offer many enrichment and value based programmes which enable them to face the modern world soon after the completion of the course. They are encouraged to participate in various National and international seminars and workshops by the institution to develop their research aptitude

Besides the numerous scholarships by UGC and government, the institution offers many cash prizes to eligible candidates. PTA also cooperates with the institution for the well being of the students. PTA gives proficiency prizes to the top ranking students of all classes. The alumni association of the institution also encourages the students by giving prizes to the best students.

Anti-ragging cell is functioning in the college. The cell prevents ragging, indiscipline activities by any student or students which cause annoyance, hardship or psychological harm or to raise fear or apprehension etc.

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

Our institution promotes the noble vision of great SREE NARAYANA GURU ie. Liberation of the weak and oppressed of the society through education. Governance and leadership are blended properly for enriching teaching, learning and other co- curricular activities. The Annual internal and external auditing guarantees financial discipline and transparency. The institution possess a crucial role in bringing socio- economic- cultural changes in and around North Paravurand Vypeen region. We have very active Alumni.

SAGA, is another organ for promoting the Alumni activities of our college. The governing body of the college comprising Manager, Principal, College Council, IQAC and PTA. Various committees are working for supporting the Principal in core matters, strategic formation and other institutional governance. Each of these committees has black and white vision and mission.

Teachers of the institutions are motivated to attend orientations, refresher courses, seminar and workshop to refresh their know how. College has providing computer and communicative training programs to non – teaching staff. All these training programs are very much helpful for them to transform their skills into a professional way, which in turn creates better Human Resources.

The library of the institution equipped with modern books and internet system. Now it is turning into the establishment of a full fledged computerization.

The structure of IQAC comprising CHAIRMAN, MANAGEMENT REPRESENTATIVE, CO- ORDINATOR, and other representative from different categories. IQAC performs academic, administrative and financial task for upgrading the college into a professional way.

CRITERION VII: INNOVATIONS AND BEST PRACTICES

Several initiatives and campaigns are taken by the college to make the campus eco-friendly. The college has a bio gas plant facility for the effective use of renewable energy and a rain water harvesting system. Trees are planted in the campus for carbon neutrality and to make it more eco-friendly. Standard waste disposal techniques are used in the college for laboratory and E wastes. Trees are planted every year at different locations in the campus and organic farming is promoted by the dept. of Botany and NSS. Waste bins are provided in UG, PG classes and the students are encouraged to use carry bags made of paper and cloth. Special days such as world ozone day, world forest day, world water day, world environment day ,wild life week are commemorated by organizing seminars, chart and poster exhibitions, processions, street plays etc.

As a part of innovative practices, rallies were conducted by the NCC unit of the college among the villagers of Vadekkekkara and for creating awareness against polluting water sources. As part of reinventing the present teaching- learning process the department of English has framed innovative mobile lessons and reading weeks to introduce them to new books with innovative concepts. The department of Botany planted critically endangered tree species included in the Red Data Book in the campus. The department also organized a programme for creating awareness about indigenous flower species among the students. The department of Physics conducts visits to old age home once in every year to evoke moral values and social commitments among students. Trainings are given to Degree and P.G students in jewellery making and glass painting which will help them to find money for their education. The Department of Mathematics conducts basic computer lessons for kudumbasree members The Chemistry department students manages to distribute lunch packets to the people in nearby hospitals once in every month. Water quality testing from local places in and around Maliankara is also done by the department.

As a part of Best Practice, the Sree Narayana Study and Research Centre acts as a cultural and research organization intended to give general awareness to students in topics related to moral and ethical issues and help them to study and conduct research on the teachings and philosophy of Sree Narayana Guru. A Value Based Education based on the principles of the Guru is propagated through its certificate course. Yoga classes are regularly conducted by the center and the participation of the local people in different classes on the teachings of Sree Narayana Guru is also a great success of the centre.

Another Best Practice taken up the college, the Women Empowerment Programme aims at empowering lesser privileged women through skill development and counselling and bringing them to the main stream of the society. Various programmes are organized by different departments of the college, NSS, NCC and Women cell to equip under privileged women with

skills which enable them to become economically independent and gain confidence. Vocational training classes like tailoring classes, beautician classes, jewellery making and training in Fabric Painting, painting, Basic Computer knowledge, detergent making etc. are imparted to help them to become self dependent. The programme also offers various counselling classes and karate classes which help the girls to cope up with physical and mental challenges.

Profile of the College

1. Name and Address of the College:

Name:	S.N.M.College, Maliankara	
Address:	Maliankara, Moothakunnam.P.O., Ernakulam	
City:	Pin: 683516 State: Kerala	
Website:	www.snmasm.org	

2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Email
Principal	Smt.M.R.Usha	0484-2483600	9846444299	snmcm@yahoo.com
Steering Committee Co-ordinator	Sri.K.A.Ajan		9447049333	ajan1979@gmail.com

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2	Ctotura	of tha	Institution	٠.
n.	Status	or me	THISTITION	н.

Affiliated College	\checkmark
Constituent College	
Any other (specify)	

4. Type of Institution:

a.	By	Gender

i.	For Men	
ii.	For Women	
iii.	Co-education	✓

b. By Shift

i.	Regular	✓
ii.	Day	
iii.	Evening	

5.	It is a recognized minority	institution?
	Yes	
	No	✓
	If yes specify the minori	ty status (Religious/linguistic/ any other) and
	provide documentary evic	lence.
6.	Sources of funding: Government Grant-in-aid Self-financing Any other	✓
7.		of the college: 14/07/1964 e college is affiliated /or which governs the
	college	Mahatma Gandhi University, Kottayam

c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks(If any)
i. 2 (f)	25-03-2000	
ii. 12 (B)	25-03-2000	

(Enclose the Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act)

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

Under Section/ clause	Recognition/Approval details Institution/Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
i.	Not Applicable			
ii.				
iii.				
iv.				

(Enclose the recognition/approval letter)

8. Does the affiliating university Act provide for conferment of autonomy (as
recognized by the UGC), on its affiliated colleges?
Yes No
If yes, has the College applied for availing the autonomous status?
Yes No ✓
9. Is the college recognized
a. by UGC as a College with Potential for Excellence (CPE)?
Yes No V
If yes, date of recognition: (dd/mm/yyyy)
b. for its performance by any other governmental agency?
Yes No ✓
If yes, Name of the agency and
Date of recognition: (dd/mm/yyyy)
10. Location of the campus and area in sq.mts:
Location * Rural
Campus area in sq. mts. 107000 sq. mts.
Built up area in sq. mts. 10089 sq. mts.
(* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)
11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.
 Auditorium/seminar complex with infrastructural facilities
 Sports facilities
* play ground ✓
* swimming pool
* gymnasium ✓
 Hostel
*Boys' hostel
i.Number of hostels - 0

	ii.	Number	of inmates			
	iii.	Facilitie	s (mention a	available 1	facilities)	
	* Girls' hoste	1 ✓				
	i.	Number	of hostels -	2		
	ii.	Number	of inmates	- 47		
	iii.	Facilitie	s (mention a	available 1	facilities)	
*	Working wo	men's ho	stel - 0			
	i.	Number	of inmates			
	ii.	Facilitie	s (mention a	available 1	facilities)	
•	• Residential f	acilities	for teaching	g and non	ı-teaching sta	ıff (give
	numbers ava	ailable —	cadre wise))		
•	Cafeteria —	1				
•	• Health centre	e - 0				
First aid, Inp	oatient, Outpatio	ent, Emer	gency care	facility,		
Ambulance	Health ce	ntre staff	_			
	Qualified of	loctor	Full time		Part-time	
	Qualified I	Vurse	Full time		Part-time	
•	Facilities like	banking,	post office,	book sho	ps ✓	
	There is a Pos	t Office r	ear to the C	College. T	he College h	as a
	store with stat	ioneries a	and reprogra	phy.		
•	Transport faci	lities to ca	ater to the ne	eeds of stu	idents and sta	ıff
•	Animal house					
•	Biological wa	ste dispo	sal ✓			
•	Generator or o	ther facili	ty for manag	gement/re	gulation of el	ectricity
	and voltage ✓					
-	Solid waste ma	anagemer	t facility			
-						
•	Waste water m	anageme	ent			
•	Water harvesti	ng ✓				

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

Progra- mme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student strength	No. of students admitted
	B.A.Economics			English	45+11 = 56	56
	B.A.Malayalam			Malayalam	20 + 5 = 25	24
	B.A.English			English	24 + 6 = 30	30
	B.Sc.Mathematics			English	32 + 8 = 40	40
U.G. Regular	B.Sc.Physics			English	24 + 6 = 30	30
Regular	B.Sc.Chemistry		0	English	32 + 8 = 40	38
	B.Sc.Botany	3 years	Plus Two	English	32 + 8 = 40	39
	B.Sc.Zoology	8	Plu	English	32 + 8 = 40	39
	B.Com Taxation Model I			English	50 + 13 = 63	63
	B.Com Taxation Model II			English	40 + 10 = 50	44
UG	B.Com Computer Application			English	100 + 20 = 120	106
Self Financing	B.Com OM & SP			English	40 + 10 = 50	45
	B.B.A.			English	40 + 10 = 50	46
	M.A.Economics			English	15 + 3 = 18	18
	M.Sc.Mathematics			English	10 + 2 = 12	12
Post- Graduate	M.Sc. Physics			English	12 + 2 = 14	14
Regular	M.Sc.Chemistry	2 years	Degree	English	12 + 2 = 14	14
	M.Sc.Botany	7	П	English	12 + 2 = 14	14
P G	M.Sc.Zoology			English	20 + 4 = 24	24
Self Financing	M.Com Finance			English	30 + 6 = 36	36
	Botany			English		5
Ph.D.	Chemistry			English		1

13. Does								
If yes	, how many? 6							
14. New any?	programmes introduced in the college during	the last fi	ve year	s if				
Yes	✓ No Number 3							
like	the departments: (respond if applicable only an Library, Physical Education as departments,	unless the	ey are	also				
the	ring academic degree awarding programmes. departments offering common compulsory rammes like English, regional languages etc.)	subjects						
Facult	Departments (eg. Physics, Botany, History etc.)	UG	PG	Research				
	Postgraduate & research department of	✓	✓	✓				
	Postgraduate & research department of Chemistry	✓	√	√				
Science		✓	✓					
	Department of Mathematics & Statistics	✓	✓					
	Department of Zoology	✓						
	Department of Zoology (S.F)		√					
	Department of English	√						
Arts	Department of Malayalam	√						
	Department of Economics	V	√					
Commer	Department of Commerce	√						
Department of Commerce (S.F)								
	ber of Programmes offered under (Programmes like BA, BSc, MA, M.Com)	e means a	degree					
	nual system							
b. se	mester system 22							
c. tr	c. trimester system							
17. Nun	17. Number of Programmes with							
a.	Choice Based Credit System	13						
b.	Inter/Multidisciplinary Approach							
c.	Any other (specify and provide details)	9		_				

18. Does the college offer UG and/or PG programmes in Teacher Education? Yes No V
If yes,
a. Year of Introduction of the programme(s) (dd/mm/yyyy) and number of batches that completed the programme
b. NCTE recognition details (if applicable)
Notification No.: Date:
(dd/mm/yyyy)
Validity:
c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?
Yes No
19. Does the college offer UG or PG programme in Physical Education?
Yes No
If yes,
a. Year of Introduction of the programme(s)
and number of batches that completed the programme b. NCTE recognition details (if applicable) Notification No.:
Date:
(dd/mm/yyyy)
Validity:
c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?
Yes No

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

		Teaching faculty					Non-		Tool	mi
Positions	Professor		Associate Professor		Assistant Professor		teaching staff		Techni- cal staff	
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University / State Government			11	14	7	16	25	8		
Yet to recruit										
Sanctioned by the Management/ society or other authorized bodies <i>Recruited</i>					3	25	1			
Yet to recruit										

^{*}M-Male *F-Female

21. Qualifications of the teaching staff:

Highest qualification	Professor		Assoc Profe		Assistant Professor		Total			
quamication	Male	Female	Male	Female	Male	Female				
Permanent teacher	Permanent teachers									
D.Sc./D.Litt.										
Ph.D.			6	7	3	5	21			
M.Phil.			1	2	1	1	5			
PG			3	5	3	10	21			
Temporary teacher	rs									
Ph.D.										
M.Phil.						1	1			
PG					3	24	27			
Part-time teachers										
Ph.D.										
M.Phil.		·	·							
PG		·								

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

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

	2010-11		2011-12		2012-13		2013-14	
Categories	Male	Female	Male	Female	Male	Female	Male	Female
SC	27	39	11	53	28	44	32	51
ST	-	-	-	-	1	3	1	-
OBC	102	174	90	197	181	246	169	268
General	19	31	11	29	13	39	10	12
Others	-	-	-	-	-	-	-	_

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	599	120			719
Students from other states of India					
NRI students					
Foreign students					
Total	599	120			719

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

UG	0.53 %	PG	0 %

26. Unit Cost of Education

 $({\it Unit cost} = {\it total annual recurring expenditure (actual) divided by total} \\ {\it number of students enrolled})$

- (a) including the salary component Rs. 50471.00
 (b) excluding the salary component Rs. 8961.00
- 27. Does the college offer any programme/s in distance education mode (DEP)?

	If yes,							
	a) is it a registered centre for offering distance education programmes							
	of another University							
	Yes No							
	b) Name of the University which has granted such registration.							
	c) Number of programmes offered							
	d) Programmes carry the recognition of the Distance Education Council.							
	Yes	No						
28.	Provide 7	Teacher-student rat	io for each of the pr	ogramme/cours	se offered			
	Sl.	Department	t UG	PG				
	No. 1.	Zoology	1:30	-				
	2.	Botany	1:15	1:4				
	3.	Physics	3:40	5:28				
	4.	Chemistry	3:40	2:7				
	5.	Economics	1:21	1:6				
	6.	Mathematics	1:15	1:3				
	7	Commerce	4:189	-				
	8	Commerce S F	1:21	1:7				
	9	Zoology S F	-	1:12				
	10	English	7:90	-				
	11.	Malayalam	2:25	-				
29.	Is the col	lege applying for						
Accı	editation:	Cycle 1 Cy	cle 2 ✓ Cyc	ele 3 Cy	vcle 4			
	Re-Asses	ssment:						
(Cycle 1refers to first accreditation and Cycle 2, Cycle 3 and								
	Cycle 4 refers to re-accreditation)							

30. Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle 1: 28/03/2008 (dd/mm/yyyy)

Accreditation Outcome/Result - Grade B CGPA - 2.77

- * Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.
- 31. Number of working days during the last academic year.

202

32. Number of teaching days during the last academic year (*Teaching days means days on which lectures were engaged excluding the examination days*)

168

33. Date of establishment of Internal Quality Assurance

Cell (IQAC) IQAC : 10/07/2007 (dd/mm/yyyy)

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

AQAR 2010 - 2011 (10/07/2012)

AQAR 2011 - 2012 (15/10/2012)

AQAR 2012 - 2013 (05/11/2013)

AQAR 2013 - 2014 (18/12/2014)

CRITERION I: CURRICULAR ASPECTS

1.1 CURRICULUM PLANNING AND IMPLEMENTATION

1.1.1. State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stake holders.

Established in 1964, S.N.M College Maliankara is a pioneering institution of higher education with a vision of nurturing youth to be agents of progress, transforming lives and society. Its mission has been, as enunciated by the great social revolutionary of Kerala, Sree Narayana Guru, emancipation and enlightenment through education. The institution upholds the message of the great Guru and strives to be a source of enlightenment to the people at large and poor and socially backward in particular. From its inception, the college has been rendering commendable service as a centre of learning and culture.

The Mission

- The college is committed to the principles of equity and excellence in higher education
- Impart holistic education to young men and women particularly from
 the lower from all strata of society and enable them to develop as
 intellectually mature, globally competent, employable, morally upright,
 socially responsible and spiritually inspired young leaders to serve the
 society.
- Develop in learners employability and the other skills necessary for being successful in life.

The Objectives

- To liberate the under privileged of the society through education.
- To create global citizens equipped to assess received opinion, make independent judgments, and to empower students to succeed in a changing world.

- To help prepare professionals recognized for the quality and significance of their skills, scholarship, service, outreach and leadership.
- To develop in learners employability and the other skills necessary for being successful in life.
- To enhance the commitment of faculty, staff and students to the centrality of diversity, social justice and democratic citizenship.
- To sustain a caring and supportive climate throughout the college.

The Mission, Vision and Objectives of the college are conveyed to the students and staff by taking the following initiatives:

- The vision and mission are regularly printed in the college prospectus, handbook, calendar, magazine, and reports published from time to time and distributed to the students, staff, visitors and guests. It is also displayed at strategic points, at the entrance, near the Principal's office and on the front wall of the college auditorium.
- Orientation programmes for the students and staff are organized at the commencement of the academic session.
- The newly recruited staff is introduced to the various programmes, activities, facilities and other important values of the institution immediately after their appointment.
- On all important events like Induction, College Day etc, the head of the institution acquaints the audience with the vision and mission of the college.
- Awareness and knowledge about the mission and vision is also imparted to the staff and students in the staff meetings and student council meetings respectively.
- The College organizes regular meetings with parents, not only to convey its vision and mission but also to involve them in achieving its target as well.
- The vision and mission statement of the college is also displayed in the College website.

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

The college meticulously develops action plans for effective implementation of the curriculum. The IQAC and planning board of the college design tentative curricular developmental plans and send them to departments for detailed discussion and modifications. At the outset, the Principal of the college conducts protracted meetings with the staff members of various department heads to develop various strategies for effective implementation of the curriculum and prepares an Academic Calendar. Teachers are encouraged beforehand to impart the curriculum through innovative teaching methods such as ICT enabled instructional strategies, presentations, assignments, discussions, workshops, seminars, industrial visits, computer education apart from regular/traditional teaching methods.

Thereafter, the staff members of various teaching departments conduct their internal meetings and develop academic plans for the coming academic year. Keeping in view, the no. of working days available, the syllabus is divided into units which are to be finished by a given deadline. Teachers are encouraged to prepare Unit Plans to ensure time bound and effective completion of the syllabus. Each department of the college follows the academic calendar issued by the affiliating university. Thereafter, the college plans its annual academic schedule which clearly mentions the topics to be taught and no. of working days allocated to respective topics, the amount of syllabus to be tested in various class, monthly, terminal or half yearly exams.

1.1.3 What type of support (procedural and practical) do the teachers receive (from the university and/or institution) for effectively translating the curriculum and improving teaching practices?

The institution is affiliated to Mahatma Gandhi University, Kottayam. The University conducts meetings/ workshop at the time of curriculum design by coordinating the senior faculty members of all its affiliated Colleges. The

College also sends the teachers to participate in the meeting/ workshop/ seminar organized by the University to update knowledge on curriculum and to improve teaching practices. The teachers of the College actively participate in the meetings/ workshop, discuss issues/ problems and put their suggestions.

The College provides well-stocked library, internet facility at different segments, computers for science, commerce and humanities departments, seminar hall to conduct departmental programme, computer laboratory, science laboratories, LCD projector, display boards, etc. The college also encourages research aptitude among teachers in all possible ways. The college authorities motivate the teachers for academic advancements & help them to apply to UGC for fellowships. The management is committed to promote research & ensure professional development of the faculty. All the departments of the college organize Seminars/ Conferences /Workshops of the state, national, international level by rotation as a maximum number of teachers are facilitated to attend such programmes. The teachers attend different orientation programmes and refresher courses held at various Universities to facilitate a productive interaction. The institution organizes training programmes for the faculty in the use of computers, internet, audio-visual aids, computer aided packages and multimedia for effectively translating the curriculum and improving teaching practice. The internet is available in the college labs and departments. The college offers central computing facility to the faculty and students to collect teaching learning resources for conferences, seminars etc.

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

Though the curriculum is designed and revised by the Mahatma University, Kottayam, for effective curriculum delivery, we give weightage to academic improvement and at the same time give sufficient importance to overall development of students by encouraging them to work with various forums of the college such as Student Council, NSS, NCC etc.

Following initiatives are taken up by the College:

- Provides latest reference books.
- Provides internet facility and modern teaching aids at different segments of the College.
- Enrichment and remedial instruction are given to the deserving students.
- Organizes computer skill development programme for the faculty so that they are able to use modern teaching aids in classroom instructions.
- Encourages the teachers to participate in special lectures organized by the College/other Colleges/affiliating University.
- Practical oriented departments conduct educational tour.
- Students' feedback about the curriculum and college is collected regularly through IQAC.
- Extension activities are promoted
- Tutor- ward system and mentoring system are implemented.

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

- ➤ Botany department conducts a field trip for the first year students to various places of ecological interest to familiarize them about nature and its functioning. The students of the department conducts visit to various industrial institutions like Binani Zinc. The department had done research in collaboration with centre for Medicinal Plant Research (CMPR) Kottakal, Malappuram. The department is also maintaining connections with research institution and NGOs. The following are some among the collaborative group:
- National centre for Sustainable Coastal Management
- Ministry of Environment and Forests, Chennai
- Kerala Forest Research Institute, Peechi.

- M.S. Swaminathan Research Foundation, Wayanad.
- Hornbill Research Foundation
- Western Ghats open Collaborative Information system, Pondicherry.
- Biotechnology research department of MET's Engineering college,
 Mala.
- Malabar Natural History Society, Calicut
- Research department of Botany, Calicut University.
- Dept. of Marine Biology CUSAT.
- Centre silk Board Palakkad.
- State Seed Farm.
- ➤ The Department is co-operating with Amrita Vishwavidyapeetam on developing IGRs [Indigenous growth regulators] from native plants for sericulture farmers of Kerala State. They are also collaborating with Sericulture Farmers' Association, Kerala at State level agency for evaluating and popularizing the use of IGRs for increasing silk production.
- ➤ Department of Physics is collaborating with research bodies like NIT, Cusat etc.
- ➤ Commerce Department runs and 'Add on course' in collaboration with Tax Study Centre.
- ➤ The Department of chemistry has link with research bodies like CUSAT, MG University etc. The PG students of chemistry visit industrial centres like FACT, TCC, Kanchor etc for their projects.

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

- ➤ Sri T.S. Rajeev Associate professor of Botany Dept. is currently in the Board of Post Graduate and Under Graduate studies of M.G.University. He is a member of UG Botany Board of studies from 2010-2013 and also Member of Vigilance Committee for monitoring examination from 2010-12. He is also serving as a member in the panel of subject Experts in Botany for the recruitment of Asst. Professor in Colleges affiliated to M.G. University.
- ➤ Dr. C.N. Sunil, Associate Prof. of Botany Dept and a renowned plant taxonomist, is a member of the panel of external examiners and question paper setters for PG programmes of Calicut and Kannur University. He is also a member of (Expert Committee) of St. Terasas College Ernakulam.
- ➤ Dr. K.K. Thampi Associate Prof. of Mathematics Department is a life member of Kerala Statistical Association India. He also served as a member of Board of studies in statistics in M.G. University.
- ➤ M.S. Asha, Assocate Professor of Mathematics is a member of PG Board of Studies in Mathematics, M.G. University.
- Prof. Ranjan Abraham (retired in 2014) was in the PG Board of Studies in Mathematics in MG University. He also served as a member of U.G. Board of studies in mathematics for 3 years in M.G. University
- Prof. Rishi Kumar of Mathematics (retired in 2013) was a member of
 P.G. Board of examinations for 4 years
- Dr.Cibi Komalan, Associate Prof. of Chemistry Dept. is a member of P.G. Board of Studies.

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

The Curriculum of the Add- on courses is developed by the concerned departments of the institution.

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

- ➤ The institution conducts periodic tests, seminars and assessments for ensuring the successful achievement of the objective of curriculum.
- > The departments conduct meetings once in a month to discuss and monitor the student related issues in curricular, co-curricular and extracurricular areas.
- ➤ College provides placement opportunities like ASAP for students in various disciplines based on their curriculum.
- ➤ Feedback evaluation system is in full swing by various departments. The institution gathers feedback from parents and students at the end of each semester to ensure the stated objectives of curriculum and adopts corrective measures based on it.
- The number of students passing out of the college, the rate of students pursuing higher studies and the number of students clearing NET/SET/IELTS etc. are other bench marks to ensure the achieved outcome of the curriculum.
- ➤ In extracurricular activities especially in sports, the students have possessed notable achievements for the institution. The kabadi and volley ball teams of the college have achieved so many prizes at the University and inter-University level. In Body-building champion ship

one of the students from this institution had entered into the final stage and won the third prize at the national level.

➤ In co-curricular activities like NCC and NSS very effective participation have been enforced by the institution with the help and exemplary support from the part of students and the teachers.

1.2 Academic Flexibility

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

Following the words of Sree Narayanaguru- Enlightenment and Emancipation through education- SNM College endeavours to develop good citizens – socially acceptable, technically efficient, personally well adjusted and socially responsible -for the country. As it is situated in a rural and economically backward area, the college offers ample educational opportunities to the minority groups, including a majority of girls. It trains the students for future life by creating an awareness of universal brotherhood and equity. It imparts one of the best types of quality education with the use of ICT techniques. Even in this Infoage the college ensures value education to its members. Various social service activities facilitate the development of sportsman spirit, leadership quality, divergent and independent thinking, and the concept or wisdom of eco justice. Students acquire competency in all fields of education with the support of its dedicated teachers. The college aims at a holistic development of the students –of body, mind and spirit.

The Following Certificate/ Skill development courses were offered by the institution to realize these goals and objectives

Sl. No	Title	Department	Year
1	Sree Naryana Study Courese	Malayalam	2008
2	Tax Practitioner Course	Commerce	2013
3	Accountant Course	Commerce	2013
4	License for consultation	Commerce	2013

1.2.2 Does the institution offer programmes that facilitate twinning /dual degree? If 'yes', give details.

No such programme is offered by the University/Institution.

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

Range of Core /Elective options offered by the University and those opted by the college

The sixth semester of the UG courses and the fourth semester of the PG courses offer options for electives in the core programme. *The Model I B.Com and the Model II programmes have an additional core option.*

Department	Courses Offered	Course Opted by the
	(U.G.Semester VI)	Department
	Creative Writing in English	
English	Regional Literatures in	Regional Literatures in
	Translation	Translation
	Malayalam Literature of	
Malayalam	Women Writers	
	Electronic Communications	Malayalam Literature of
	& Languages	Women Writers
	Magazine Journalism	

	Operations Research			
	Programming in C			
Mathematics	Topology	Operations Research		
	Theory of Computations			
	Astronomy and			
	Astrophysics			
	Information Technology			
Physics	Renewable Energy	Renewable Energy		
	Technology	Technology		
	Nanoscience and	Technology		
	Nanotechnology			
	Nanochemistry &			
	Technology			
	Industrial Chemistry			
	madstrar Chemistry			
	Polymer Chemistry			
Chemistry	Environmental Chemistry	Environmental Chemistry		
Chemisuy	Soil & Agricultural	Environmental Chemistry		
	Chemistry			
	Computer application in			
	Chemistry			
	Agribusiness			
	Phytochemistry &			
	Pharmacognosy			
	Plant genetic resources	Phytochemistry &		
Botany	management	Pharmacognosy		
	Agribusiness			
		A 1' 1 D /		
	Ecotourism	Applied Entomology,		
Zoology	Nutrition, Community	Management of Ornamental		
	Health, and Sanitation	Fish Prooding Varmiculture		
	Applied Entomology,	Fish Breeding, Vermiculture		
Management of Ornamenta		and Bee keeping		
	Fish Breeding, Vermiculture			
	and Bee keeping			
	1 ·· · · = · · · · · · · · · · · · · · ·			

	Outline of Economic	
	Thought	
	Human Resource	
	Management	Marketing Management
Economics	Marketing Management	
	Entrepreneurship and Small	
	Business Economics	
	Travel and Tourism	
	Management	
	Econometric Methods	
	Computer Application in	
	Economics	
	Finance &Taxation	
	Computer Applications	
Commerce	Co-operation	Finance &Taxation
	Travel and Tourism	
	Marketing	

Electives Offered for IV semester P.G. courses:

Department	Courses Offered (P.G.	Courses Opted by the
	IV semester Elective)	Dept.
	Computer Applications in Economics	Resource Economics and Sustainable Development
	Fundamentals of Environmental Economics	Personal Management Economics of Agriculture
	Resource Economics and Sustainable Development	
	Management Theory and Practice Personal Management	
Economics	Personal Management Capital Market	

		T
	Security Analysis and Portfolio Management Economics of Agriculture	
	Co-operation and Rural	
	Development	
	Advanced Economics	
	Analytic Number	Mathematical
	Theory	Economics
	Combinators	Mathematics for computing
	Classical Mechanics	Communicative Algebra
	Probability Theory	Fractal Geometry
	Mathematical	
	Economics	
	Mathematics for	
	computing	
	Operations Research	
Mathematics	Special Functions	
TVIALITOTITATIOS	Theory of Wavelength	
	Signal Theory	
	Communicative Algebra	
	Fractional Calculus	
	Algorithmic Graph	
	Theory	
	Coding Theory	
	Complex Algebraic	
	Curves	
	Algebraic Geometry	
	Fractal Geometry	
	Lie Algebras	
	Algebraic Topology	
	Financial Mathematics	

	Polymer chemistry	Advanced Inorganic	
	Analytical Chemistry	Chemistry	
	Advanced Inorganic	Advanced Organic	
Chemistry	Chemistry	Chemistry	
	Advanced Organic	Advanced Physical	
	Chemistry	Chemistry	
	Advanced Physical Chemistry		
	Opto Electronics		
	Software Engineering		
	and Web Designing	Opto Electronics	
Physics	Thin Film Nano-science		
	General Relativity and Cosmology		
	Environmental Science		
	Entomology	Environmental Science	
Zoology	Fishery science		
	Medical Microbiology		
	Biotechnology		
Botany	Environmental Science	Environmental Science	
	Microbiology		

Elective Options

The Choice Based Credit and Semester System (CBCSS) offer options to choose a course (Choice Based Elective) from their own core course in the sixth semester (details given above) and an Open Course of their liking from other programmes during the fifth semester.

Open Courses offered by the University & opted by the department for Semester V:

Department	Courses Offered	Course opted by the department
	Theory, Language	
	and Appreciation of	
	Films	
	Media Studies	
English	English for Careers	English for Careers
	Creative Writing in	
	English	
	Regional Literatures	
	in Translation	
	Basic principles in	
	Journalism	Basic principles in
Malayalam	Environmental	Journalism
	Studies	
	Mathematical	
	Modeling	
	Applicable	
Mathematics	Mathematics	Applicable Mathematics
	Financial	
	Mathematics	
	Mathematical	
	Economics	

	Energy and	Energy and Environmental
	Environmental	Studies
Physics	Studies	
	Amateur Astronomy	
	Diary Science	
	Food Science	
	Forensic Science	
	Environmental	
Chemistry	Chemistry	Food Science
	Nanoscience & Nano	
	Technology	
	Chemistry in	
	Everyday Life	
	Horticulture and	
	nursery management	
	Agribased	
Botany	microenterprises	Agribased microenterprises
	Ecotourism	
	Biotechnology	
	Bioinformatics	
	Man, Nature and	
	Sustainable	
	Development	
	Human Genetics,	Vocational Zoology
Zoology	Nutrition, Community	
	health and Sanitation	
	Vocational Zoology	
	Food Microbiology	

	Foundations of	
	Environmental	
	Economics	
	Reading in	
Economics	Economics	Foundations of
	Agricultural	Environmental Economics
	Economics	
	Demography	
	Economics of	
	Population	
	Fundamentals of	
	accounting	
	Business ethics	
Commerce	insurance and risk	Fundamentals of accounting
	management	
	Capital market &	
	investment	
	management	
Physical Education		Physical health and life skill
		education

Choice Based Credit System and range of subject options

All the programmes under the CBCSS offer options in their V Semester in the Open Course where each student has the freedom to choose any of the courses offered by any of the departments under the system. The VI semester also offers an elective in the core course.

Courses offered in modular form:

All the courses in the degree programmes and PG programmes are designed in the modular form.

Credit transfer and accumulation facility

The university allows provision for credit transfer subject to the conditions specified by the Board of Studies concerned.

Lateral and vertical mobility within and across programmes and courses

The affiliating University does not permit lateral mobility across programmes. However, the Open course of the V Semester gives opportunity for lateral mobility within the programme.

All the UG and PG courses have provisions for vertical mobility. The college conducts five PG courses – Economics, Mathematics, Physics, Chemistry and Botany and two self financing PG courses – Zoology and MCom to facilitate vertical mobility in the respective subjects.

Enrichment Courses

Different Add-on courses are offered to the students for learner enrichment. Sree Narayana Study Courses has been offered by Dept. of Malayalam. Dept. of Commerce offers courses like Tax Practioner Course, Accountant Course and Licence for Consultation for students.

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

Yes. The following self -financing programmes are offered by the institution

- i. B Com Computer Application
- ii. BCom Taxation
- iii. BCom Office Management & Secretariat Practice
- iv. BBA
- v. MSc Zoology Environmental Sciences
- vi. MCom Finance

The college follows the regulations of the Mahatma Gandhi University with regard to the admission to the above programmes including issue of application forms and prospectus, publication of rank lists, conduct of interview etc. The prescribed curriculum of the university is followed for the different programmes, availing the options therein. The programmes have a fees structure stipulated by the Mahatma Gandhi University for self-financing programmes. The institution ensures that the faculties have the qualifications prescribed by the University and Government.

1.2.5. Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If 'yes', provide details of such programmes and beneficiaries.

The college is a Training Partner Institution(TPI) of Additional Skills Acquisition Programme (ASAP) of the state government which imparts training to selected final year students of the Arts and Science colleges of the state as Skill Development Executives, who in turn train the High School students of the region in Communication Skills. The students of our college also have availed of this training programme.

Several departments offer skill development programmes/upskilling programmes that help the students to develop their skills, abilities and values in accordance with the regional and global employment markets. The Skill Oriented Programmes offered by various departments are mentioned in 1.2.1. Global competency among the students is enhanced through the exposure to ICT techniques and communication skills.

1.2.6. Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice" If 'yes', how does the institution take advantage of such provision for the benefit of students?

The affiliated University does not provide such flexibility.

1.3. Curriculum Enrichment

- 1.3.1. Describe the efforts made by the institution to supplement the University Curriculum to ensure that the academic programmes and institutions goals and objectives are integrated?
 - ➤ Skill-based add-on courses are provided by commerce and Botany department to prepare students for fulfilling courses.

Commerce: Tax Practitioner Course, Accountant Course, License for Consultation.

Botany: Phytochemistry Division. School of Biotechnology, Amrita Viswa vidyapeedam, Klappana, Kollam.

- ➤ The Department of Botany prepared the syllabus for M.Sc. Botany elective papers (Environmental Biology) under the Mahatma Gandhi University.
- ➤ Bridge course is been offered for 1st year graduate students.
- ➤ As part of promoting independent thinking, Seminars, Lectures and Workshops are conducted.
- > Optimum use of general library and ICT enabled teaching is ensured.
- > Field tips, industrial visits and community development programmes are conducted to ensure social service.
- 1.3.2. What are the effects made by the institution to enrich and organize the curriculum to enhance the experience of the students so as the cope with the needs of the dynamic employment market?
 - Student oriented academic and career programmes and Personality Development programmes are conducted to enrich and modify the curriculum.
 - > Open courses are offered in semester V

- Various add-on programmes/ certificate course are conducted by the concerned departments.
- ➤ To enrich the curriculum seminars and workshops are conducted by all the departments.
- ➤ The department of English held classes on Interview Techniques.
- Two seminars are organized by the Botany association in each academic year which are handled by veteran scientists/ Professors/ academicians)
- ➤ Field trips and study tours to various places of ecological interests are conducted to instill environmental awareness among the students.

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

The various departments of the college organize diverse programmes in collaboration with other departments to make the students aware and sensitive to the social, political, economical, ethical and scientific issues of the time. These programmes help the learners see the pressing issues, around them in a critical and objective perspective. They are organized in such a way to let them grew into responsible citizens who can lead the society into 21st century. Some of such programmes are;

- The series of programmes addressing gender issues, organized by the women cell as a part of creating awareness and ensuring women empowerment.
- The department of English offered awareness classes on Gender issues and on the Role of Parental Support in School Education. The Department also conducted a programme on traffic awareness in collaboration with Kerala Police. Chemistry Department has also given a class on Gender Sensitization.

- The special days such as Women's Day, International Human Rights day, Ozone day, World Food Day, World Forest Day, World Environmental Day, AIDS Day Alzheimer Day etc. are observed by conducting seminars, open forums, processions etc.
- There are organizations and clubs like Nature club, science forum,
 Debate club, NSS, NCC etc with their regular programmes conducted in and outside the campus not just to make the students aware of the issues around them but also to help them register their critical responses.
- Some departments make the students to watch video lessons from OERs and prepare assignment. In some departments student have created their own blogs and found in them a vent for their creativity. Altogether the college has tried to present ICT not as a subject of study for the learner but a very effective and enjoyable tool for their studies.

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

The profile of a 21st century college student is truly daunting. He is supposed to be a master of the higher order thinking and communication skills. He should be a lifelong learner with the intellectual flexibility to learn new things and acquire new habits. He must also possess vocational efficiency and productivity. Above all his actions and thought are to be guide by timeless moral and ethical values.

- The department of English has taken the leadership of upskilling the student population of the college. It has done it by regularly organizing training programmes on study stills, language skills, memory skills (mnemonics), public speaking, speed reading, impromptu speaking and creative writing.
- The career guidance cell regularly organize programmes to expose the students to new career and academic opportunities and also to the kind of career competencies they need to develop.

• Sree Narayana study centre does commendable job in inculcating lasting values among the students. The centre organizes a chain of programmes like Seminers, Invited Talks, Debates, Competitions to spread the message of revolutionary saint and social reformer Sree Narayana Guru. Sree Narayana Guru lead a society that was groping in the darkness of ignorance. Similarly the centre pledge its role as a guiding light to the students.

Every department designs and implement with a healthy spirit of competition programmes to reach out to the society where the learner can apply the skills and knowledge they give in the class rooms and labs. Such programmes can make them feel that they are responsible and useful citizens. Some of such programmes are;

- ➤ Classes on moral and ethical values were conducted by faculty members themselves in the Dept. of Mathematics. In the academic year 2013-14 talks were organized on "Adolescence problems and solutions" (by Dr. Madhu, Chaitanya Hospital, N.Paravur) and on "Positive Mental Attitude" (by M.V.Jose, Director, Lakshmi College, N.Paravur) by the Department.
- ➤ Department of physics and English organized classes for developing moral values in students.
- ➤ Department of Botany offers classes of moral and ethical values once in a month to UG and PG students.
- ➤ Department of Maths and Physics conducts CSIR-UGC Net coaching classes for PG students.
- Botany department provides awareness classes leading to acquisition of good employment skills.
- As part of promoting life skills department of Maths and English offered Bridge course for 1st year students. They also provided remedial coaching for I BSc Subsidiary statistics. In order to prepare students for

skill based careers, they conducted jewellery making classes for girl students. Personality development classes are organized to promote independent thinking.

Better career options:

- Department of Botany conducted awareness classes on current and future job opportunities related to their subject.
- Department of Mathematics and Chemistry conducted enrichment programmes such as career guidance classes for their final year B.Sc. and M.Sc. students.
- As part of promoting better career, English department offered career guidance classes for their final year students.

Community Orientation programmes:

English Department Organized the following programmes:

- Workshop on communication skills for Higher Secondary students
- Workshop on creative writing for High school students
- Training programmes on ICT applied teaching for High school teachers, Vadakkekara Panchayath
- Visiting old age homes and special schools
- Orientation for N.S.S students of S.N.H.S.S, N. Paravur
- Community visit and awareness classes on women empowerment and Gender Issues; Role of parental support in school education.

Physics Department conducted the following:

• 'Save energy campaign programme' in order to make people aware of the importance of energy conservation.

- Training was given to house wives in the locality for maintaining and repairing household appliances.
- An awareness programme was conducted with a vision to make people aware of the adverse effect of plastic on environment and to minimize its use.
- Students visited old Age house to invoke social commitments and responsibilities
- Opportunity to interact with differentially abled children.
- Prof. K.M Chandrahasan has conducted classes and demonstration of electric experiments to higher secondary school teachers of nearby school.
- Exhibition of handicraft items was conducted by the degree and PG students.

Mathematics department conducted the following:

- literacy mission for Kudumbasree units
- Workshop on 'Latex (Scientific typesetting)'for Higher Secondary teachers.
- 'Padheyam' providing mid-day meals to destitutes as a path to the value based life.
- 'Swanthwanam' Visited old age homes and Pratheeksha, the school for mentally retarded students.

Department of Botany conducted the following:

- training Programme on mushroom cultivation and sericulture to kudumbasree units.
- Practiced seasoned vegetable farming intended to be conveyed to the local people.

Department of Chemistry organized workshop and exhibition for Higher Secondary students.

1.3.5. Cite a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?

The college uses the feedback from the stake holders generally for multiple purposes. Firstly it is taken as a criterion in area of improving infrastructural facility for the teaching learning process. The suggestions are also noted for modifying the instructional design or the class room process. Same modifications on the evaluation process are also based on the information from feedback. Some points noted in the feedback were good enough to inform the university also. The following are the curricular changes based on the feedback.

- More ICT facilities like internet browsing provisions and smart class rooms were introduced.
- Classroom interaction was made learner centered.
- Class tests and quizzes were planned after every chapter.
- Based on the feedback from the alumni, coaching classes for the entrance examination for PG courses were organized by some departments.
- Based on the feedback from the parents, values based programmes were conducted sequentially.
- The extension programmes were constantly modified and perfected based on the feedback from the community involved.

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

Enrichment programmes are evaluated chiefly by the feedback from stakeholders. Critical feedbacks are collected from students and community members. Every programme in reviewed by each department by analyzing the

reasons for success or failure. Peer evaluation is another way of assessing the quality of enrichment programme that will give the people involved on objective and different perspective.

1.4. Feedback System

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

Faculty member of various departments actively participate and contribute to the design and development of the curriculum prepared by the university. The following faculty members from various departments are the members of Board of Studies of M.G. University in their corresponding subject areas.

G Dr. Jehosheba P. Mathews (B.Sc. Biochemistry)

Dr.M.K. Joshy (B.Sc. Chemistry)

Prof. Manoranjan (B.Sc. Chemistry)

Dr. Cibi Kamalan (M.Sc. Chemistry)

Dr. C.M. Sreejith (B.Sc. Botany)

Dr. K.K.Joshy: Prof. T.S. Rajeev (M.Sc. Botany)

Dr. M.B. Ajthen Menoth; Prof. S.P Sudheer (M.A and B.A. Economics),

Dr. K.K. Thampi (B.Sc. Statistics)

Prof. Rishikumar (M.Sc. Mathematics)

Prof. M.S. Asha (M.Sc. Mathematics)

Prof. Ranjan Abraham (B.Sc. and M.Sc. Mathematics)

The above mentioned faculty members were the representatives of the institution in the University for the framing of the curricula.

 Dr. T.K. Mukundan attended two workshops on restructuring curriculum UG & PG Degree Course (Zoology) Conducted by the MG

University, Kottayam. He also participated in CBCSS Zoology curriculum Review workshop conducted by the M.G. University.

- The syllabus of the elective paper for P.G. Botany Programme was structured by the Department of Botany. Dr. C.N.Sunil of the Botany Dept. serves as external examiner, question paper setter and as the member of expert committee of St. Teresa's college, Ernakulam.
- 1.4.2. Is there a formal mechanism to obtain feedback from students and stakeholders on curriculum? If 'yes' how is it communicated to the University and made use internally for curriculum enrichment and introducing change/new programmes?

Formal feedbacks on curriculum are collected from students for analysis. Through informal discussion and interaction with parents/ guardians/ stakeholders too, the curriculum is constantly evaluated. Preferences and required changes for enrichment are reported and conveyed to the concerned faculty who is a member of the Board of Studies for further procedure.

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

During the test four year the following programmes were introduced in the institution in the self financing sector.

- (1) B.Com Taxation
- (2) B.Com office Management and secretarial practice
- (3) B.B.A.

The B.Com department of the aided sector conducts a job oriented training programme for the B.Com students.All these courses have been introduced in tune with recent trends and cater to the interest, demand and need of the students in the area.

1.4.4. Any other relevant information regarding curricular aspects which the college would like to include.

The institution envisages a transparent procedure regarding syllabus selection /fixation and other related curricular aspects. A simplified and inclusive system in which faculty member of every department can contribute ideas/suggestion as to the content of the syllabus would also be beneficial for the student community.

CRITERION II: TEACHING - LEARNING AND EVALUATION

2.1 Student Enrollment and Profile

- 2.1.1 How does the college ensure publicity and transparency in the admission process?
- Information regarding the various programmes offered by the Institute is published in the College website.
- Prospectus provided along with the application form.
- Admission procedure is strictly on the basis of the rules and regulations formulated by Mahatma Gandhi University and the Government of Kerala
- The lists of candidates to be admitted are displayed on the College notice board and the admission procedure is strictly carried out according to this list.
- 2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

Criteria

- 40% of the seats are allotted for open merit, 20% for reservation students,
 20% for Management community quota and the remaining 20 % is for
 Management.
- Weightage for NCC, NSS and Ex-service man quota is accorded as per the Government rules.

Process

- The entire process of admission is co-ordinated by an admission committee comprising of the Principal, Coordinator, Joint Coordinator, Office Superintendent and staff members.
- The admission process is carried out under single window system implemented by MG University for regular courses under which 40% of seats for open merit and 20% of seats for SC/ST candidates. The rest 40% consisting of community and management merit are done by admission committee and management respectively.

- The fellows with JRF or the candidates who cleared university entrance examination can apply to the research Centre for Ph.D registration.
- In self financing programmes seats of Merit and Management quota are fixed as 50:50.
- 2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

UG Level Programmes

T	1	1		1	1
Programmes	Max/Min	2010-11	2011-12	2012-13	2013-14
English	Max	83	85	84	85
	Min	65	62	67	68
Malayalam	Max	80	80	81	82
	Min	70	71	69	70
	Max	84	83	84	85
Economics	Min	68	67	63	65
Physics	Max	85	86	81	92
	Min	65	69	56	68
Chemistry	Max	84	85	86	93
	Min	75	73	71	78
Mathematics	Max	83	84	87	92
	Min	58	64	67	63
Zoology	Max	79	78	78	80
	Min	67	65	62	68
Botany	Max	86	84	88	90
	Min	67	65	63	66
Commerce	Max	95	97	97	98
	Min	80	83	80	82
Commerce (self	Max	84	85	87	89
financing)	Min	56	56	55	50

PG Level Programmes

Programmes	Max/Min	2010-11	2011-12	2012-13	2013-14	
Physics	Max	84	87	84	85	
Thysics	Min	68	69	69	70	
Chemistry	Max	88	89	87	89	
Chemistry	Min	74	76	78	75	
Mathematics	Max	91	87	89	90	
Wathematics	Min	62	59	58	72	
71(16	Max	78	79	76	80	
Zoology (self financing)	Min	65	68	66	73	
Botany	Max	85	83	84	86	
Dotairy	Min	83	85	83	58	
Commerce (self	Max	81	80	83	82	
financing)	Min	63	64	62	63	

- 2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?
 - The execution and review of the admission process is done by the admission committee.
 - The admission committee ensures whether due consideration is given for students of socially and educationally backward community.
 - The SC/ST vacancies are advertised in the national dailies and in their absence the vacancies are filled by OEC students
- 2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion

- SC/ST/OBC The reservation policy of the Government is strictly followed by the institution for the admission of students from these communities
- Women Greater part of our students are women candidates.
- Differently abled- The institution promotes the admission of these students by giving special consideration.
- Economically weaker sections Special scholarships are given to
 encourage the bright students by external and internal agencies.
- Minority community The institution encourages the admission of these communities.
- Any other Co-operative society run by the teaching and non-teaching staff of the institution awards Scholarships to the brilliant students.

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

Demand ratio-U.G

			No. of a	pplicants		No	o.of stude	nts admit	ted	Demand Ratio			
Sl. No.	Programmes	2010-11	2011-12	2012-13	2013-14	2010-11	2011-12	2012-13	2013-14	2010-11	2011-12	2012-13	2013-14
1	English	357	275	289	256	30	12	13	14	12:1	23:1	22:1	18:1
2	Malayalam	209	179	189	186	25	14	14	13	8:1	13:1	14:1	14:1
3	Economics	442	318	309	308	52	27	23	25	9:1	12:1	13:1	12:1
3	Physics	248	146	136	129	30	12	13	13	8:1	12:1	10:1	10:1
4	Chemistry	270	168	159	133	38	16	15	16	7:1	11:1	11:1	8:1
5	Mathematics	202	122	164	134	35	16	17	18	6:1	8: 1	10:1	7:1
6	Zoology	127	87	96	89	39	16	15	17	3:1	5:1	6:1	5:1
7	Botany	153	100	88	97	37	16	16	14	4:1	6:1	6:1	7:1
8	Commerce	720	329	421	406	62	26	28	27	12:1	13:1	15:1	15:1
9	Commerce (self financing)	403	412	385	502	60	60	59	61	7:1	7:1	7:1	8:1

^{*}from 2011 onwards 60% seats of UG admission is based on CAP allotment by M.G.University

Demand ratio-P.G

S1.	Programmas	No. of applicants				No.of students admitted				Demand Ratio			
	Programmes												
No		11	12	13	14		12	13	4		12	13	4
		2010-1	2011-12	2012-1.	2013-1	2010-11	11-1	12-	2013-14	2010-11	2011-12	2012-13	2013-14
		20]	20]	20]	20]	20]	2011.	2012	20]	20]	20]	20]	20]
1	Physics	47	52	27	29	14	9	8	7	3:1	7:1	4:1	4:1
2	Chemistry	55	53	25	29	14	8	9	8	4:1	7:1	3:1	4:1
3	Mathematics	48	45	24	28	12	9	9	9	4:1	5:1	3:1	3:1
4	Zoology (self financing)	54	51	25	27	24	12	13	13	2:1	4:1	2:1	2:1
5	Botany	52	53	25	28	14	8	8	7	4:1	7:1	3:1	4:1
6	Commerce (self financing)	75	93	54	56	36	46	18	18	2:1	2:1	3:1	3:1
7	Economics	27	32	11	15	18	17	7	8	2:1	2:1	2:1	2:1

^{*}from 2012 onwards 60% seats of PG admission is based on CAP allotment by M.G. University

2.2 Catering to Student Diversity

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

Differently-abled students are provided admission according to the government norms. If necessary, classes were shifted to the convenient places. These students are provided seats in the front row near to the door in the class rooms. These students are encouraged at every level in the institution. The concerned teachers take extra care and moral support whenever necessary. They help the students to understand all the portions well. The teachers also make sure that those students get all the study materials. During examinations scribes are provided for the physically and visually handicap students.

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

Based on the marks of the student at the entry point of the admission we can assess the knowledge and skill level of the student. After the admission procedure all departments conduct a socio-economic and academic survey to assess the students. Based on this, the needs of the students can be understood. There may be slow learners who require special attention and there will be fast learners who have to be guided properly. The faculty members will give proper counselling and remedial coaching to the weak students and make every effort to motivate the good students.

2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/ Addon/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?

There are various programmes developed by the institution to bridge the knowledge gap of the enrolled students so as to enable them to cope with the programme of their choice. These measures are enumerated below.

Socio-economic and Academic survey/ Aptitude tests

All the departments conduct a socio-economic and academic survey for the first year students at the beginning of the programme. The survey consists of two parts. The first part contains the details of the students social and economic background and the second part contains his educational background. Some department conducts an aptitude test along with the survey. Based on the performance in these tests as well as the academic data obtained from the survey, the students are identified as advanced, average and weak students. Remedial coaching is given to the weak students.

Induction programme

The students are given an induction programme which enables them to get a basic idea of the programme.

Bridge course

During the first semester a bridge course is conducted which provides the students with required fundamentals for the core course.

Tutorial system

The students of a particular batch are put under the charge of a tutor until the completion of the programme. This system helps the teachers to identify their personal problems as well as problems related to studies and can take necessary measures to correct it. The tutor also gives proper guidance in their personal as well as academic matters.

Add-On Courses and Enrichment programmes

The commerce department is conducting an add on course for tax practitioners. Several enrichment programmes are there to supplement the students in different aspects of education. The different programmes include NET coaching, PSC coaching, Bank test coaching etc are organized by the career guidance and placement cell.

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

Gender

Ours is a co-ed college with a majority of females. The college has a Women cell which is working in an efficient way. The cell organizes various programmes for the empowerment of women. These programmes help the women to know about many legal rights enabling them to fight against social discrimination. Apart from this, various programmes are arranged to bring the female students to the forefront and to develop different skills in them. Equal

opportunities are given to both the genders in academic activities, Sports, placement and other related activities.

Inclusion

Lectures and classes are conducted for up-liftment of the students from the backward section of the society. These students are provided financial assistance from the institution in addition to the scholarship given by the UGC and Government. Special attention is given to the above students to guide them in proper way and to bring them to the main stream of the society.

Environment

In order to make the campus green and shady, trees are planted and conserved at different locations of the campus which in turn reduce environmental pollution, if any. Special days such as World Ozone Day, World Forest Day, World Water Day, World Environment Day, World Wetland Day, Earth Day and Wildlife Week and so on has been commemorating by the conduction of seminars, chart and poster exhibitions, procession etc. Several programmes are conducted to make students aware of keeping environment free from pollution.

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

Advanced learners are identified through interactive classroom teaching and classroom discussions. The college also has provision of class tests and quiz through which faculties can identify advanced learners. Various extension lectures are organized to respond to learning needs of advanced learners. The students also get opportunity to participate in several national events. They are constantly encouraged and guided for preparation of various competitions. Students are free to communicate with their faculty at any time and discuss their problems. Advanced learners are given additional project work and necessary guidance by their teachers in addition to extra reading material. They are also encouraged to participate in symposiums, paper presentations, poster

presentation and quiz contests. They are encouraged to acquire new and advanced information through the internet to bring out their full potential. The creative abilities of students are given vent through department magazines and college magazine. All the students are exposed to peer group learning where both the slow and advanced learners are combined. A friendly environment is created to improve the communication skills of the advanced learners. A number of motivational lectures are organized to channelize their potential to achieve success.

The following methods are used to respond to their special learning needs:

Challenging assignments are specially given to advanced learners. The college and the department libraries are enriched with books and journals for advanced readings. The advanced learners are encouraged to use the sophisticated resources of the college library like reference books, INTERNET etc. UGC NET coaching was given to the advanced learners. Encouragement is given to the advanced learners for university ranks.

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

The college collects and analyzes the data with regard to academic performance through academic history, attendance record, developing a mechanism to inculcate academic tastes among the students by way of organizing classroom seminars, debates, quiz programmes, conducting tests, assigning project works, classroom and laboratory involvement, arranging remedial classes and extension lectures. Academic performances of the students from the disadvantaged sections of society, differently- abled, slow learners, economically weaker sections etc. are detected by the teachers during

their lectures in classroom. We use marks as index for identifying slow learners are subjected to various methods of evaluation such as vocal responses, sample individual responses & written test after each unit of syllabus. These students who do not seem to cope up with the pace of learning are advised and counselled by the teachers so as to help them improve themselves. The morale of the slow learners is boosted by counselling sessions, remedial classes and intensive interactive sessions. They are also given advice after class hours and are motivated by providing additional learning material such as printed lecture notes and solved question papers.

Student attendance is regularly monitored and analyzed every week by the class teacher and at the end of each month by the Head of the Department. Those students with attendance shortage, who obviously belong to the drop-out risk group, are counselled and warned and their parents are called in. The closer interaction between the parents and the teachers resulted in marked improvements in their ward's attendance in the college.

The institution has devised the following measures to improve their academic performance:

- Orientation Programmes and lectures conducted by the Equal Opportunity Centre.
- Personality Development Programmes and Life Skills Programmes.
- Remedial Coaching
- Mentoring
- Counselling
- Monitoring of attendance and parental interaction sought in case of shortage.
- Stipends and scholarships are given to students from economically weaker sections of society

2.3 Teaching-Learning Process

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

Choice Based Credit and Semester System

An academic year consists of two semesters, an odd semester from June to October and an even semester from December to April. The semester breaks are in November and May during which the teachers are engaged in evaluation duty and practical examination.

Evaluation of students happens in two criterions:

Internal Evaluation and External Evaluation

The internal evaluation is done by continuous assessments which include assignments, seminars and test papers. All students have to do a project in the course as part of their curriculum. Moreover, student attendance is also graded to ensure his/ her presence during the class room and practical sessions. At the end of each semester, the students will have to go for an external examination conducted by the University. There will also be an external practical examination and viva voce for the students as a part of the curriculum.

Academic calendar

The institution prepares an annual academic calendar of the college well on time for the smooth conduct of the training programme. This document is based on the academic calendar published by the M.G.University at the commencement of each academic year and is distributed to the departments accordingly. The calendar will contain details about the working days for each semester, probable dates for the conduct internal examinations, university examinations, add-on courses, etc.

Heads of the departments, under the guidelines of academic calendar drafts a departmental academic calendar which will include details and the probable dates regarding the departmental activities, association activities, remedial and advanced coaching, entry level test, bridge course, add-on courses, seminars and enrichment programmes etc. These documents are displayed on college / departmental notice board for student intimation. Teaching Plan is to be taught for the teachers for each semester. Time-tables for assignments, seminars, project work and evaluation and tutorial work are also prepared in advance and given to the teachers. The teachers in turn submit a detailed individual course plan for the approval of the Head of the Department which is then handed over to the Principal for implementation as scheduled. Separate timetables and course plans are prepared for Bridge Courses, Remedial and Advanced Coaching and Add-on courses. All the details regarding the time-tables, course plan, invigilation and evaluation duties are maintained by the teachers in the Teacher's Diary.

Evaluation

Examination Cell constituted by the elected staff representatives in the College Council conduct internal examinations for all programmes in a semester. The Examination cell will inform the departments and students about the schedule of examinations through a circular. It is the responsibility of the co-ordinators of the Cell to collect the question papers from each department, appoint invigilators, and conduct the examinations on the model of university examinations and further make arrangements for evaluation.

2.3.2 How does IQAC contribute to improve the teaching –learning process?

Periodical review meetings / feedback system identifies the scope of improvements including the grey areas within the system. The following documents are being maintained and followed for reference:

Academic Calendar
Teaching Plans
Departmental work schedule
Teacher's dairy

Details of Add on courses

Guidelines for the conduct of national seminars

Guidelines for the conduct of Workshops

Language Labs

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

The introduction of Credit system has improved the scope of teaching – learning curve within the system. The additions and alterations made in the curriculum, the change in grading and the evaluation criteria etc are being implemented towards achieving this aspect. Focus has been shifted to research oriented projects, seminars, spot assignments / tests, presentations, attendance grading, orientation programmes through eminent personalities etc rather than following the traditional methods of knowledge sharing.

The conventional teacher – centric learning concept has been shifted to the platform of student – centric. The organization offers the following support structures and systems to make learning process more students centric:

Independent Learning:

Research oriented projects for under graduates & post graduates courses

Ensuring participation in National seminars

Focus on communication / presentation skills

Conduct of Workshops

Preparations/ Presentation of Seminars on individual topics

Ensuring availability of e-journals

Provision of central library & departmental library with internet facility

Interactive learning:

Seminar and Workshops

Individual presentations

Group discussions

Interactive sessions with eminent personalities

Conventional question – answer session

Experimental lab sessions

Mock drills / viva voce

Collaborative Learning

Knowledge sharing through Inter college projects and seminars Schedules envisaged through the state government flag ship programme "Flair"

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

The threshold energy for young vibrant minds is being constantly ensured through the expert faculty members. Few among the innovative methods implemented are as follow:

- Eminent scientists / academicians/ social workers are being called for invited talks.
- Workshops and Seminars conducted by departments are being focused towards students' future.
- Inter college knowledge sharing platforms viz. group discussions, quizzes, lab visits, etc.
- In house debates, group discussions, etc on current topics.
- Study tours and industrial visits.
- Students are encouraged to do their projects and field work in collaboration with the industries viz. production plants, IT parks, etc.

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

ICT classrooms are available in all departments.

Facilities for online tutorials are available at few selected hubs in college library.

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

Seminars, Workshops, Symposium, Lectures by professionals etc on topics relevant to the recent development in respective fields are being conducted by the departments.

Paper presentations by faculty members in International / national seminars.

Participation of students in various national / international events such as Olympiads, Talent Research Examinations etc

Ensuring availability of latest books and e-journals are being subscribed to update the latest developments in the fields of literature arts, science and technology.

Faculty members are encouraged to carry out minor/major projects.

Publication of research works / papers in national and international journals by the faculty members

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

provided to students?

Orientation programme are conducted for freshers to educate them about the academic atmosphere in the organisation, job market requirements etc.

Value addition sessions are scheduled focusing on the overall development of an individual.

Mentoring done through counselling and guidance

Micro teaching lessons are introduced to improve communication skills, presentations capability etc

Job opportunities for students through the Placement cells

Career Guidance and placement cell working in collaboration with recruiting agencies for the benefit of students community

Women cell works for the psycho-social support of girl students

Grievance redressal cell functions to address the academic grievances of students

Anti ragging cell and Anti sexual harassment cell function to provide personal and psychological support to student community

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

The new Choice Based Credit and Semester System introduced in all the affiliated colleges under the M.G. University since 2009 comprises of a continuous internal evaluation and an external evaluation. New trends and specialized topics like informatics and computer application in the concerned core areas of study, application-based questions, provision for hands-on

experience, research oriented projects, soft skill development etc. have been introduced in the curriculum. The institution and the faculty have adopted the following strategies for a time-bound transaction of the innovative approaches to students.

Course Plan

The Course Plan for the entire programme of a department is prepared by the HOD and the teachers prepare semester wise individual course plan. Teaching plans for each month/ module is also prepared for uniformity in the lessons covered which makes the setting of questions for the internal assessments as well as revisions more convenient.

Multi-Strategic Teaching

Teachers adopt different teaching methods depending on the need of the circumstances. They adopt discussion method, interactive sessions and question-answer method to make teaching a pleasant exercise and also to supplement the traditional lecture method of teaching. Assignments, seminars, projects and viva are given by the teacher to make learning more student-centric.

ICT-Enabled Teaching

Application of ICT -enabled teaching aids in addition to conventional lecture method is another innovation in the area of teaching. Power point presentations are made by many teachers for teaching. Audio-visual rooms with Smart Board and a seminar hall have been installed in the college for common purpose of all departments.

Practical Exposures

All departments, especially science stream arrange field trips and industrial visits to work spots for the students to give them practical experience and new knowledge besides theoretical knowledge acquired in the classrooms.

Also students are taken to visit some cultural places and institutions, which promote our cultural heritage.

Film shows and drama are conducted for theatre experience. Students are also taken for seminars, workshops and competitions conducted by other educational institutions.

Internet Connectivity in Departments

To facilitate teaching, the college has provided internet connectivity in all the departments. The faculty who guides the students in their project helps them to browse for data using this facility.

Knowledge up-gradation

The institution encourages the faculty to update themselves in their subjects by attending refresher courses, seminars, conferences and workshops. A research Committee has been set up to guide and encourage teachers to take up research and project works and to present papers in seminars and to publish them in this regard. The teachers are given duty leave to take part in all faculty development programmes.

The change from the annual system and numerical grading to the semester system and continuous evaluation and credit system has tightened the campus life. It demands for time-bound and better student learning, thus improving the discipline and academic atmosphere of the campus. The multi-strategic teaching and ICT- enabled learning has made learning more functional, practical, fun-filled and less time-consuming.

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

The institute is having a full-fledged library facility which hubs more than one lakh of reference books, text book, journals, etc. of various streams viz. Science, technology, arts, general knowledge and other related topics.

Cubicle modular structure equipped with internet facility enhances library utility to the teachers and students community. Ergonomic seating arrangement with easy access to the almarahs / shelves which stock the reference material reduces the time lapse on search of materials by the customers.

Library starts functioning with a time schedule so as to provide access to student and teacher community before and after the college hours.

Journals and magazines are made available for updating the scholarly with the newest knowledge. A separate wing in library with books and CDs for Remedial Coaching is functioning. A specialized section with study material for competitive exams and entry into services has been set up to enhance the competitiveness of students attending various examinations in national and international level. Audio and video learning content in CD and DVD resources are made available to all. Internet facility is provided in the library. In addition to the general library there are department libraries for easier access of the students and teachers of the respective departments.

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

The newly implemented semester system has constraints of time to complete the curriculum within the stipulated time frame of the academic calendar. The difficulties faced are enumerated in the following paragraphs:

The restructuring of syllabus has called for more effort from the faculty members for designing of new academic calendar, teaching plans, internal assessments etc. which is more time consuming at initial stages. The non-availability of text books at the time of commencement of the courses, time lag in the setting of new question paper pattern, the non-availability of model question papers etc. had created difficulties in completing the curriculum within the planned time-frame.

The non-availability of faculty members during the commencement of a new semester due to special duties of paper evaluation and practical exams had resulted constraints in class room coaching.

Late admissions to first semester on additional allotments via CAP and the need to repeat topics covered for new students further added the gravity of situation.

The number of working days of the semester calculated inclusive of the exam dates which consume considerable number of class hours. The actual teaching hours are much less than the stipulated 90 hours due to the above mentioned reasons.

The college adopts the following measures to cope with the challenges:

- Symposiums and workshops were being conducted for the teachers on the new grading system. Teachers are exposed to the various programmes of syllabus restructuring and new trends in the areas conducted by the University.
- Faculties are encouraged to take part in seminars, workshops and other trainer development programmes for updating knowledge in the new topics and keep abreast of latest happenings.
- Focus has been ensured for the performance of late admission students through special classes and remedial coaching.
- Special sessions are scheduled during holidays to complete the syllabus.
- Model question papers are prepared by the teachers under the guidance
 of the internal / external expertise available within the organisation.
 Mock tests are being scheduled to keep students and teachers at comfort
 zone during the final examination stage.

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

The monitoring and evaluation of teaching –learning process is being carried out mainly for the following two purposes:

- (i) Measure the quality of learning, teaching and course/unit design, ie Quality Assurance (QA) purposes.
- (ii) Improve the quality of learning, teaching and course/unit design, ie Quality Enhancement (QE) purposes.

As primary recipients of instruction, students are in a unique position to offer their perspective on aspects of teaching such as student-lecturer relationships, workload, difficulty of material, choice and availability of resources, what they have learned in the unit, fairness of assessment, and aspects of lecturing such as the lecturer's ability to communicate clearly, the speed of delivery and audibility.

Students can provide feedback at any time during the semester. The feedback from the main stake holders of the organisation i.e. students are divided into two types: **informal feedback** activities and **formal feedback** activities. Informal feedback activities can be undertaken at any time during the course. Formal feedback activities are more often undertaken at the end of semester.

The internal assessments, assignments, seminars and group discussion are the tools to evaluate students' efficiency. The graphical data of pass percentage, grading scored etc. are prepared by all departments semester wise to make a comparative analysis.

Inspection by the Principal and HoDs on various sessions conducted by the teachers ensures quality assurance in the teaching process. Staff Council functioning in the college evaluates the performance of the students in the internal assessment and University exams which would reflect the quality of teaching and learning.

2.4 Teacher Quality

2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and

competent teachers) to meet the changing requirements of the curriculum

- Appointment of teachers based on UGC norms
- Induction programmes on teaching learning aspects on senior faculty members and experienced hands
- Orientation/ refresher on constant intervals and short term courses are provided
- Honing pedagogical skills with the support of sister concern.
- Encouraged to attend various training programmes conducted by various agencies such as Higher Education Department, UGC and other nationally graded institutions
- Quality enhancement of faculty members are envisaged through FDPs by UGC.
- Most of the faculty members are credited with Minor/Major research projects funded by UGC and other agencies.
- Newly introduce teaching learning methodologies, evaluation etc are familiarized through proper training conducted by PTA, IQAC.

Highest qualification	Pro	ofessor	Associate Professor		Assistant Professor		Total
quamication	Male	Female	Male	Female	Male	Female	
Permanent teacher	'S						
D.Sc./D.Litt.							
Ph.D.			6	7	3	5	21
M.Phil.			1	2	1	1	5
PG			3	5	3	10	21
		Tempor	ary teach	ers			
Ph.D.					0	0	
M.Phil.						1	1
PG					3	24	27
		Part-tin	ne teache	rs			
Ph.D.							
M.Phil.							
PG							

2.4.2. How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/

modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

The last few years were a period of face-lift in higher education system through curriculum modifications and innovative evaluation techniques. Moreover, mass retirement of faculty members from the sphere had aggravated the criticality.

The corrective steps done are:

- Enrichment of knowledge adherence through web resources like Massive Open Online Courses (MOOCs) and Open Educational Resources(OERs)
- Knowledge sharing with emeritus faculty members of National reputation.
- Faculties are enrolled in various online courses conducted and organized by international level institutions.
- College IQAC organized an orientation programme on Methodology course on business studies on behalf of Kerala State higher Education Council.
- Organized a workshop on *Application of ICT in Developing Listening* and *Speaking Skills* by department of English.
- Organized an orientation session on *Horizons of Nanotechnology* for all science faculties by department of Physics.
- A seminar on MathCAD was organized by department of Mathematics.
- The college appoints expertise visiting faculty and part-time faculty to supplement the teaching programmes of the new areas.
- Retired faculties are being invited for specialist lectures, presentations on various relevant topics.
- 2.4.3 Provide details on staff development programmes during the last four years Elaborate on the strategies adopted by the institution in enhancing the teacher quality.

- Instructor evaluation schemes through various feedback systems namely top to bottom, 180^0 evaluation scheme and 360^0 evaluation scheme.
- Conducts capsule training courses for faculty members by eminent personalities from various fields.
- Facilitating frequent Coffee table meetings among the community of faculty members and research scholars to ensure a common platform for knowledge and experience sharing.
- The department of Physical education organised a seminar on Health and wellness through Sports for all faculty members
- a) Nomination to staff development programmes

Academic Staff	Number of faculty nominated				
Development Programmes	2009-10	2010-11	2011-12	2012-13	2013-14
Refresher courses	0	1	1		
HRD programmes	0			1	
Orientation programmes	0		2		1
Staff training conducted by the university	0		1		1
Staff training conducted by other institutions Summer / winter schools, workshops, seminars etc.	27	29	40	37	67

b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning

Teaching learning methods/approaches

Ensuring participation of faculty members in international /national level training programmes conducted by various agencies viz. FLAIR, Academic staff Colleges, etc.

Short and long term attachments to the institutes of national repute such as IITs, IISc., NITs etc horns the soft skills of faculty members in both academic and research arenas.

Conducted workshop on new instructional strategies organised by IQAC funded by higher education council.

Handling new curriculum

Training curriculum is being distributed among the core committee department wise.

The onus of preparing lesson plans is entrusted with the core committee in consultation with other faculty members.

Content-knowledge management

Cross exchange of the lesson plans and the training dockets among the colleges within the university ensure fool proof methodology of content management under various topics.

Selection, development and use of enrichment materials:

Training sessions for faculty members are being regularly conducted to create awareness regarding the best tools, resource materials, implementation methodologies and the work flow systems within the frame work of existing stakeholders.

Assessment:

The assessment system followed is promulgated among the teacher student community well on time.

The internal and external exam grading is being implemented with the comfort of systematic approach towards the teaching learning curve. Moreover transparency is maintained through timely evaluation and unbiased assessment.

Cross cutting Issues

On job training programmes are coordinated for creating awareness in the areas of conventional energy management, pollution control, rain water harvesting, Swach Bharat Abhiyan and waste management. In house technical meetings, workshops, seminars, etc are focused at this end.

Audio multimedia: A smart class room has been established encompassing the latest electronic gadgets which are useful for trainer trainee interactions. Students and faculty members are trained for power point presentations, communication skills, etc through the training movies / clips available at the hub. The revalidation and upgradation of database happens at regular intervals to keep pace with the technological developments.

• **OER:** The organization focus on progressive training philosophy. The faculty members are being monitored on regular basis and their scope of improvements are ensured through ensuring participation in various national / international seminars, workshops, on job training programmes, etc. The availability of resource materials including the e-learning

Teaching learning material development, selection and use

Department of Mathematics conducted a workshop on LATEX – a free tool used for scientific typesetting, to enable staff members of science departments to make use of this tool for preparing study materials.

- 2.4.4. What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)
 - The Science Departments have benefitted from FIST grant from DST,
 Govt. of India.
 - Encouraged Faculties to avail FDP programmes.
 - Some of the faculty members have contributions in published book.

- 2 science faculties have undergone training programme FLAIR coordinated by state Higher education department.
- Teachers are granted leave to go as resource persons
- Departments organize workshops in regular intervals.
- organized study tours/industrial visits by respective departments.
- Expertise lectures were organised to explore novel areas of research and development.
- Encouraged to attend national/international seminars, workshop sand conferences.
- 2.4.5 Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/ achievement of the faculty.

Recognitions are received by the faculty from reputed professional bodies and agencies, nationally and internationally for their contributions in teaching and research.

Dr.Jehosheba P Mathews Associate Professor of Biochemistry, bagged 'BHARAT SHIKSHA RATAN AWARD' sponsored by Global society for health and educational growth for excellence in chosen field of activity held at New Delhi

Sri. C.M.Sreejit, Assocate Professor of Botany was awarded best paper in the national conference held at mangalore, 2011

Dr. Ajithan Menoth, Head of the Department of Economics, received the 'THAKAZHI AWARD' for short stories in the year 2009-10.

Dr. M.G Sanilkumar, Assistant Professor of Botany is the recipient of "Young Scientist Award" at the 3rd Kerala Environment Congress 2007, for the best paper presentation, held at Thiruvananthapuram, Kerala, India.

Sir. V.V. Naveenkumar, Research Scholar of the department of Botany received third Prize for the Paper Presentation in UGC sponsored National Seminar Seminar cum Workshop on 'Plant Systematics and Herbarium Techniques' held at KKTM Govt College, Pullut on 24-25 September 2014.

Ms. Lima O.S., Post Graduate student of Botany under the guidance of Dr. E.C. Baiju., bagged the First Prize for the Poster Presentation in UGC Sponsored National Seminar Cum Workshop on Techniques in Biosciences held at KKTM Govt College, Pullut on 18-19 February 2014

Dr. Sanilkumar M.G., Assistant Professor of Botany, has been recognized as the microalgal taxonomic consultant by National Centre for Sustainable Coastal Management, Chennai, (Ministry of Environment Forest and Climate Change Govt. Of India).

CUSAT

- 2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?
- Instructor evaluation schemes through various feedback systems formulated by IQAC namely top to bottom, 180° evaluation scheme and 360° evaluation scheme

2.5 Evaluation Process and Reforms

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

The institution takes the following measures to ensure that the stakeholders of the institution, especially students and faculty, are aware of the evaluation processes:

 The evaluation processes are incorporated in the annual prospectus of the College which is being circulated to the stakeholders especially students
 Self Study Report of SNM College, Maliankara, Ernakulam Dt., Kerala-2014 and faculties of the College. Annual prospectus is also available in the College website.

- At the beginning of the year, Departmental Heads and faculty members inform the students about it in the classroom.
- Time-to-time notifications about evaluation processes issued by Principal are being circulated to the classrooms and displayed in the College notice board.
- A proforma for feedback is circulated among final year UG and PG students to evaluate the performance of the teachers.
- 2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

The University has introduced Choice based Credit and Semester System for both UG and PG courses. The evaluation has both Internal Assessment and Semester Examinations.

The college has adopted the following university reforms concerning evaluation:

- The Continuous Assessment has been done by tests, assignments, seminars, projects, practical sessions, etc.
- Internal assessment is awarded to the students as per the university criteria.
- Class tests and unit tests are conducted to evaluate the performance of students.
- The marks of the internal assessments are displayed in the college notice-board to maintain transparency.

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

The institution ensures effective implementation of the evaluation reforms of the university and those initiated by the institution on its own through Academic Council & IQAC. Any doubt about evaluation is made clear to the students. All records are maintained i.e answer sheets, award lists etc. weekly tests are taken and record is kept. Whenever class tests and term tests are taken the results of the students performance/awards are shown to the students to encourage them or counsel them for better future performance.

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

University is the sole authority for implementation of reforms in examination and evaluation and faculty members who are a part of academic bodies of the university actively campaign for reforms. For bringing about a positive change in the evaluation practices, the institution adopts both formative and summative methods of evaluation. The formative and summative evaluation approaches are adopted at curricular, co-curricular and extracurricular front to measure student achievement.

In the Curricular front, formative approaches include attendance record, classroom interactions, assignments, project work, field visit, practical sessions, unit tests etc. For summative approach unit tests are taken in the college. If any student doesn't clear the condition of these terms tests then one special test is taken to improve his performance for final examination.

In the co-curricular front, debates, elocution, quiz, sports trials etc are conducted for students and they are made to participate in University Youth Festivals, Sports meets and other National, State and District level competitions.

All these approaches of evaluation have positively impacted the system.

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

The progress and performance of a student is closely monitored through the duration of the course. The teacher / tutor in charge, HOD and Principal are participants in this process of continuous evaluation. Every semester, the process involves class tests, university model internal exams, oral exam, open discussion, debates, assignments, seminars, practical exams and minor research project works. The evaluated results are recorded on grade sheets and form A of the college and sent to the university in Form B. This internal evaluation is included in the final assessments on a 7point scale of the university. Before finalizing the result, there are departmental discussions on students performance. Parents are requested to be present in college in whose presence the progress and performance of their respective wards are communicated. The university results of various programmes are depicted in a chart given below.

Results

Programme	2011	2012	2013	2014
BA English	51	52	48	51
BA Malayalam	62	64	64	63
BA Economics	86	86	82	73
Bcom Taxation	85	92.85	91.66	100
Bcom CA	91	87.5	92.42	90.32
Bsc Physics	90	86	79	68
Bsc Chemistry	84.2	82.75	82.14	86.7
Bsc Botany	94	85	91	92

Bsc Mathematics	85	100	79	55
Bsc Zoology	85.2	87.5	89.66	97.14
MA Economics	94	75	63	Awaiting
Msc Physics	44	56	56	55
Msc Mathematics	82	72	58	Awaiting
Msc Botany	57	77	50	Awaiting
Msc Zoology	62.50	56.25	61.10	Awaiting
Msc Chemistry	64.3	50	78.6	Awaiting
Mcom (Self)	81	77	78.57	Awaiting

The study of the chart reveals results that fluctuate. This unpredictable nature makes it difficult to arrive at a definite conclusion regarding students' achievements. However the difference in examination pattern implemented by the university in 2010 and 2012 has helped to screen the academically meritorious students. Students who have proved their merit have fallen into their chosen carrier tracks.

2.5.6 What are the graduate attributes specified by the college/ affiliating university? How does the college ensure the attainment of these by the students?

- In every year college prepares an academic calendar which shows a time schedule for each internal examination. The exam co-ordinator in charge will conduct the internal examination process. The date and time table for the examinations will be published well in advance.
- The date for evaluation and submission of the answer scripts and grade sheets will be informed to teachers. The evaluated answer scripts were shown to the students for scrutiny. Those students who were absent for the internal examinations and those who scored poor marks will be given a second chance.

The academic performance of each student will be entered in their student profile forms and will be shown to their parents at the time of PTA meeting. At the end of each semester grade sheets of each course is prepared in the A form in which attendance of the students is also incorporated, because it is an integral part of internal assessment. Those students, having no enough attendance(below 75%) will be warned by the departmental head and will be informed to the concerned parents in the same time, and they have to get condonation from the university to register for the examination. The consolidated semester wise evaluative form is prepared in the B form and this will be published in the notice board of each department for transparency and to avoid unnecessary grievances if any. The grades in the B form are uploaded in the MG university portal after counterchecked by the class teacher and department head.

2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

Yes, each faculty of the institution maintain record of the grades in the concerned programmes and grades obtained by the students for their assignments, seminars and projects. The grades of the entry level test, the tests of remedial and advanced coaching are also recorded. Besides internal examination, each department are conducted module-wise class tests, group discussions, regular mentoring/counselling etc for the students.

• The department of Botany is being conducted horticulture practices (grafting, budding etc) as a part of basic learning process. They are also actively involved in planting mangrove seedlings in and around the campus. The department of English, for improving the communication skills of students exhibits various literary movies, and conducts inspirational talks and thoughts. The department of Physics regularly conducts industrial visits for upgrading the awareness on new tools and technology. (PetroNet LNG). The department of Mathematics introduced an awareness programme to the students on Math Cad

software for improving problem solving ability. The department of Commerce has conducted a UGC sponsored add-on programme.

2.5.8 What are the mechanisms for redressal of grievances with reference to evaluation of both at the college and University level?

The college has a three tier Grievance Redressal mechanism with 10 members, including the principal as the chairperson. If the students have any problem regarding their internal marks, they can approach the concerned teacher for solving the same. If that concern is not redressed satisfactorily, the student can approach the head of the institution.

2.6. Student performance and Learning Outcomes

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

Yes. The learning outcomes of the college revolves round its vision 'enlightenment through education,' endeavors to develop the technically efficient and socially committed members of the society.

- ➤ IQAC has designed curricular design based on entry level of the learners and the learning outcome of courses. The learning outcomes includes
 - Productive knowledge of the respective disciplines
 - 21st century skills such as communication skills, soft skills, divergent and independent thinking skills
- The Staff are made aware of the learning outcomes by giving workshops, seminars and meetings. The awareness about various skills and areas of knowledge that learners have to attain at the end of the course are also provided to them. The college hand book gives a clear cut idea of the same.

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

According to the instructional design, the college follows strategies based on cooperative principles which help get confidence for the economically and socially backward learners. The instructional design consists of

- > Classroom Instruction
 - Focused learning (lecture methods)
 - Guided Learning (practicals in which teacher acts as a guide)
 - Cooperative Learning (Project Works)
 - Individual Learning (Students learn independently)
- > Supplementary Programme

Teaching is supplemented in plenty by giving awareness classes on

- Motivation
- Communication Skills
- Soft Skills
- Thinking Skills
- Business Skills

Apart from the external evaluation by the University, the college systematically follows continuous evaluation to check the learners progress of attaining course curricular objectives. Co-curricular activities like yoga, sports, NCC, NSS etc helps facilitate achievement of learning outcomes.

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

In order to enhance the social and economic relevance of the courses offered, the following measures are taken up by the college

- The students are encouraged to do the projects of their concerned disciplines which have practical value
- Participation of students in various National and International seminars.
- Various seminars and talks by entrepreneurs
- The college moulds the students for future job opportunities through special training on competitive exams, group discussions and interview skills.
- 2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?

Data related to Students learning outcomes are collected and analysed based on two sources- continuous and summative assessments. Continuous evaluation is done through test, assignments, seminars and indirect observation. Summative assessment is conducted at the end of each semester. The progress of learning is represented graphically and slow and advanced learners are identified. Remedial coaching and mentoring are provided to the slow learners to overcome the barriers of learning and enrichment programmes for the advanced learners.

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

In order to monitor and ensure the learning outcomes, the college follows strategies based on cooperative principles which help to attain confidence for the economically and socially backward learners. The instructional design consists of classroom instruction and supplementary programmes. Teaching is supplemented in plenty by giving awareness classess on;

- Motivation
- Communication Skills
- Soft Skills
- Thinking Skills
- Business Skills

Result analysis of the concerned departments helps to measure the progress of the learners and to choke out the plans for the next year.

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

The college endeavors to develop the attributes like academic excellence to face the challenges of the competitive world and human excellence which aims to develop a secular, moral and democratic outlook among the students through various programmes.

The different attributes specified by the college includes

- ➤ Knowledge of the Subject
 - Theoretical knowledge
 - Practical knowledge
 - Productive knowledge
- ➤ Knowledge of the world
- ➤ Values in life
- > Skills and abilities
 - Communication Skills
 - Soft Skills
 - Thinking Skills
 - Entrepreneurial Skills

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

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

Yes. Botany and chemistry departments of our college are recognized research centres of Mahatma Gandhi University. A total of four research guides are already engaged in active research in these centres. More staff members have filed the application for getting recognised as research guides. Seven research scholars are working for their doctoral degree at present.

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

Yes. The institution has a Research Committee to facilitate and monitor research activities, address the issues of research and to popularize the importance of research and development in the field of higher education. The committee comprises of a chairperson (principal), convenor, research guides and one teacher representative with PhD each, from all the departments.

"Teaching without research is likely to make you stereotyped, outdated and stale. Updating knowledge for the purpose of teaching is not enough, it must be applied to seek and find undiscovered truths" (Dutta Roy, 2009). The college has realized the above quotation in the true sense even before its publication and hence the institution has adopted various strategies to promote research oriented culture. The teachers are encouraged to avail of the Faculty Improvement Programme (FIP) of the UGC as well as other research projects from various national and regional agencies (DST, DBT, KSCSTE and so on). Seminars/conferences and workshops are regularly arranged in the college by various departments to create a research perspective among the teachers and

students. The research committee encourages students to take up projects which have potential for future research for themselves and for the faculty.

The major decisions taken by the research committee during the academic year:

- The faculty who hold Ph.D. degree shall be directed to get guide-ship recognition from the university as per the norms. As per decision, some of the faculty members applied for the guide-ship
- > To support the faculty who do not possess research degrees to register as research scholars in Universities or other recognized research centres at the earliest.
- To encourage and guide the faculty and scholars of the centres to take up minor/ major projects.
- ➤ To motivate the faculty members to participate and present their findings in various seminars/symposia organized by several international and national institutions to get in touch with the latest developments in their respective fields.
- ➤ To subscribe research journals in the departments, especially the research centres.
- > To motivate the faculty to regularly publish articles and research papers in various national and international journals.
- ➤ To arrange for collaboration with other institutions and industrial organizations, in the manner of an academic collaboration.

The impact of the recommendations of the research committee:

- ➤ Three teachers applied for UGC major research projects and one teacher submitted a proposal to Kerala State Council for Science Technology and Environment.
- ➤ Ten teachers have applied for UGC assistance for Minor projects

- The teachers have been motivated to conduct /attend seminars, conferences etc and to publish articles in various peer reviewed international and national journals of repute.
- Received funds from UGC every year to organize seminars, workshops and conferences

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

§ Autonomy to the principal investigator

Autonomy is provided to the Principal investigator regarding the implementation of his project without affecting the teaching hours in the department.

§ Timely availability or release of resources

The fund sanctioned from external agencies is handed over to the principal investigator without any delay. The overhead charges are also given to the PI/ concerned department and hence they can make use of it for the augmentation of departmental activities.

§ Adequate infrastructure and human resources

The College provides adequate infrastructure for research activities including separate research laboratories for Chemistry and Botany. The library, lab, internet etc are utilized for carrying out research.

§ Support in terms of technology and information needs

The institution has adequate supporting system in terms of technology and information such as computer labs, LCDs, library etc.

§ facilitate timely auditing and submission of utilization certificate to the funding authorities

The office provides support for timely audit and submission of utilization certificate to the funding authorities

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

The institute is in constant pursuit of developing scientific temper and research culture amongst the students. Some of these initiatives are given as under:

- By conducting workshops in emerging techniques in various fields by inviting eminent scientists to impart hands-on techniques to the students.
- By inducing practical aptitude among students through participation in experimental exercises.
- By conducting quiz competitions based on various research topics.
- By arranging seminars and conferences whereby students have ample opportunities to interact with eminent researchers.
- By undertaking research projects for UG and PG students
- By providing books, journals, magazines of research importance in library and modern equipments in laboratories
- The project work includes experimental works in the laboratory as well as field survey. As the institution belongs to the coastal area, the students are directed to carry out their project work in day to day matters like water analysis, impact of contagious diseases, fish farming, fish preservation, food adulteration etc.
- Students are encouraged to continue their research activities by sending them to the prominent universities, factories etc.
- They are also advised to publish their findings in Journals.

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

The research projects of teaching faculty enrich the students to explore the horizon. Hence all the departments are given the right to formulate research projects according to the needs and practicality.

Faculty involvement in guiding student research:

Dr.Sunil C.N of Botany department, Dr.Sleema B, Dr. Beena T Abraham and Dr. Cibi Komalan of Chemistry department are the recognised research guides of Mahatma Gandhi University at our research centres. Dr. K.K Thampi of Mathematics is a research guide of Mahatma Gandhi University and Bharathiyar University, Tamil Nadu. Ten research scholars are for their doctoral degree under these faculty members.

Details of research guides and research scholars of our college are presented in the following table:

Sl. No.	Name of the guide	Subject	Number of scholars doing Ph.D
1	Dr.K.K Thampi	Mathematics	5
2	Dr. C.N. Sunil	Botany	5
3	Dr. Sleema B	Chemistry	1
4	Dr. Beena T Abraham	Chemistry	2
5	Dr. Cibi Komalan	Chemistry	2

Faculty involvement in doing PhD:

Sl. No	Name of the teacher	Department	Year of Ph.D awarded
1	Dr. Joshy.M.K	Chemistry	2008
2	Dr. M.G. Bhuvaneswary	Chemistry	2010
3	Dr.Cibi Komalan	Chemistry	2008
4	Dr.Jeeju	Physics	2013
5	Dr. Neena P	Physics	2012
6	Dr. Sudheer.S.P	Economics	2013
7	Dr. Smitha.T.H	Economics	2010

8	Dr. Padmaja.K	Economics	2008
9	Dr.Ajithan Menoth	Economics	2008
10	Dr.K.K.Joshy	Botany	2011
11	Dr. Sanilkumar.M.G	Botany	2009
12	Dr. Baiju.E.C.	Botany	2012
13	Dr.K.D.Girija	Botany	2008
14	Dr.T.K Mukundan	Zoology	2013
15	Dr.Babitha.K	Hindi	2011
16	Dr.Bindu T.R	Hindi	2011
17	Dr.Jitha.T.H	Malayalam	2009
18	Dr.Renjith. P.G	Sanskrit	2009
19	Dr.P.S.Sankaranarayan	Physical education	2009
20	Sri. Sreejith.C.M	Botany	Thesis submitted
21	Smt.Sreejamol.P.R	Mathematics	ongoing
22	Sri Ajan.K.A	Mathematics	ongoing
23	Smt.Neelima.C.A.	Mathematics	ongoing
24	Sri Jainlal.V.S	English	ongoing
25	Sri. Ajeesh.S	English	ongoing
26	Smt. Ragi Sekharan K	Malayalam	ongoing
27	Sri Krishnakumar U.R	Commerce	ongoing
28	Smt. Reena.T.S	Commerce	ongoing

Faculty involvement in leading research projects:

Dept. of Botany

- Dr.C.N.Sunil has been sanctioned Rs. 13,34,800 for his Major Research Project entitled "Studies on flowering plant diversity of Ernakulam district "from UGC.
- Dr.Baiju.E.C has been sanctioned Rs. 1,10,000 for his Minor Research
 Project entitled "Bioprotective activity of Syzygium travancoricum
 Gamble a critically endangered tree species of Western Ghats "from UGC.

Dept. of Economics

- Dr. Ajithan Menoth has been completed a Minor Research Project entitled "Impact of Globalisation on the Social dimensions of Handloom Industries in Ernakulam district" and sanctioned Rs. 1,25,000 from UGC.
- Dr. S.P. Sudheer has been sanctioned Rs. 1,45,000 for his Minor Research Project entitled "Production Potential, Cost and Profitability aspects of Pepper cultivation in Kerala under the WTO Regime" from UGC.
- Dr. T. H Smitha has been sanctioned Rs. 1,05,000 for her Minor Research Project entitled "Feminisation of Rural employment in Kerala- A case study of self- help groups in Paravur district" from UGC.

Dept. of Mathematics & Statistics

- Dr.K.K.Thampi has been sanctioned Rs.1,50,000 for his Minor Research Project entitled "Stochastic analysis insurance risk models "from UGC
- Smt. Neelima C A has been sanctioned Rs. 1,70,000 for her Minor Research Project entitled "Applications of Rough set theory in algebra "from UGC

Dept. of Physics

- Dr.P.P Jeeju has been sanctioned Rs. 2,00,000 for her Minor Research Project entitled "Investigation on the synthesis and characterisation of polyaniline and polypyrrole nano structures from UGC
- Dr.Neena.P has been sanctioned Rs. 95,000 for her Minor Research Project entitled "Measurement of permeability of water vapour and gas through polymers "from UGC

Dept. of Chemistry

- Dr. Sleema B. has been sanctioned Rs.60,000 for her Minor Research Project entitled "Physico-Chemical characterization and analysis of Hydrographic parameters of Well water, Bore-well water, Tap water and River water of Vadakkekara Panchayat in Ernakulam District, Kerala "from UGC
- Sri.V.N.Madhusudhanan has been sanctioned Rs.1,00,000 for his Minor Research Project entitled "Determination of thermodynamic parameters of hydrolysis of methyl and ethyl acetate by kinetic study "from UGC
- Dr. Cibi Komalan has been sanctioned Rs. 95,000 for her Minor Research Project entitled "Rheological and Transport Property study of dynamically vulcanized Nylon/EPDM blends "from UGC
- Dr.M.G Bhuvaneswary has been sanctioned R.1,30,000 for her Minor Research Project entitled "Modification of elastomers using nanospinels "from UGC

Dept. of Commerce

 Krishnakumar.U.R has been sanctioned Rs. 42,000 for his Minor Research Project entitled "Financial inclusion practices of state bank of Travancore in Ernakulam (D) from UGC Reena .T.S has been sanctioned Rs. 50,000 for her Minor Research Project entitled "Consumer acceptance of supplyco in Ernakulam district from UGC

Dept. of Malayalam

- Dr.Jitha.T.H has been sanctioned Rs. 1,00,000 for her Minor Research Project entitled "Sahodaran Ayyappan as a writer, social worker and cultural reformer "from UGC
- Smt. Ragi Sekharan K has been sanctioned Rs. 75,000 for her Minor Research Project entitled "Representation of women in Koodiyattam - a contemporary study" from UGC

Dept. of English

 Sri. Jainlal V S has been sanctioned Rs. 35,000 for her Minor Research Project entitled "Use of multimedia in developing listening and speaking skills of under graduate level" from UGC

Faculty involvement in individual/collaborative research activity:

- Dr.K.K Thampi, Dept. of Mathematics has a collaborative research work with Prof. M.J Jacob, NIT, Calicut.
- Dr. Beena T Abraham, Dept. of Chemistry has a collaborative research work with Dr. Eby Thomas Thachil of Polymer Science and Rubber Technology, CUSAT.
- **Dr. C.N. Sunil**, Asssociate Professor of Botany, worked together with Dr. M. Sivadasan, Professor, King Saud University Soudi Arabia., Dr. V.V. Sivarajan (late), HOD and Professor of Botany, Calicut University, Dr. T. Shaju, Scientist TBGRI, Thiruvananthapuram, Dr. Jaleel, Department of Botany, Sir Syed College, Thaliparamba, Dr. Rathish Narayanan, Department of Botany, Payyannur College, Dr. A.K. Pradeep, Professor of Botany, Calicut University, Dr. K.M. Prabhukumar, Centre for Medicinal Plant Research, Kottakkal.

- Sri.C.M. Sreejit, Associate Professor of Botany has collaborated with Dr. A. Banerji, distinguished Professor and Raja Ramanna Fellow of Amrita Viswavidyapeedam, Kollam on developing indigenous growth regulators bio prospected from native plants for the benefit of sericulture farmers of the state for increasing silk production.
- **Dr. M.G. Sanilkumar**, Assistant Professor of Botany, associated together with Dr. Lawrence Cahoon, Professor, University of North Carolina, USA., Dr. K. J. Joseph, Dr. A.V. Saramma, Dr. A.A. Mohamed Hatha, (Professors of School of Marine Sciences, Cochin University of Science and Technology, CUSAT), Dr. N.R. Menon, Professor and former Registrar of CUSAT and presently the Chairman of the Scientific Research advisory board and Board Director of Nansen Environment Research Centre India., Dr. V.N. Sanjeevan, former Director and with Dr. K.B. Padmakumar, Project Scientist (Centre for Marine Living resources and Ecology, Ministry of Earth Sciences).
- Dr. E.C. Baiju, Assistant Professor of Botany, associated with Dr.
 U.M. Chandrasekhara, Scientist F, Kerala Forest Research Institute,
 Peechi., and with Dr. Balakrishna Gowda, Professor of University of
 Agricultural Sciences, Bangeluru.
- 3.1.6 Give details of workshops/ training programmes/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

Name of workshop /seminar	Geo- graphical coverage	Organizing department	Date	Participant status
Quantum chemistry and nano techniques	National	Chemistry	19 th & 20 th Nov.2009	Teachers, Scholars, Professional s & students

Computational chemistry & its applications	National	Chemistry	25 th & 26 th March 2013	Teachers, Scholars, Professional s & students
Food Security and poverty alleviations During the post globalisation period in India	National	Economics	6 th and 7 th October 2009	Teachers, Scholars, Professional s & students
Recent trends in the development of Nanomaterials and Nano devices	National	Physics	5 th and 6 th September201	Teachers, Scholars, Professional s & students
NCMOCT	National	Mathe- matics	5 th and 6 th April 2013	Teachers, Scholars, Professional s & students
Use of ICT in developing listening and speaking skills of under graduate level	National	English	29 th , 30 th and 31 st January 2013	Teachers, Scholars, Professional s & students
Integrating the Nation – Contribution of Swamy Vivekanadha	National	Malayalam	18 th and 19 th September201 4	Teachers, Scholars, Professional s & students
Impact of soil sand and quarry mining on biodiversity	National	Zoology	29the and 30 th September 2014	Teachers, Scholars, Professional s & students

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

Dept. of Botany

- 1. Dr. K.D. Girija Ecology and phytochemistry
- 2. Dr. C.N.Sunil Plant taxonomy
- 3. Sri. C.M.Sreejit Phytochemistry and ethnobotany
- 4. Dr. M.G. Sanilkumar Algae, harmful algal blooms and wetland ecology
- 5. Dr. E.C.Baiju Forest ecology and phytochemistry

Dept. of Chemistry

- 6. Dr. Sleema B Inorganic complexes
- 7. Dr. Beena T Abraham Physical chemistry
- 8. Dr. M.K.Joshy Polymer Chemistry
- 9. Dr. P.B. Sulekha Polymer Chemistry
- 10. Dr. Cibi Komalan Polymer Chemistry
- 11. Dr. M.G.Bhuvaneswary–Polymer Chemistry
- 12. Dr. Jeho Sheba P Mathews Biochemistry

Dept. of Physics

- 13. Dr. K.K.Radha- Sensors
- 14. Dr. Jeeju.P.P Nano technology
- 15. Dr. Neena.P Nanomaterials

Dept. of Zoology

- 16. Dr. Ramesh Babu M.G Insect Taxonomy
- 17. Dr. Mukundan Biology and biochemistry of fishes

Dept. of Malayalam

- 18. Dr. Jitha.T.H. –Feminism in short stories
- 19. Dr. Renjith.P.G Concepts in creation of Upanishathu

Dept. of Hindi

- 20. Dr.Bindu.T.R Literature
- 21. Dr.Babitha.K -Literature

Dept. of Economics

- 22. Dr. Ajithan Menoth –Globalisation & Industry
- 23. Dr.K.Padmaja Health Economics
- 24. Dr.T.H.Smitha- Monitory Economics
- 25. Dr. S.P.Sudheer-Agricultural Economics

Dept. of Physical Education

26. Dr.Sankarnarayan-Physical Education

Dept. of Mathematics & Statistics

- 27. Dr.K.K.Thampi- Stochastic Analysis
- 3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

Eminent researchers are invited for delivering key note addresses during national seminars conducted with the aid from various agencies like UGC. Parent Teacher Association of the college provides aid to all departments to conduct two regional level workshops per year in which recognised speakers are invited to present their work before the faculty and students of the college

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

C.M.Sreejit of Botany department was awarded a teacher fellowship by Indian Academy of Sciences Bangalore and has worked for two months vacation with DR R.R. Rao of CIMAP research centre at Allalasandra ,Banglore on phytochemistry of Essential oils.

C.M. Sreejit of Botany department and Jeeju P.P. of Physics department were awarded FIP fellowships during these assessment period and both have successfully completed their tenure of which Jeeju P.P. has been already awarded the Doctoral degree and the former is awaiting his open defense.

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

Sri.C.M. Sreejit, Associate Professor of Botany has collaborated with Dr. A. Banerji, distinguished Professor and Raja Ramanna Fellow of Amrita Viswavidyapeedam, Kollam for his doctoral work on developing insect growth regulators(IGR) bio prospected from native plants for the benefit of sericulture farmers of the state for increasing silk production. He has also research tieup with kerala sericulture farmers association on evaluating the effect of indigenous IGRS on silkworms as well as popularizing this new technology among them. Also efforts are been put to reduce the logistic problem in acquiring IGRs from local market by providing water extracts of locally available plants to them.

3.2 Resource Mobilization for Research

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

As a facilitator, the college encourages research culture among teaching faculty and postgraduate students by providing infrastructural facilities such as construction of well-equipped libraries, science laboratories, internet terminals, language laboratory etc. and research books which are provided by the various research projects of faculty members. However there is no specific fund allocated for research from management side.

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

The institution has no provision for seed money to the faculty for research work. However the management encourages teachers to do research and conduct ceremony to congratulate and present mementos to those teachers who are awarded PhD. PTA has been providing a cash price of sum of Rupees 3000/- to those teachers who publishes their research work in peer reviewed national and international journals with impact factor.

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

The institution provides the students the facility to make use of the infrastructural facilities such as internet facility, General / Departmental Library, issue of reference books and free e-books etc and also provides research books from various research projects by faculty members to undertake their projects.

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

The research department of botany and chemistry along with PG department of physics has got a financial assistance from Department of Science and Technology, (FIST- Fund for the Improvement of Science and Technology) Govt. of India for setting up a centralized instrumentation lab and a phytochemistry lab which will undertake serious research activities in the interdisciplinary areas of bioprospection, chemotaxonomy, algal studies, taxonomy and ecology of angiosperms, environmental studies etc as its part. A FIST monitoring committee comprising senior faculty members and PhD holders from the three departments will be controlling its activities.

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

The institution ensure optimal use of various equipment and research facilities by sharing the library, labs, computers with internet facility, reprographic facility, INFLIBNET and e-journals and other infrastructural facilities of the research centre/college. All the sixth semester CBCSS students and PG students conduct research projects as part of their academic activities by enjoying all the facilities available in the college.

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

Fund for Improvement of Science and Technology (FIST) by the department of Science and Technology, Govt. of India has approved our proposal and a sum of rupees 90 lakhs (ninety lakhs) is sanctioned for upgradation of academic facilities in PG departments of Botany, Physics and Chemistry.

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

Major Research Projects Ongoing

Sl. No	Name of faculty	Topic of research	Funding agency	date	Sanctioned Amount (Rs.)
1	Dr. C.N. Sunil	Studies on flowering plant diversity of Ernakulam district	UGC	2013	Rs.13,34,800

Minor Research Projects Ongoing

Sl. No	Name of faculty	Topic of research	Funding agency	date	Project outlay
1	Dr. S.P. Sudheer Dept. of Economics	Production Potential, Cost and Profitability aspects of Pepper cultivation in Kerala under the WTO Regime	UGC	2013	Rs. 1,45,000
2	Dr. T. H Smitha Dept. of Economics	Feminisation of Rural employment in Kerala- A case study of self- help groups in Paravur	UGC	2013	Rs. 1,05,000
3.	Smt. Neelima.C.A Dept. of Mathematics	Applications of Rough set theory in algebra	UGC	2014	Rs.1,70,000
4.	Dr.P.P Jeeju Dept. of Physics	Investigation on the synthesis and characterisation of polyaniline and polypyrrole nano structures	UGC	2014	Rs. 2,00,000
5.	Dr.Neena.P Dept. of Physics	Measurement of permeability of water vapour and gas through polymers	UGC	2014	Rs.95,000
6.	Dr.M.G Bhuvaneswary Dept. of Chemistry	Modification of elastomers using nanospinels	UGC	2014	Rs.1,30,000

7.	Dr.Baiju.E.C Dept. of Botany	Bioprotective activity of Syzygium travancoricum Gamble – a critically endangered tree species of Western Ghats	UGC	2014	1,10,000
8.	Krishnakumar.U. R Dept. of Commerce	Financial inclusion practices of state bank of travancore in Ernakulam district	UGC	2014	Rs.42000/-
9.	Reena .T.S Dept. of Commerce	Consumer acceptance of supplyco in Ernakulam district	UGC	2014	Rs.50000/-
10.	Dr.Jitha.T.H Dept. of Malayalam	Sahodaran Ayyappan as a writer,social worker and cultural reformer	UGC	2014	Rs.100000
11.	Smt. Ragi Sekharan K Dept. of Malayalam	Representation of women in Koodiyattam - a contemporary study	UGC	2014	Rs. 75,000
12.	Sri. Jainlal V S Dept. of English	Use of multimedia in developing listening and speaking skills of under graduate level	UGC	2014	Rs. 35,000

Completed Minor Research Projects

Sl.No	Name of faculty	Topic of research	Funding agency	date	Project outlay
1	Dr. Ajithan Menoth	Impact of Globalisation on the Social dimensions of Handloom Industries in Ernakulam district.	UGC	2009- 2011	Rs. 1,25,000
2.	Dr.K.K. Thampi	Stochastic analysis insurance risk models	UGC	2011- 2013	Rs.1,50,000
3.	Sri.V.N. Madhu- sudhanan	Determination of thermodynamic parameters of hydrolysis of methyl and ethyl acetate by kinetic study	UGC	2011- 2013	Rs.1,00,000/-
4.	Dr. Cibi Komalan	Rheological and Transport Property study of dynamically vulcanized Nylon/EPDM blends	UGC	2011- 2013	Rs.95,000/-
5.	Dr. Sleema B.	Physico-Chemical characterization and analysis of Hydrographic parameters of Well water, Bore-well water, Tap water and River water of Vadakkekara Panchayat in Ernakulam District, Kerala.	UGC	2009- 2011	Rs.60,000/-

3.3 Research Facilities

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

Botany and chemistry departments are recognized research centres of Mahatma Gandhi University. They have at present five research guides who can induct a minimum of 50 research scholars into theses streams. Botany department has all facilities for taxonomic and ethnobotanical research with enough floras, stereo-zoom microscopes and a well maintained herbarium with more than 5000 herbarium accessions. This may be the largest collection

of herbaria in colleges affiliated to Mahatma Gandhi University. The department is trying to get the status of National Herbarium by the Botanical Survey of India. Enough room and computer facilities are provided to students who join these departments. The central library is equipped with INFLIBINET facility to make them connected to various e resources.

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

The college has already received grant allocation of fifty nine lakhs as first installment out of ninety lakhs from DST under the FIST program for creating a phytochemistry lab for multidisciplinary research, a centralized instrumentation lab with HPLC, UV spectroscopy, etc for high end research for faculty and students which will be installed soon.

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

The details of this is same as in 3.3.2

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

Botany Department has research collaboration with MSSRF,(M.S. Swaminathan Research Foundation) Kalpetta, Wayanad, Kerala in undertaking projects on conserving RET (Rare, Endangered and Threatened) plants. It also has tie up with Calicut University in pursuing taxonomic research. Botany department has research collaboration with Amrita University, Kollam in developing natural products from indigenous plants for the benefit of society.

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

At present, there are no specified centers however, the provision may be implemented to provide a separate reference centers in research departments soon.

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

At present, Nil

- 3.4 Research Publications and Awards
- 3.4.1 Highlight the major research achievements of the staff and students in terms of
 - * Patents obtained and filed (process and product)
 - a. 2 Patents

Dr. Neena, P. Assistant professor of Physics

- 1. "Conducting Polymer Nanoparticles from Elastomers", Dr.P.Predeep, Ms.Najidha.S, Neena.P and Ms.Anisha Mary Mathew, The Patent Official Journal 14/01/2011, Issue No.02/2011, 569.
- 2. "Humidity and Gas Sensor from Conducting Polymer Nanoparticle-Plastic Composites", Dr.P.Predeep, Neena.P and Ms.Anisha Mary Mathew, The Patent Official Journal 14/01/2011, Issue No.02/2011, 567.
 - * Original research contributing to product improvement

Sri. C.M. Sreejit, associate professor of Botany department has research collaboration with Amrita University in improving the IGR based products available in the market, from native plant sources. Currently these products are based on imported compounds

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

Physics department conducted a training programme for housewives in the local gramma panchayath on repairing of house hold appliances

Botany department in collaboration with central silk board has given a hands on training to the self help groups of Vadekkekara gramma panchayath on sericulture technique.

Botany department has given training on mushroom cultivation to the self help groups of Vadekkekara Gramma Panchayath

* Research inputs contributing to new initiatives and social development

Sri. C.M. Sreejit, associate professor of Botany department has research collaboration with Amrita University in popularising the IGR technology among sericulture farmers of Kerala state for better silk production

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

Yes, the institute publishes a research journal 'Journal of Current Studies, an interdisciplinary journal with ISSN: 2271-2707.

Editorial Board

Chairman : Smt. M.R. Usha, Principal S.N.M. College

Chief Editor : Dr. P.P Jeeju, Associate Professor of Physics

Associate Editor : Dr. C.N. Sunil, Associate Professor of Botany

Members : Dr. K.K. Thampi, Associate Professor of Statistics

: Dr. Cibi Komalan, Associate Professor of Chemistry

: Dr. T.H. Jitha, Assistant Professor of Malayalam

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S.N.M. College, Maliankara

The Journal of Current Studies prefer to publish basic and applied research articles in various disciplines and is intended to promote research and academic excellence among teachers, research scholars, post graduate students in universities/colleges and other centres of research. We publish different research articles in the categories like research papers, short communication, review articles, book reviews and professional news. The journal is committed to provide its space for quality research publication of budding scientists and experienced teachers from all over the world.

3.4.3 Give details of publications by the faculty and students:

• Publication details per faculty

SI. No.	Name of the Faculty	Department	International Journal	National Journal	Conference/ Seminar/ Workshops/ Proceedings	Total
1	Dr. C.N. Sunil	Botany	15	1	4	20
2	Dr. M.G. Sanilkumar	Botany	10	5	14	29
3	Dr. E.C. Baiju	Botany	3	6	7	16
4	Sri. C.M. Sreejit	Botany			2	2
5	Sri. T.S. Rajeev	Botany	1			1
6	Dr.K.D. Girija	Botany			2	2
7	Dr. P.P Jeeju	Physics	10	7	22	39
8	Dr. P. Neena	Physics	4	2	10	16
9	Ms. Priya S	Physics	2			2
10	Dr. Cibi Komalan	Chemistry	2		8	10
11	Dr. Beena T Abraham	Chemistry	2			2
12	Dr. M.K. Joshy	Chemistry	2			2
13	Dr. K.K. Thampi	Mathematics	2	2		4
14	Ms. Neelima	Mathematics	5	2		7

• Number of papers published by faculty and students in peer reviewd journals (national/international)

No.	Name of the author	Title of the paper	Name of the Journal	Volume Page.no. Year				
Depa	Department of Chemistry							
1.	Dr. M.K. Joshy	Effect of alkali treatment on the mechanical properties of short randomly oriented Isora fibre polyester composites,	Plastics and recycling Technology	Vol.24 255-272 2008				
2.	Dr.Cibi Komalan	Thermo gravimetric and Wide angle X-ray diffraction studies of Blends of Nylon copolymer with EPDM rubber	J. of thermal degradation and stability	Vol.93 2104- 2112 2008				
3	Dr.Cibi Komalan	Reactive compatibilisation of Nylon copolymer / EPDM blends: Experimental aspects and their comparison with theory	Polymers for Advanced Technologies	Vol.15 351-360 2008				
4	Dr.Cibi Komalan	Effect of crosslinking systems on the thermal behaviour of Nylon copolymer and EPDM Rubber blends and their kinetic analysis	Journal of CPRI	Vol.4 175-178 2008				
5	Dr.M.G Bhuvaneswary	Blends of natural rubber with unsaturated polyester resin	Inter.J. of polym. Mater.	Vol.57 1-12 2008				
6	Dr.B.Sleema	A comparative study of Hydrographic parameters of Kodungallur estuary at Moothakunnam, Kottappuram and Maliankara	Millenium Zoology ISSN 0973- 1946	2009				

7	Dr.Beena T	Studies on the use of	Progr.Rubber,pl	Vol.25
	Abraham	Cardinol as plasticizer for	astics and Recy.	75-90
		silica-Filled Nitrile Rubber	Tech.	73-90
				2009
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8	Dr.M.k Joshy	Influence of fibre surface modification on the	Inter.J.of polym.Mater.	Vol.58
		mechanical performance of	porym.iviater.	2-20
		randomly oriented isora-		2009
		polyester composites		2007
9	Dr.M.G	Control of microvoids in	J.of appl.	Vol.113
	Bhuvaneswary	resol phenolics using	Polym. Sci.	
		unsaturated polyester		802-810
				2009
10	Dr.M.K.Joshy	Isora fibre-A natural	Science and	Vol.8
		reinforcement for the	Society	5-12
		development of High performance Engineering		
		Materials		2010
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11	Dr.B.Sleema	Antimicrobial studies of some Histidine complexes	Millenium Zoology	32-35
		some institute complexes	Zoology	2010
12	Dr.Beena T	Cardinal-based Resol	Progress	Vol.26
	Abraham	phenolics-a comparative	Rubber,plast.	21.50
		study	and Recyling	31-50
			Technology	2010
13	Dr.Cibi Komalan	D	Journal of	Vol.2
		Determination of interfacial tension of	Current Studies	
		nylon6,66 / epdm blends		41-44
		using palierne and choi-		2012
		schowalter methods		
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14	Sanilkumar M.G.	Proboscia alata	Current Science	Vol. 106
		(Brightwell) Sandström		1643-
		bloom in the coastal waters off Bekal, southwest India.		1646
		on bekar, southwest midia.		2014

15	Sanilkumar M.G.	Dynamic Changes in Bacterial Population and Corresponding Exoenzyme Activity in Response to a Tropical Phytoplankton Bloom Chattonella marina Journal of Marine Biology	Journal of Marine Biology	Vol.10 1155 2014
16	Sanilkumar M.G.	A new species of Garnotia (Poaceae) from Kerala, India	Journal of the Botanical Research Institute of Texas	Vol.8 519-523, 2014
17	Dr. C.N. Sunil	A new species of Garnotia (Poaceae) from Kerala, India	Journal of the Botanical Research Institute of Texas	Vol.8 519-523, 2014
18	Dr. C.N. Sunil	Eriocaulon kannurense (Eriocaulaceae), a new species from Kerala, India	International Journal of Plant, Animal and Environmental Sciences	2013
19	Dr. C.N. Sunil	Rotala khaleeliana sp. nov. (Lythraceae), a new species from lateritic hills of Kannur, Kerala, India	International Journal of Advanced Research	2013
20	Dr. C.N. Sunil	Lindernia madayiparense (Linderniaceae) – a new species from Kerala, India	International Journal of Plant, Animal and Environmental Sciences	2012
21	Dr. C.N. Sunil	Impatiens johnsiana (Balsaminaceae) - a new scapigerous balsm from Western Ghats from India	Journal of Botanical Research Institute of Texas	2012
22	Dr. M.G. Sanilkumar	Chattonella marina bloom in the coastal Sea off Mahe, Southwest India	Current Science	2012

23	Dr. C.N. Sunil	Sisyrinchium (Iridaceae): A new genus record for India	Rheedea	2011
24	Dr. M.G. Sanilkumar	Monsoon Effects on Biomass and Composition of 20Microphytobenthic Diatoms in the Cochin Estuary, Southwest India	Journal of North Carolina Academy of Science, USA	2011
25	Dr. M.G. Sanilkumar	Vertical distribution of microphytobenthos in Cochin estuary	Journal of the Marine Biological Association of India	2009
26	Dr. M.G. Sanilkumar	Algal blooms along the coastal waters of southwest India during 2005-08	Journal of the Marine Biological Association of India	2009
27	Dr. M.G. Sanilkumar	First report of Protoperidinium bloom from Indian waters. Harmful Algae News,	Intergovernmen tal Oceanographic Commission (IOC), UNESCO, Paris, Vol.39	2009
28	Dr. M.G. Sanilkumar	Microcystis eruginosa bloom in a high altitude lake in the Western Ghats of India. Harmful Algae News	Intergovernmen tal Oceanographic Commission (IOC), UNESCO, Paris, Vol.40	2009
29	Dr. M.G. Sanilkumar	Microcystis eruginosa bloom on Southwest coast of India.	Harmful Algae News, published by IOC, UNESCO, Paris, No.37	2008

	Dr. M.G. Sanilkumar artment of Mathem		Harmful Algae News, published by IOC, UNESCO, Paris, No.36	2008
31	Dr. K K. Thampi	On the Renewal Risk Model with Constant Interest Force	Journal of Risk Analysis and Crisis Response	Vol. 3 (2), 2013
32	Dr. K K. Thampi	Mathematical Modeling: Concepts and Application	Journal of Current Studies	Vol.1 2014
33	Dr. K K. Thampi	Finite time Ruin Probability of the Compound Renewal Model with Constant Interest rate and Weakly Negatively Dependent Claims with Heavy Tails"	International Game Theory Review	
34	Dr. K K. Thampi	The modelling of insurance risks	Journal of Current Sciences	
35	Neelima C A	Rough subring and their properties	Int. J. of Mathematical Science	Vol.12(3- 4), 2013
36	Neelima C A	Rough Ideals and their properties	J. of Global Research in Mathematical archives	Vol.1(6) 2013
37	Neelima C A	Anti-homomorphism on rough prime fuzzy ideals and rough primary fuzzy ideals	Annals of fuzzy Mathematics and Informatics	Vol.8(4) 2014

38	Neelima C A	Rough fuzzy bi-ideals and their properties	Bulletin of Kerala Mathematical Association	2014
39	Neelima C A	Rough Semi-prime Ideals and Rough bi-ideals in rings	Int. J. of Mathematical Science and Applications	2014
40	Neelima C A	Anti-homomorphism on rough prime ideals and rough primary ideals	Advances in Theoretical and Applied Mathematics	Vol. 9(1) 2014
41	Neelima C A	Rough anti homomorphism on a rough group	Global J. of Mathematical Science Theory and Practical	Vol.6(2) 2014

Department of Physics

42	Dr. Radha K K	Increased sensitivity for petroleum gas due to additions of lanthanum on SnO ₂ thin films	Journal of current studies	Vol.2(1) 2012
43	Dr.Jeeju P P	On the interesting optical properties of highly transparent, thermally stable, spin coated Polystyrene (PS) /Zinc Oxide (ZnO) nanocomposite films,	Journal of Applied Polymer Science	Vol.120 1361- 1365 2011
44	Dr.Jeeju P P	Size dependent optical properties of transparent, spin coated Polystyrene/Zinc Oxide nanocomposite films	Polym Int	Vol.60 1263– 1268 2011
45	Dr.Jeeju P P	Size dependent nonlinear optical properties of spin coated Zinc Oxide-Polystyrene nanocomposite films	Optics Communi- cations	Vol.285 5433– 5439 2012

46	Dr.Jeeju P P	Novel Polypyrrole films	Materials	Vol.134
		with excellent crystallinity and good thermal stability	Chemistry and Physics	803-808
				2012
47	Dr.Jeeju P P	Enhanced linear and	Thin solid	Vol.531
		nonlinear optical properties of thermally stable	films	378–384
		ZnO/PS-PMMA nanocomposite films		2013
48	Dr.Jeeju P P	Quantum confinement	Journal of	Vol.132
		effects in highly conducting, ultrathin	Luminescence	801–805
		Polyaniline films pursued through spectroscopic investigations		2012
49	Dr.Jeeju P P	L-Histidine Modified	Journal of	Vol.8 (7-
		Biocompatible Zinc Oxide Nanocrystals	Experimental Nanoscience	8)937- 946
50	Dr.Jeeju P P	Excellent UV absorption in spin coated thin films of oleic acid modified ZnO nanorods embedded in poly vinyl alcohol	Journal of Physics and Chemistry of solids	73 (2012) 396–401
51	Dr.Jeeju P P	"Enhanced photoluminescence in transparent thin films of polyaniline-zinc oxide nanocomposite prepared from oleic acid modified zinc oxide nanoparticles	Thin solid Films,	volume 562 2014, pp. 84 – 89.
52	Dr.Jeeju P P	Nonlinear optical properties of ZnO/poly (vinyl alcohol) nanocomposite films	AIP Conference Proceedings	1576 , 163-166 (2014)
53	Dr.Jeeju P P	Micelle-assisted synthesis of polypyrrole nanoparticles and their characterization	Science & Society	Vol9 (2), 113-120 (2011)

54	Dr.Jeeju P P	Studies on L-citrulline	Science	Vol9 (2),
		Capped Zinc Oxide	&	183-188
		Nanocrystals	Society	(2011)
55	Dr.Jeeju P P	Solvent Dependent Optical	Science &	9 (2),
		Properties of Highly	Society	109-112
		Luminescent Nanocrystals		(2011)
		of ZnS Doped with		
		Manganese		
56	Dr. Neena. P.	Toward "Rubbery"	Journal of.	2013
		Nanoparticles	Appl. Polymer.	
			science	
57	Dr. Neena. P.	Cynthosis of highly	Journal of	Vol.5(9)
31	DI. Neella. P.	Synthesis of highly translucent conducting thin	Optoelectronics	v 01.3(9)
		films from elastomer	and Advanced	985 –
		Nanoparticles	Materials –	987
			Rapid	2011
			communication	2011
			S	
58	Dr. Neena. P.	Differential Comming	Journal of	V ₂ 1.2(1)
38	Dr. Neena. P.	Differential Scanning Calorimetric analysis of	Current Studies	Vol.2(1)
		Conducting Natural	Current Studies	11-16
		Rubber Nanoparticles		2012
		Reinforced Natural Rubber		2012
		Composites		
50	D. N. D	The succession of the	January 1 C	W-1 2(1)
59	Dr. Neena. P.	Thermogravimetric	Journal of Current Studies	Vol. 2(1)
		Analysis of LDPE Modified by Conducting	Current Studies	10-13
		Natural Rubber		10-13
		Nanoparticles		2013
		.		
60	D: GM:	mi' p'i p i ii	T 1 C	X/ 1 12
60	Priya S Nair	Thin Film Rechargeable	Journal of Nanoscience	Vol. 13
		Electrodes Based on Conductive Blends of	and	1–6 2013
		Nanostructured Olivine	Nanotechnolog	2013
		LiFePO4 and Sucrose	у	
		Derived Nanocarbons for		
		Lithium Ion Batteries		

61	Priya S Nair	Synthesis and	ISRN	2013
		Characterization of	Nanotechnolog	
		Electrophoretically	у	
		Deposited Nanostructured		
		LiCoPO4 for Rechargeable		
		Lithium Ion Batteries		

List of Publications in Conference Proceedings during last five years (Authors Names, Title of Paper, Name of the Conference, Volume, Page nos., Year).

Department of Chemistry

No.	Name of the author	Title of the paper	Name of the Conference	Volume Page.no. Year
1.	Dr.Cibi Komalan	Dynamic Rheological properties of Nylon copolymer/EPDM blends and the application of Palieme Model	International Conference on Polymer blends: Micro to Nano Scale	22-24 Sept 2008
2.	Dr. M.G Bhuvane- swary	Epoxy modification of Natural Rubber	'POLY CHAR 16'Internat. Conference organized by University of Lucknow	2008
3.	Dr.M.G Bhuvaneswary	Effect of blending epoxidised phenolic novolac resin with NR	'ICMSRN2008'I nter. Conf Mother Thresa University Kodaikanal	2008
4	Dr.M.G Bhuvaneswary	Modification of carbon black filled natural rubber using novolac resin	'APT 2008' international seminar on Advances in Polymer Technology	2008

6	Dr.Cibi Komalan Dr.Cibi Komalan	Dynamic Rheological properties of dynamically crosslinked Nylon6.6 copolymer/EPDM thermoplastic elastomer Spectrophotometric determination of	I st Kerala Women's Science Congress 20 th Swadesi Science congress	10-12 Aug 2010
		ambroxol	Ū	Nov 2010
7	Dr.Cibi Komalan	Effect of blend ratio on diffusion of water molecules through nylon6/EPDM blends	ISCA-SRM Uty- Chennai	02-07 Jan 2011
8	Dr.Cibi Komalan	Effect of blend ratio on diffusion of water molecules through nylon6/EPDM blends	Proceedings of Indian Science Congress	2010
9	Dr.Cibi Komalan	Rheological and morphological study of dynamically vulcanised nylon 6,610/EPDM blends	Proceedings of 100 th Indian Science Congress	02-07 Jan 2013
10	Dr.Cibi Komalan	Rheological and morphological study of dynamically vulcanised nylon 6,6/EPDM blends,	Proceedings of India Isreal meeting on Material Science and Nano Science	2013
11	Dr.Cibi Komalan	The Non-Oxidative thermal degradation behaviour of functionlalized liquid rubber modified Epoxy resin	Proceedings of India Isreal meeting on Material Science and Nano Science	2013

Department of Botany

No.	Name of the author	Title of the paper	Name of the Conference	Volume Page.no. Year
1.	Dr. M.G. Sanilkumar	Microalgae along the Southwest coast of India.	European Union sponsored International workshop on Marine Primary Productivity, Kochi,	2013.
2.	Dr. K.D. Girija	The effect of different pre-treatments on seed germination in Flacourtia jangomas (Lour.) Raech.	Journal of Current Studies	2013
3.	C.M. Sreejit	Isolation and characterisation of Ecdysterone as the anti diabetic principle of Coscinium fenestratum (Gaertn.) Colebr.	Proceedings of 5 th International Conference on Medicinal Plants and Herbal products Jan 25-27,Manipal University, India	2013
4	Dr. E.C. Baiju	Evaluation of antioxidant properties of Carallia brachiata	Proceedings of National Seminar on Modern Biotechnology	2013
5	Dr. E.C. Baiju	Preliminary phytochemical screening of Carallia brachiata	Proceedings of National Seminar on Modern Biotechnology	2013
6	C.M. Sreejit	Ethno-phytochemical prospection of Kerala flora for Phytoecdysoids: Value addition to Western Ghats biodiversity	Proceedings of 12 th International Congress of Ethnopharmacol ogy Feb 17-19, Jadavpur University, Kolkata, India	2012
7	Dr. M.G. Sanilkumar	Benthic microalgae in Southeast coast of India. In, 'Marine benthic microalgae of India - A monograph'	Ministry of Earth Sciences, Govt. of India	2012

8	C.M. Sreejit	Bioprospection of Kerala flora for Phytoecdysoids: Value addition to biodiversity	Proceedings of National seminar on Innovative and Modern Technologies for agricultural Productivity, Food security and Environmental Management, July 22- 23,SABT, Mangalore, India	2011
9	Dr. E.C. Baiju	Mycorrhizal fungal abundance and diversity in different landscape units in the Kerala part of Nilgiri Biosphere Reserve	Soil Biota (Book)	2011
10	Dr. M.G. Sanilkumar	Blooms of phytoplankton along the near-shore waters of SW India	Proceedings of National seminar on Indian Ocean Marine Living Resources (INDOMLR) organized by CMLRE, Ministry of Earth Sciences, Kochi	2010
11	Dr. M.G. Sanilkumar	Diversity of phytoplankton along the Southwest coast of India	Proceedings of 1 st Indian Biodiversity Congress (IBC), Thiruvananthapu ram	2010
12	Dr. M.G. Sanilkumar	Bacteria associated with Protoperidinium bloom	Proceedings of National seminar on Indian Ocean Marine Living Resources (INDOMLR) organized by CMLRE, Ministry of Earth Sciences, Kochi	2010

13	Dr. M.G. Sanilkumar	Optimization of culture conditions of Prymnesium parvum Carter	Proceedings of National seminar on Indian Ocean Marine Living Resources (INDOMLR) organized by CMLRE, Ministry of Earth Sciences, Kochi	2010
14	Dr. E.C. Baiju	Impact of landuse transformation in Kerala on arbuscular mycorrhizal fungal diversity	Proceedings of 22 nd Kerala Science Congress, 29-31 January 2010, Thiruvananthapu ram	2010
15	C.M. Sreejit	Quantitative ethnobotany and traditional knowledge documentation of medicinal plants used in gastro intestinal ethnic therapeutics by Kuruma, Kattunaikka and Kuruchiar tribes of Wayanad district, Kerala,, Western Ghats	Proceedings of International Seminar BIOCAM, Feb 3-6, CUSAT, Kochi, Kerala, India	2008
16	Dr. E.C. Baiju	Landuse transformation and loss of belowground biodiversity - An analysis (10)	http://www.tsbfs arnet.org/CSM- BGBD/CSM- BGBD-main- links/phaseII.htm l	2008
17	Dr. E.C. Baiju	Soil health analysis using earthworms as the indicator - Possibilities and constraints (9)	http://www.tsbfs arnet.org/CSM- BGBD/CSM- BGBD-main- links/phaseII.htm 1	2008
18	Dr. E.C. Baiju	On-farm participatory activities of soil fertility improvement and belowground biodiversity conservation - An ex-ante evaluation (12)	http://www.tsbfs arnet.org/CSM- BGBD/CSM- BGBD-main- links/phaseII.htm 1	2008

19	Dr. E.C. Baiju	Ecology and economics of	Proceedings of	2008
	-	arecanut based mixed	National	
		farming system of Kerala	Symposium on	
			Plant Resources	
			of India: Linking	
			Conservation,	
			Livelihood and	
			Culture, 14-15	
			March 2008 held	
			at Sri JCBM	
			College,	
			Sringeri,	
			Karnataka	

Department of Mathematics & Statistics

Name of the	Title of the paper	Name of the	Volume
author		Conference	Page.no.
			Year
Dr. K KThampi	Modelling of Classical	INCABS,2011	January
	Risk Process	Kannur Uty	10-14,
			2011
Dr. K KThampi	Challenges in Statistics	Kuwait Uty	March8-
	and Operations Research		10,2011
Dr. K KThampi	Deficit at Ruin and	Insurance:	June-14-
	Surplus Prior to Ruin in	Mathematics and	17, 2011
	the Sparre Anderson	Economics,	
	Model with Interest Force	Trieste Uty	
Dr. K KThampi	Asymptotic Behavior of	4 th Annual high	July 19-
	finite time ruins	Frequency Data	22,2012
	Probabilities of a	in Finance	
	Dependent risk model	Conference,	
	with constant force of	Stevens Institute	
	interest	of Technology,	
		USA	
Dr. K KThampi	Finite Time Ruin	ISAOGTM-2013	January
	Probability of the	Indian Statistical	9-
	compound Renewal	Institute, Delhi	11,2013
	Model with constant		
	interest rate		
	author Dr. K KThampi Dr. K KThampi Dr. K KThampi Dr. K KThampi	Dr. K KThampi Modelling of Classical Risk Process Dr. K KThampi Challenges in Statistics and Operations Research Dr. K KThampi Deficit at Ruin and Surplus Prior to Ruin in the Sparre Anderson Model with Interest Force Dr. K KThampi Asymptotic Behavior of finite time ruins Probabilities of a Dependent risk model with constant force of interest Dr. K KThampi Finite Time Ruin Probability of the compound Renewal Model with constant	Dr. K KThampi Modelling of Classical Risk Process INCABS,2011 Kannur Uty Dr. K KThampi Challenges in Statistics and Operations Research Dr. K KThampi Deficit at Ruin and Surplus Prior to Ruin in the Sparre Anderson Model with Interest Force Mathematics and Economics, Trieste Uty Dr. K KThampi Asymptotic Behavior of finite time ruins Probabilities of a Dependent risk model with constant force of interest Stevens Institute of Technology, USA Dr. K KThampi Finite Time Ruin Probability of the compound Renewal Model with constant Institute, Delhi

6	Dr. K KThampi	Finite time Ruin	Bernoulli Society	Septembe
		Probability of the	Satellite Meeting	r 2-4,
		compound Renewal	to ISI World	2013
		Model with constant	Statistics	
		interest rate and WND	Congress2013	
		claims	Uty of Tokyo,	
			Japan	
7	Dr. K KThampi	Mathematical Modeling:	NCMOCT, 2013,	April5-6,
		Concept and Application	Dept. of	2013
			Mathematics,	
			SNM College	
8	Neelima CA	A short note on some	NCMOCT, 2013,	April5-6,
		properties of Rough	Dept. of	2013
		Subring	Mathematics,	
			SNM College	
9	Sreejamol PR	Regular rings	Topics in	October1
		complemented modular	Algebra,	5-17,
		lattice	SB College,	2014
			Changanassery	

Department of Physics

			_	Volume
No.	Name of the	Title of the paper	Name of the	Page.no.
	author		Conference	Year
1	Dr. Jeeju P P	Polypyrrole Nanorods	Proceedings of	January
		with appreciable	the International	3-6
		Crystallinity and good	conference on	2009
		Optical Absorption	frontiers in Nano	
		Characteristics	Science and	
			Technology.	
			Cochin Nano	
2	Dr. Jeeju P P	On the interesting optical	Proceedings of	Novembe
		properties of ZnO nano	the National	r
		crystals embedded in	seminar on	19-20
		polystyrene matrix	Quantum	2009
			chemistry and	
			Nano techniques;	
			SNM College	
			Maliankara,	

3	Dr. Jeeju P P	Synthesis and study of	Proceedings of	January
	-	size dependent optical	the National	4-5 2010
		properties of ZnO nano	seminar on Nano	
		particles	structured	
			materials and	
			Nano photonics	
			St.Teresa's	
			college,	
			Ernakulam	
4	Dr. Jeeju P P	Transparent PS-ZnO/	Proceedings of	February
		Nano composite films	the International	20-22
		with good UV shielding	conference on	2010,
		properties	Advancements in	
			Polymeric	
			Materials APM-	
			2010, Trends and	
			Technology,	
			CIPET,	
			Bhuvaneswar	
5	Dr. Jeeju P P	Polypyrrole films with	Proceedings of	October
		excellent crystallinity	the International	29-31,
		and good thermal	conference on	2010
		stability,	Recent Trends	
			in Materials	
			Science and	
			Technology	
			ICMST-2010,	
			IIST,	
			Trivandrum.	
6	Dr. Jeeju P P	Investigations on the size	Proceedings of	Decembe
		dependent optical	the International	r 20-22,
		properties of PS/ZnO	Symposium for	2010
		nanocomposite films	Research	
			Scholars on	
			Metallurgy,	
			Materials Science	
			and Engineering	
			ISRS, Dept. of	
			Metallurgical and	
			Materials	
			Engineering, IIT	

7	Dr. Jeeju P P	Enhanced UV-shielding properties of ZnO/PS-PMMA nanocomposite films	Proceedings of the Third International conference on frontiers in Nano Science and Technology. Cochin Nano, Cochin, Kerala.	August 14-17, 2011
8	Dr. Jeeju P P	Micelle-assisted synthesis of polypyrrole nanoparticles and their characterization	Proceedings of the National symposium on Nano Science and Technology Nanostech, Nirmala College Muvattupuzha, Kerala.	Septemb er 1- 2,2011
9	Dr. Jeeju P P	Studies on Polyaniline- Functionalised Carbon Nanotube Composite Films with Exceptionally High DC Electrical Conductivity,	Proceedings of the International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering ISRS-2010, Dept. of Metallurgical and Materials Engineering, IIT Madras	Decembe r 20-22, 2010,
10	Dr. Jeeju P P	A quest for quantum confinement in conducting Polyaniline through spectroscopic investigations	Proceedings of the International conference on Recent Trends in Materials and Technology ICMST,IIST, Trivandrum	October 29-31, 2010

11	Dr. Jeeju P P	Functionalization of multiwalled carbon nanotube as a route to synthesize highly conducting polymernanocomposites	Proceedings of the International conference on Recent Trends .in Materials Science and Technology ICMST-2010, IIST, Trivandrum.	October 29-31, 2010
12	Dr. Jeeju P P	Highly luminescent PANI/ZnO Nanocomposite Films Prepared from Oleic Acid Capped ZnO Nanoparticles	Proceedings of the Third International conference on frontiers in Nano Science and Technology. Cochin Nano, Cochin	August 14- 17,2011
13	Dr. Jeeju P P	Effect of various capping agents on the optical properties of Zinc oxide nanocrystals,	Proceedings of the Third International conference on frontiers in Nano Science and Technology. Cochin Nano,Cochin, Kerala.	August 14-17, 2011,
14	Dr. Jeeju P P	Studies on L-citrulline Capped Zinc Oxide Nanocrystals	Proceedings of the National symposium on Nano Science and Technology Nanostech – Nirmala College Muvattupuzha, Kerala.	1-2 Septemb er, 2011

15	Dr. Jeeju P P	Solvent Dependent Optical Properties of Highly Luminescent Nanocrystals of ZnS Doped with Manganes	Proceedings of the National symposium on Nano Science and Technology Nanostech, Nirmala College Muvattupuzha, Kerala	1-2 Septemb er,2011
16	Dr. Jeeju P P	Synthesis and Characterization of Camphor Sulfonic Acid Doped Polypyrrole Nanoparticles	Proceedings of the National conference on Emerging Trends in Theoretical and Experimental Physics, Farook College, Calicut, Kerala.	Septemb er 26-27, 2012
17	Dr. Jeeju P P	Effect of Lithiumd doping on the optical properties of L-citrulline oxalate monohydrate nonlinear optical crystals	Proceedings of the National conference on Emerging Trends in Theoretical and Experimental Physics, Farook College, Calicut, Kerala.	Septemb er 26-27, 2012
18	Dr. Jeeju P P	Linear and nonlinear optical properties of transparent, spin coated ZnO/poly vinyl alcihol nanocomposite films	Proceedings of the National seminar on Current trends in the fields of Nanoscience and Nanotechnology, KKTM Govt College, Pullut, Kerala	Decembe r 13-14, 2012

19	Dr. Jeeju P P	Highly luminescent, transparent and flexible nanocomposite films of ZnS:Mn in PVA-PVP matrix	Proceedings of the National seminar on Current trends in the fields of Nanoscience and Nanotechnology, KKTM Govt College, Pullut, Kerala.	Decembe r 13-14, 2012
20	Dr. Jeeju P P	Third order nonlinearity and biocompatibility studies of L-histidine capped ZnO nanocrystals,	Proceedings of the National seminar on Current trends in the fields of Nanoscience and Nanotechnology, KKTM Govt College, Pullut, Kerala	Decembe r 13-14, 2012
21	Dr. Jeeju P P	Nonlinear optical properties of ZnO/PVA nanocomposite films	Second International conference on Optoelectronic Materials and Thin films for Advanced nology, Department of Physics, CUSAT Kochi-22, Kerala	2-5 January 2013,
22	Dr. Jeeju P P	Nonlinear Optical Properties of ZnO/ Polyvinylpyrrolidone Nanocomposite Films,	Proceedings of the National seminar on Recent trends in the development of Nanomaterials and Nanodevices (RTNN 2013), Dept. of Physics, S N M College, Maliankara Kerala.	Sept.5-6 2013

24	Dr. Neena P Dr. Neena P	Optical Characterisation of Semiconducting Natural Rubber nanoparticles and its Composites Effect of Applied potential on the Electrochemical Deposition of Styrene- Butadiene Copolymer	Optics11, International Conference on Light, AIP Conf. Proc. 1391, 131 Optics'11, International Conference on Light, AIP Conf. Proc. 1391, 799	2011
25	Dr. Neena P	Based Conducting Polymer Composite Styrene-Butadiene Copolymer Based Highly Conducting and Flexible Polymer Composite Film with Low Percolation Threshold	Optics'11, International Conference on Light, AIP Conf. Proc. 1391, 793	2011
26	Dr. Neena P	Synthesis and Characterisation of Polypyrrole Coated SBR Composites	Thermophysical Properties of Materials and Devices, American Institute of Physics,CP 1004, 264	2008
27	Dr. Neena P	Evaluation of AC Conductivity Behaviour of Conducting Rubber based Composites	Thermophysical Properties of Materials and Devices, American Institute of Physics, CP 1004,269	2008
28	Dr. Neena P	Synthetic Elastomer/Conducting Polymer Composites by Plasma Polymerisation for Microelectronic Applications	International Symposium for Research Scholars on Metallurgy (ISRS 2010), Material Science and Engineering,IIT Madras, Chennai	20-22 Decembe r, 2010.

29	Dr. Neena P	Thin Film Deposition of	Second	23-25
		SBR Copolymer Based	International	February,
		Conducting Polymer	Conference on	2011.
		Composites by	Materials for the	
		Electrochemical Method	Future (ICMF	
			2011),	
			Government	
			Engineering	
			College Thrichur,	
			Thrissur, Kerala	
30	Dr. Neena P	Synthesis and Electrical	National	17-18
		Characterisation of	Symposium for	May,
		Polypyrrole Based cis 1,4	Material	2008.
		Polyisoprene Composites	Research	
			Scholars (MR	
			08), IIT Bombay,	
			Mumbai	
31	Dr. Neena P	Low Cost Humidity	National	17-18
		Sensor from Styrene	Symposium for	May,
		Butadiene Copolymer	Material	2008.
			Research	
			Scholars (MR	
			08),IIT Bombay,	
			Mumbai	
31	Dr. Neena P	Humidity Sensors from	National	14-15
		cis 1,4 polyisoprene	Conference on	Decembe
			Advances I	r, 2007
			Sensors for	
			Aerospace	
			Applications	
			(SENSORS	
			2007), Research	
			Centre Imarat,	
			Defence R&D	
			Organisation,	
			Hyderabad,	
			Andra Pradesh,	

• Number of publications listed in International database: 30

• Chapter in books: 2

• Books edited: 3

- Books with ISBN/ISSN numbers with details of publications 3
- Citation index:

Majority of International and national papers published by the faculty are cited in number of publications

- SNIP:
- SJR:
- Impact Factor The publications listed below is having impact factor

Department of Botany

- 1. **C.N. Sunil,** V.V. **Naveen Kumar & T.S. Rajeev**. *Sonerila sreenarayaniana* (Melastomataceae), a new species from Ernakulam district of Kerala, India. *International Journal of Advanced Research* 2(3): 701-704, 2014
- 2. **C.N., Sunil**, V. Abdul Jaleel, M.K., Ratheesh Narayanan& V. Balakrishnan. 2014. *Lindernia nelliyampathiensis* (Linderniaceae), a new species from Kerala, India. *International Journal of Advanced Research* 2(3): 136 139. 2014
- 3. M.K., Ratheesh Narayanan C.N., Sunil, MK Nandakumar .T., Shaju,VMini K T Satheesh & V.Balakrishnan Sonerila raghaviana sp.nov.(Melastomataceae),a new species from southern Western Ghats of Karnataka,India. International Journal of Advanced Research 2014.
- 4. **C.N., Sunil** & V.V. **Naveen Kumar** *Hygrophila polysperma* (Acanthaceae), a new record for Kerala. *Journal of Economic and Taxonomic Botany*. 2014.
- 5. **C.N., Sunil, V.V.,Naveen Kumar & M.G., Sanilkumar**. A new species of Garnotia (Poaceae) from Kerala, India. *Journal of Research Institute of Texas*. 8:519-523, 2014.

- 6. M.K., Ratheesh Narayanan, C.N. Sunil, T., Shaju, V. Abdul Jaleel, M. Sivadasan & A.H. Alfarhan *Rotala dhaneshiana*, a new species of Lythraceae from Kerala, India.. *Phytotaxa*. Accepted
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- 8. **C.N., Sunil** &**V.V., Naveen Kumar**. A New Species of *Arundinella* (Poaceae: Panicoideae: Arundinelleae) from Kerala, India. *Webbia*: *Journal of Plant taxonomy and geography*. 2014. (Accepted).
- 9. **C.N., Sunil,** A.K., Pradeep & Thoiba Kottekkattu *Tripogon idukkiana* (Poaceae: Chloridoideae), a new species from India . *Phytotaxa*. Accepted.
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- 13. C.N., Sunil, M.K., Ratheesh Narayanan, M. K. Nandakumar, Sujana, K.A., Jayesh P. Joseph & N. Anil Kumar. Eriocaulon kannurense (Eriocaulaceae), a new species from Kerala, India. International Journal of Plant, Animal & Environmental sciences 3 (2): 116 119. 2013
- M.K. Ratheesh Narayanan, C.N., Sunil, M. K. Nandakumar, Sujana,
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- C.N., Sunil, M.K., Ratheesh Narayanan, M. K. Nandakumar, Jayesh P. Joseph, V. Abdul Jaleel & N. Anil Kumar. *Rotala khaleeliana* sp.nov. (Lythraceae), a new species from lateritic of Kannur, Kerala, India. *International Journal of Plant, Animal & Environmental Sciences*. 1 (2): 14 16. 2013
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- 20. Sanilkumar, M.G, A.V. Saramma K.J. Joseph and L.B. Cahoon 2011.
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- 6 S. J. Varma, Jerin George, **P. P. Jeeju**, S. Jayalekshmi, *Quantum* confinement effects in highly conducting, ultrathin Polyaniline films pursued through spectroscopic investigations, Journal of Luminescence 132 (2012) 801–805
- V.G. Sreevalsa; P.P. Jeeju; M. Sajimol Augustine; K M. Anilkumar; S. Jayalekshmi; L-Histidine Modified Biocompatible Zinc Oxide Nanocrystals Journal of Experimental Nanoscience Vol. 8, Issue 7-8, (2013) pages 937-946 DOI:10.1080/17458080.2011.624553
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- 11. Neena P, "Synthesis of highly translucent conducting thin films from elastomer Nanoparticles", Journal of Optoelectronics and Advanced Materials –Rapid communications, Vol. 5, No. 9, September 2011, p. 985 987
- 12. Priya S Nair, "Thin Film Rechargeable Electrodes Based on Conductive Blends of Nanostructured Olivine LiFePO4 and Sucrose Derived Nanocarbons for Lithium Ion Batteries", Journal of Nanoscience and Nanotechnology, Vol. 13, 1–6, 2013

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- Effect of blend ratio on Morphology and Mechanical properties of immiscible binary blends of Nylon copolymer (PA6, 6-6) and EPDM rubber." Cibi Komalan, K. E. George, E. Deenadayalan, C. Ranganathaiah, S. Thomas. *Journal of Applied Polymer Science (Accepted)*.
- 2. "Determination of interfacial tension of Nylon6,66/EPDM blends using Palierne and Choi-Schowalter Method", **Cibi Komalan**, K.E. George, and S.Thomas.J.Current Studies,Vol.(2),41-44,2012.

3.4.4 Provide details (if any) of

* Research awards received by the faculty

- Dr.Jehosheba P Mathews Associate Professor of Biochemistry, bagged 'BHARAT SHIKSHA RATAN AWARD' sponsored by Global society for health and educational growth for excellence in chosen field of activity held at New Delhi
- Sri. C.M.Sreejit, Assocate Professor of Botany was awarded best paper in the national conference held at Mangalore, 2011
- Dr. Ajithan Menoth, Head of the Department of Economics, received the 'THAKAZHI AWARD' for short stories in the year 2009-10.
- Dr. M.G Sanilkumar, Assistant Professor of Botany is the recipient of "Young Scientist Award" at the 3rd Kerala Environment Congress 2007, for the best paper presentation, held at Thiruvananthapuram, Kerala, India.
- Sir. V.V. Naveenkumar, Research Scholar of the department of Botany received third Prize for the Paper Presentation in UGC sponsored National Seminar Seminar cum Workshop on 'Plant Systematics and Herbarium Techniques' held at KKTM Govt College, Pullut on 24-25 September 2014.
- Ms. Lima O.S., Post Graduate student of Botany under the guidance of Dr. E.C. Baiju., bagged the First Prize for the Poster Presentation in UGC Sponsored National Seminar Cum Workshop on Techniques in Biosciences held at KKTM Govt College, Pullut on 18-19 February 2014
 - * Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally

Dr. Sanilkumar M.G., Assistant Professor of Botany, has been recognized as the microalgal taxonomic consultant by National Centre for Sustainable Coastal Management, Chennai, (Ministry of Environment Forest and Climate Change Govt. Of India). He is serving as a consultant of Taxonomy and Ecology of Marine Harmful Algae in the Ministry of Earth Science Project(Government of India) on harmful algal bloom that has been conducting

at the school of Marine Sciences, Cochin University of Science and Technology, for the past two years.

* Incentives given to faculty for receiving state, national and international recognitions for research contributions.

The management encourages research by presenting mementos to those are awarded PhD and cash awards are instituted for those who publish papers in national and international journals.

Parent teacher association also gives cash awards to teachers who publish papers in reputed journal as a token of appreciation of their contribution.

3.5 Consultancy

3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

At present, the institute is providing consultancy services only on basis of academic knowledge sharing. There are so many thrust areas capable for establishing department – industry link. The college is intended to make such tie ups with leading industries/local NGOs/cooperative sector, which will in turn reflects the ability of our human resource, research and development.

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

The institute wishes to help the poor and the needy weaker sections of the society by the knowledge acquired and generated by our staff and students through research as envisaged by our leading light the Great Sri Narayana Guru whose teachings we follow in our mission. The management encourages inter disciplinary and inter institutional alliances in the area of research and consultancy.

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

The principal and management encourage staff members to engage in meaningful collaborations with other research institutes by giving full support.

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

We have engaged in various consultancy services purely on academic and not for revenue generation

Dr. C.N .Sunil, Associate Professor of Botany is an expert in plant taxonomy and is a part of the Musiris excavation project identifying plants in the excavations.

He was also served for department of forest, govt. of Kerala for the identification of flora of FACT (a leading public sector company of Kerala) on request.

Sri. C.M. Sreejit, Associate Professor of Botany with Amrita University has consultancy with Kerala State Sericulture farmers association in popularising the IGR technology among sericulture farmers of Kerala State for better silk production.

Dr. M.G. Sanilkumar, Assistant Professor of Botany, has been treated as consultant for microalgal identification by National Centre for Sustainable Coastal Management, Chennai, (Ministry of Environment Forest and Climate Change Govt. Of India) for various ecological and taxonomical analysis of microalgae. He is serving as a consultant of Taxonomy and Ecology of Marine Harmful Algae in the Ministry of Earth Science Project(Govt. of India) on harmful algal bloom that has been conducting at the school of Marine Sciences, Cochin University of Science and Technology, for the past two years

- **Dr. E.C. Baiju**, Assistant professor of Botany has provided his proficiency to Sree Narayana College, Nattika for the establishment of plant tissue culture laboratory
- 3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

So far, we are not accepting any amount for our consultancy but as and when industrial products are developed by our faculty we would institute and benefit sharing MOU between us and industries for the income generated and use it for the research activities of the institution

- 3.6 Extension Activities and Institutional Social Responsibility (ISR)
- 3.6.1 How does the institution promote institution-neighbourhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

Botany department in collaboration with central silk board has given hands on training to the self help groups of Vadekkekara gramma panchayath on sericulture technique. Botany department has given training on mushroom cultivation to the self help groups of Vadekkekara gramma panchayath

- Dr. T.H. Jitha, Assistant Professor of Malayalam Department gives frequent lectures on the vision of Sree Narayana Guru at the public gatherings conducted by various SNDP unions for its followers and common public.
- Dr. C.N. Sunil, Associate Professor of Botany department is an expert in plant taxonomy and is often consulted by taxonomic research students within the state for identifying plants.

English department conducts workshop on Communication Skills for Higher Secondary Students, Workshop on creative writing for High School Students and Training Programmes on ICT applied teaching for High School Teachers of VadakekaraPanchayath.

English department conducts regular Community Visit and gives awareness classes on Women Empowerment and Gender Issues and Role of parental support in School Education to members of Vadekkekara gramma panchayath.

The Physics department has conducted "Save energy campaign programme" in order to make people aware of the importance of energy conservation. They have also given training to house wives of local self help groups in the locality for maintaining and repairing household appliances. With a vision to make people aware of the adverse effect of plastic on environment and to minimize its use an awareness programme was conducted by the department.

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

- Institution takes it a pride to celebrate Independence Day and republic day in style within the banner of NCC, NSS, all staff and student community to create a national feeling among the students.
- In addition to this the whole college and the NSS volunteers participate in the Clean Campus Drive conducted periodically
- The NSS and the NCC conduct residential camps to groom leadership quality of the students.
- The NCC and NSS units organize blood donation camps, visits to old age homes, hospitals, etc to encourage social responsibility among the students
- The NSS and NCC units of the college have Blood Donors' Club which regularly donates blood to IMA and other needy patients in hospitals
- NCC cadets are given palliative care training by experts in these fields
- English department takes students to old age homes and spent time

with them to create an empathy feeling among them against alienating parents towards the old age, a social problem faced by modern society.

- 3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?
- The Parents Teachers Association, Internal Quality Assessment Cell, NCC, NSS, YRC, Alumni Associations of College and Department Alumni of Botany (AMBAL-Association of Maliankara Botany Alumni), Nature Club, Women's Cell, Sree Narayana Study Centre, Career Guidance and Placement Cell, Counseling and Guidance Cell, Science Forum, Students Support Cell, Welfare Club, Legal Literacy Cell, Arts and Cultural Club, Film and Drama Club, Vivekananda Yoga Club, Health and Fitness club are the forums functioning inside the College and they are promoting various activities in social and academic sector.
- 3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

Botany department has conducted the training programme on mushroom cultivation to women self help groups. The department has also organized hands on training programme on sericulture to the local people for ensuring self employment.

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

NCC Activities

Awareness programmes

1. Students

A. Blood donation camps have been organized during the academic years 2010-11, 11-12, 12-13, and 2013-14

Every year blood donation camps are conducted by this unit for creating awareness among staff and students regarding the importance of blood donation. Blood bank authorities are contacted and a convenient date is fixed every year. Then blood donors are identified among students and staff after wide campaign inside the campus. Blood group identification is also done for students. About 60-100 units of blood are given every year by the volunteers and the list is maintained at the office. We also supports the needs of our surrounding villagers who are in need for blood during emergencies especially in the case of rare blood groups.

- B. Aids Awareness Rally 2012-13, 2013-14
- C. Environment Day Celebration 2010-11, 11-12, 12-13, 13-14

Every year June 5 is celebrated in the college in collaboration with NSS, forest department and Botany department. Seedlings are collected from forest department and botany department and are distributed to students and staff members every year. Also some saplings are planted in the campus as per the directions obtained from botany department. This year the function was inaugurated by our principal and the first seedling was received by the Gramma panchayath member of our home ward. Around 200 saplings of rare and useful trees were distributed this year. An oath was taken by students and staff to protect and care them for at least one year.

2. Public

A. Aids Awareness Rally 2012-13, 2013 -14

A rally was conducted among the villagers of Vadekkekara Gramma panchayath for creating an awareness regarding the deadly disease AIDS. NCC cadets participated in the rally. Placards with messages regarding the various

aspects of spreading of AIDs and the methods to be followed for avoiding its spread were displayed by students in the mother tongue. Red ribbons were distributed among the villagers for spreading the message. Selected cadets briefed the villagers at the junctions on this dreadful disease. Help for local police officers were obtained during the same.

B. Anti Water Pollution Cycle Rally 2014-15

A cycle expedition rally was conducted among the villages of Cherai and Vadekkekara gramma panchayath for creating awareness against polluting water sources. The college principal flagged off the expedition. Twenty boys and six girl cadets of NCC started off at 9.30 am from the college portico. Placards carrying messages for protecting sources of water were displayed on cycles. The rally went through the villages and had a halt at Cherai beach. A small talk was delivered by cadets at the spot for those who gathered around regarding the water pollution issue.

Observation of days

1. Republic day celebrations

Every year during republic day celebration, the principal hoists the flag and delivers the republic day message at 7.00 AM in the college portico. Staff members along with NCC cadets, NSS volunteers, and other students attend the function. Sweets are parted among those present after the function.

2. Independence day celebration

Every year during Independence Day celebrations the principal hoists the flag and delivers the Independence Day message at 7.00 AM in the college portico. Staff members along with NCC cadets, NSS volunteers, and other students attend the function. Patriotic songs are sung by students from NCC and NSS students are also given 3 minutes each for presenting their own speech. Sweets are parted among those present after the function and ends with National Anthem.

NATIONAL SERVICE SCHEME

ADVISORY BOARD MEETING (JUNE, 2013)

The advisory board meeting was convened. The blue print of the action plan for this year was analyzed in detail.

CELEBRATION OF WORLD ENVIRONMENT DAY (JUNE 5, 2014)

Around 50 tree seedlings were planted in the college campus as a part of celebration of World Environment Day. The function was inaugurated by Dr. K.K. Radha, Principal SNMC Maliankara, Teachers from various departments were also participated in the programmes and planted the seedlings.

ENROLLMENT CAMPAIGN (JULY 22, 2013)

An enrollment campaign was organized by the Voluntary organizations NSS & NCC of the college on 22nd July, 2013 at 11.30 am in College Auditorium to introduce Voluntary organizations and its activities & prospects to the 1st year graduates. Dr. K.K. Radha applauded the NSS/NCC units & their self less service rendered. The significant of which is their voluntary help during various Projects in the college, apart their regular activities and heavy academic schedules. Dr. E.C. Baiju, the new NSS Programme Officer welcomed the new graduates to such voluntary organizations as it contributed to wholesome education and personality development and conveyed that NSS has become a passion for its volunteers & new comers should take it up to keep the torch a flame.

INAUGURATION OF NSS UNIT (AUGUST 2, 2013)

The Formal inauguration of the S.N.M. College NSS unit & its activities for the academic year (2013-14) took place at College Seminar Hall at 10.00 am on 2nd August 2013. The NSS volunteers, Ex.P.Os, ex.voluntary secretaries & executives and other teaching & non teaching staff & students gathered for the inaugural function.

The programme started with the glorious NSS anthem sung by the NSS

volunteers. Proramme Officer Dr. T.H. Smitha greeted and invited the gathering. Programme Officer, Dr. E.C. Baiju welcomed the gathering.

The Principal, Dr. K.K. Radha inaugurated the NSS activities by lighting the lamp. In her inaugural address, she applauded the NSS unit for their meritorious service during the previous year and inspired the new comers to rise to active volunteership as their seniors, Prof. T.K. Mukundan and highlighted the importance of NSS and its aims & activities. Dr. Sankaranarayanan former P.Os shared his good experiences in the NSS & hoped the same for the new comers. The inaugural function came to a close by 1.30 pm after Ms. Sreeshma (voluntary secretary) delivered the vote of thanks.

NSS PROGRAMME OFFICERS TRAINING AND ORIENTATION AT TOC, RAJAGIRI, KALAMASSERY FROM 12/8/2013 to 21/8/2013

Programme Officers Dr. T.H. Smitha and Dr. E.C. Baiju were selected for a 10 day Orientation and Training Programme for NSS P.O at Training and Orientation Centre, Rajagiri, Centre for Social Sciences, Kalamassery from 12/8/2013 to 21/8/2013.

30 NSS P.Os from various colleges, VHSCs and Vocational Higher Secondary Schools underwent NSS P.O training at TOC Rajagiri led by Coordinator I. V. Soman Sir. The sessions were included history, philosophy and objectives of NSS. It trained the programme officers to conduct orientation for new students also to conduct its regular activities and special camps. The sessions helped the teachers to identify social issues in the community and plan their work accordingly and work towards it in their respective units. NSS Programme Officer Dr. E.C. Baiju made a presentation as to" how to execute a special camp", in the symposium conducted at TOC. The PO's conducted surveys and tabulated it. The camp was organized in the same lines of a special camp which concluded on August 21st with the valedictory function and distribution of certificates.

THE INTRODUCTORY PROGRAM FOR I YEAR STUDENTS

This event intended to create awareness about the objectives and the activities of the national service scheme among the second year students. In this event, I year students were informed about the various activities conducted year round by the NSS unit of SNMC.

In this program only, the students were introduced to NSS, and its motto which goes as "not me but you". They were made aware of the objective of NSS, which is to develop a sense of social and civic responsibility amongst the students by arousing their conscience. The students appraised and accepted the objective of the unit enthusiastically as they understood that NSS helps provide them an opportunity to have an interaction with the weaker section of the community and to apply their education in finding practical solutions to the problems of the community.

The event succeeded in not only opening the eyes of the students' to their blessings, but also made them aware of the ways they can contribute to the development of the society. And the impact of this program on the psyche of students could be easily seen by the great number of membership forms that poured in.

INDEPENDENCE DAY CELEBRATION (AUGUST 15, 2013)

Our NSS unit in association with College NCC unit celebrated the Independence Day. It was organized with great zeal and enthusiasm on college premises, and was graced with the presence of our beloved Principal Dr. K.K. Radha. As she hoisted the flag, the feeling patriotism and pride in being a free citizen of India were almost tangible in the atmosphere. She was also delivered the Independence Day Message. The air was then filled with the sweet heart touching notes of patriotic songs as everyone celebrated the joyous occasion.

INTER UNIVERSITY STATE LEVEL PEER EDUCATORS TRAINING ON YOUTH FOR ROAD SAFETY (OCTOBER 11 & 12, 2013)

Our two volunteers, Mr. Sarathchandran I.I. and Akhil C.V. participated in the flagship programme - YOUTH FOR ROAD SAFETY, Inter University State Level Peer Educators Training held at Brahmagupta Auditorium, Nehru College of Engineering & Research Centre, Pampady, Thrissur on the 11th & 12th of October 2013. "A Decade of Action for Road Safety- 2011-2020" of the United Nations, under the Kerala Motor Vehicles Department shall be observed on the occasion, upholding the slogan of "We together can save millions of lives". The training imparted the volunteers with the knowledge on road safety and the skill set for training their peers in road safety thereby creating safe driving and travelling culture.

It is our great pleasure to inform you that our two volunteers were selected as Safety Ambassadors for the next ten year programme on road safety.

STATE LEVEL NSS VOLUNTEER SECRETARIES TRAINING AT K.E. COLLEGE, MANNANAM (SEPTEMBER 27 to 29, 2013)

M.G.University NSS wing conducted Volunteer Secretaries Leadership Training Camp at **K.E. College, Mannanam 27/09/2013 to 29/10/2013**. The State level camp equipped the volunteer secretary from the college, Mr. Sreejith to take the reins of leadership to lead NSS Unit of our College.

NSS DAY CELEBRATION (OCTOBER 24, 2013)

The NSS day was celebrated heartily on September 24th in the college campus. NSS pledge was vowed by NSS volunteers. The volunteers rededicated themselves to selfless NSS service to the society and promised to work with dedication to strengthen the integrity of the nation. On the same day, our sixteen volunteers participated in the Annual Meet of NSS conducted in Mahatma Gandhi Town Hall at Aluva.

CAMPUS CLEANING PROGRAMME (OCTOBER 5, 19 and 26, 2014)

This was an initiative taken by NSS volunteers to clean the area surrounding our college area on Saturdays in the month of October 2013. The drive was flagged of by the Principal Dr. K.K. Radha. There were 110 students who contributed their efforts to make the event a huge success.

WORLD AIDS DAY (DECEMBER 1, 2013)

World Aids Day was observed on December 1 along with NCC Unit of the College. The meeting started with NSS Song. We wore Red Ribbon which is the universal symbol of awareness and support for those living with HIV. We made many posters and placed in different locations in our campus and conducted a rally with volunteers. It became an informative one. Around 105 volunteers participated in the programme.

REPUBLIC DAY (JANUARY 26, 2014)

NSS Unit in association with NCC Unit of SNM College celebrated the Republic Day in the college premises in the presence of Principal in Charge Dr. B.S. Sleema, Head of the Chemistry Department, Col. C.M. Sreejit (NCC Officer), Dr. Ramesh Babu, Head of Zoology Department and College Superintendent Sri. Ganan Dr. B.S. Sleema hoisted the national flag and encouraged all with his inspirational words. The event concluded with sweet distribution.

FAREWELL TO FINAL YEAR NSS MEMBERS (MARCH 20, 2014)

First year and second year NSS volunteers arranged a heartfelt farewell for the final year students who have worked with zeal, unwavering dedication and persistence in various college events throughout their four years of degree. Third year members had made a special video for their seniors, in which they had captured the bitter-sweet experiences of the seniors' lives, the highs and low which have experienced as an individual and as a whole through the mirror of friendship.

Youth Red Cross (YRC)

The YRC Unit participating in the training programmes organized by state and district Red Cross Societies.

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

Various forums working in the college is actively intervening in the social area of this area and providing valuable suggestions for empowering the people at large. (Nature Club, Women's Cell, Sree Narayana Study Centre, Career Guidance and Placement Cell, Counseling and Guidance Cell, Science Forum, Students Support Cell, Welfare Club, Legal Literacy Cell, Arts and Cultural Club, Film and Drama Club, Vivekananda Yoga Club)

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

The extension activities like training on sericulture and mushroom culture conducted by the department of Botany has acquired good knowledge outcome to students particularly to the PG students

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

The helps rendered are given through self help groups in the home gramma panchayath identified with the help from elected representatives.

Most of the training activities are practical oriented micro enterprises so that it can be utilised for them in their own households to generate additional income

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

Blood donation club of NCC has tie up with blood bank Aluva and Ernakulam.

Department of Botany has got collaboration with State Agriculture Department for practicing the cultivation of various vegetables and fruits within the campus

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

Nil

3.7 Collaboration

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

Botany department has meaningful collaboration with MSSRF Wayanad and Kerala Forest Research Institute, in biodiversity and conservation studies mainly through Dr. C.N Sunil.

Botany department has collaboration with Amrita school of bio technology in identifying insect growth regulators (IGRs) from native plants. This group has collaboration with Kerala Sericulture Farmers Association in popularising the use of IGRS among them. They are also in cooperation with

The Western Ghat Hornbill Research Foundation, Western Ghats Open Collaborative Information System, Pondicherry., Biotechnology research department of MET's Engineering College, Mala, Malabar Natural History Society, Calicut., Research Department of Botany, Calicut University., Department of Marine Biology, CUSAT for various research allied programmes.

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

Department of Commerce have MOU with Tax Study Centre, North Paravur.

Steps towards signing of MOU with (MS Swaminathan Research Foundation (MSSRF), Western Gaht Hornbill Research Foundation, and Amrita University have been initiated on common research areas by Botany department.

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

Fund for Improvement of Science and Technology (FIST) by the department of science and technology, Govt. Of India has approved our proposal and a sum of rupees 90 lakhs (ninty lakhs) is sanctioned for up gradation of academic facilities in PG departments of Botany, Physics and Chemistry.

- 3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.
- a. Dr. Madan Mohan, Scientist, Central Silk Board, Palakkad
- b. Sri. Aju John Mathai, Agricultural Officer, State Seed Farm, Ernakulam
- Ms. Devayani Khare and Sri. Tomas Vattekkaven, of Western Ghat
 Biodiversity Open Collaborative Forum, Pondicherry
- d. Dr. Rejil T. Marine Biologist and Section Officer, CUSAT, Ernakulam
- e. Dr. Amitha Bachan, Director, Western Ghats Hornbill Foundation
- f. Dr. Sujanapal, P., Scientist, Kerala Forest Research Institute, Peechi,
 Thrissur

Mathematics department

- a. Prof Krishnamurthy, Maths dept, CUSAT
- b. Prof MJ Jacob Maths dept ,NITC
- c. Dr MA Shalu Maths dept, IIT Chennai
- d. Dr sunil Mathew, Maths dept, NITC
- e. Dr Satyananda panda, Maths dept ,NITC

Chemistry department

- a. Dr.N.Gopalakrishnan, Director,Indian Institute of scientific heritage, Thiruvananthapuram.
- b. Dr.K.L Sebastian (Santhi Swaroop Bhatnagar laureate), Head ,Dept Inorganic &Physical Chemistry, IISc. Bangalore.
- Dr.Prince Xavier, Senior Scientist, SABIC Corporate Research and Innovation, University of Science and Technology, Thuwal, Saudi Arabia
- d. Dr.S Murugan, Doctarate in Aquepressure, S.T Hindu College,
 Nagarcovil
- e. Dr. C. T. Aravindakumar, Professor & Director, School of Environmental Sciences, Mahatma Gandhi University, Kottayam,

- f. Dr,K,N Rajasekharan, UGC-BSR Faculty Fellow, Univerity of Kerala,
 Thiruvananthapuram
- g. Dr G Sivasubramanian, Department of Chemistry, Amrita Vishwa Vidyapeetham, Kollam 690525
- h. Dr.R.S Swathi, IISER, Thiruvananthapuram
- Dr. Krishnan Namboori , Department of Chemistry, Amrita VishwaVidyapeetham, Ettimadai

Department of Economics

Dr. N A Ajithkumar	Leading Narrator and well known
	Financial Expert
Adv P. N. Sindhu	Advocate
Dr. Thresiakkutty. K.M	HOD, Department of Economics, Morning
	Star College, Angamaly
Dr. Murukesan Krishnapillai	Research scientist of college of Micronesia

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

Only the academic collaboration without income generation is ongoing at present. No formal MOUs have been signed yet however; the College management initiated some steps to sign some agreements with leading research institutions working in Kerala and outside.

- a) Curriculum development/enrichment
- b) Internship/On-the-job training
- c) Summer placement
- d) Faculty exchange and professional development
- e)Research

Dr. C.N. Sunil, Asssociate Professor worked together with Dr. M. Sivadasan, Professor, King Saud University Soudi Arabia., Dr. V.V. Sivarajan (late), HOD and Professor of Botany, Calicut University, Dr. T. Shaju, Scientist TBGRI, Thiruvananthapuram, Dr. Jaleel, Department of Botany, Sir Syed College, Thaliparamba, Dr. Rathish Narayanan, Department of Botany, Payyannur College, Dr. A.K. Pradeep, Professor of Botany, Calicut University, Dr. K.M. Prabhukumar, Centre for Medicinal Plant Research, Kottakkal.

Sri.C.M. Sreejit, Associate Professor of Botany has collaborated with Dr. A. Banerji, distinguished Professor and Raja Ramanna Fellow of Amrita Viswavidyapeedam, Kollam on developing indigenous growth regulators bio prospected from native plants for the benefit of sericulture farmers of the state for increasing silk production.

Dr. M.G. Sanilkumar, Assistant Professor, associated with Dr. Lawrence Cahoon, Professor, University of North Carolina, USA., Dr. K. J. Joseph, Dr. A.V. Saramma, Dr. A.A. Mohamed Hatha, (Professors of School of Marine Sciences, Cochin University of Science and Technology), Dr. N.R. Menon, Professor and former Registrar of CUSAT and presently the Chairman of the Scientific Research advisory board and Board Director of Nansen Environment Research Centre India., Dr. V.N. Sanjeevan, former Director and Dr. K.B. Padmakumar, Project Scientist (Centre for Marine Living resources and Ecology, Ministry of Earth Sciences) were among the co-workers/co-authors of various research programmes/publications.

Dr. E.C. Baiju, Assistant Professor, associated with Dr. U.M. Chandrasekhara, Scientist F, Kerala Forest Research Institute, Peechi., Dr. Balakrishna Gowda, Professor of University of Agricultural Sciences, Bangeluru.

- f) Consultancy
- g) Extension
- h) Publication
- i) Student Placement
- j) Twinning programmes
- k) Introduction of new courses
- 1) Student exchange
- m) Any other
- 3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.

Initial talks with M.S. Swaminathan Research Foundation, ., WesternGhat Hornbill Foundation were made to provide research collaboration in the near future.

Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

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

Before the beginning of each financial year the college council discusses the infrastructural requirements for the upcoming academic year and proposed projects and estimated expenses are included in the budget of the college. Management makes necessary changes in the proposals, according to the availability of funds and is included in their annual budget. PTA also effectively contribute to the enhancement of infrastructural amenities. The funds available from UGC and other external agencies are also utilized effectively for this purpose.

4.1.2 Detail the facilities available for

a) Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.

Class Rooms: The college has 51 + 2 class rooms for educational purpose.

Technology enabled learning spaces:

The college has computer labs, Technology rooms, Projector rooms for aided programmes. All the departments have LCD projectors, computers, Laptops, Scanner, printer and internet facility. The library is computerized and digitalized LCD projectors have been installed in at least one class room of each department.

Seminar Halls: The college has an air-conditioned, fully equipped Seminar Hall with a seating capacity of 200 plus. Apart from this, there is a mini seminar hall for the Department of Mathematics. English department has technology room equipped with computers and projectors.

Tutorial spaces: Tutorial classes are conducted in the respective class rooms. There are 51 + 2 class rooms for tutorial classes.

Laboratories:

The PG and research departments of Botany and Chemistry are having two well equipped laboratories for pursuing research activities. PG departments of Physics and Zoology also have laboratories for their PG programmes. Besides these all the above departments possesses separate laboratories for UG programmes.

There are Computer labs for Physics, Zoology, Economics, Mathematics and Commerce self-financing departments.

Herbal Garden: Department of Botany is maintaining a herbal garden with medicinal plants and a green house. Two endangered plant species included in the RED DATA Book, namely *Strophathus wightianus* and *Syzygium travencoricum* are growing in the premises of the college and are well protected as a part of biological conservation.

Green house: Department of Botany has a green house facility to maintain delicate plant species.

Specialized facilities and equipments for teaching:

Most of the PG class rooms are equipped with wall mounted LCD projectors. Almost all the departments have LCD projectors ,Desktop Computers, Laptops, Scanners, Printers and Internet facility

DVD Players, T.V., Tape Recorders and camera are used to aid the teaching of communication skills in language departments. English department which has to handle large combined language classes uses portable sound systems also.

Learning and Research:

Departments of Botany and Chemistry both have research centers. These departments have research lab cum research rooms near the respective departments.

b) Extra –curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.

Sports: The college highly promote the sports activities of the students.

- Outdoor facility for hand ball, volley ball, Khabaddi, Ball Badminton etc.
- Football cum cricket field.
- Indoor facility for badminton, Table Tennis, Chess, etc.
- Multi-Gym Fitness Centre

Cultural activities:

For the cultural and other activities of the students the college has

- an auditorium with the seating capacity of 800 with Common generator for power supply, light and sound system etc.
- there is an activity hall of capacity 200 plus available to the students for extra curricular activities, the film shows, union activities etc. It is also used for exam purposes and for language classes.
- there is an auditorium of seating capacity of 1500 plus, maintained by the management for all the educational institutions under it. This auditorium is available to the college for major purposes on request.

NSS & NCC

Separate rooms are allotted for the functioning of NSS and NCC

Communication skills development

There is a computerized technology room cum language lab, equipped with audio-visual aids, for English Department, which is used effectively to improve the communication skills of students.

Health & Hygiene

- ** Necessary first aid facilities are maintained in each of the departments. Besides, the college utilizes the services of nearby hospitals in case of emergencies.
- * The college uses the service of an SHG (contract basis) to keep the campus clean and to maintain hygiene.
- * In addition to this the whole college, particularly the NSS volunteers and NCC cadets participate in keeping the campus clean.
- 4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any).

The planning and implementation of the infrastructural facilities of the college is done by the management according to the recommendations guidance and assistance from the College managing council, college council, PTA etc. The college has a number of proposed infrastructural projects which are awaiting for sanction from UGC.

-	Class Rooms	-	51
-	Labs	-	11
-	Computer Labs	-	05
-	Technology Room	-	1 (A/V Room)
-	Seminar Hall	-	1

General Library

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-	NET/SET couching center Library	-	1
-	Common Room for non-teaching sta	aff-	1
-	Generator	-	1 (125 kva)
-	Public Address System		
-	Research Centres	-	2
-	Rooms for NCC	-	2
-	Rooms for NSS	-	1
-	Rooms for IQAC cum NAAC	-	1
-	Store Room	-	Chemistry - 1, Zoology - 1
-	Store	-	2 (Office)
-	Record Room	-	1
-	Room for Election/Exam Cell		
-	Auditoriums		ncluding Common ditorium)
-	Canteen	-	1
-	College Store	-	1
-	Reprography	-	5
-	3 Telephone lines		
_	intercom facilities to all departments	s, cante	en and library
-	Multi Gym fitness centre	-	1
_	Well	-	2
_	Cooler	-	5
-	Audio Visual Room	-	1 (Chemistry)
-	Garden	-	1
-	Two Wheeler Parking	-	1
_	Hostel for Boys	-	1
_	Hostel for Girls	-	2
_	200m Athletic Track	_	
_	Foot Ball cum Cricket Field		
-	Outdoor Facility	-	Hand Ball Volley ball
		-	Kabaddi
		-	Ball Badminton

- Indoor Facility - Badminton

- Table Tennis

- Chess

Manager's Room - 1

RO Plant

Rain water harvesting

Biogas plant

Rooms for UGC Sponsors Schemes

The amount spent on new infrastructural facilities

Sl.No	Infrastructural facilities	Expense in Lakhs (approx.)
1.	New Hostel	120
2.	Auditorium Renovation	4.5
3.	Seminar Hall Renovation	7.5
4.	Common generator	14
5.	Drinking water	4
6.	Public Announcement system renovation	4.5
7.	Language Lab	1.5
8.	Technology Rooms	2.5
9.	Toilet facilities (improvement)	1.5
10.	Renovation of Chemistry lab	5
11.	Multi-gym	3
12.	Renovation of class rooms	10
13.	New furniture	32.25
14.	Renovation of Principal's room	2
15.	Equipments	18
16.	Computer	27.5

Future plans for infrastructural development

College has around 5 major construction plans submitted to the UGC for approval.

Sl.	Description	Expense
1	Library complex	2,36,73,000
2	Administrative Block	5,81,78,000
3	Guest house	50,77,000
4	Auditorium renovation	26,95,000
5	Canteen renovation	29,32,000

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

The requirements for physically disabled students vary each year depending on the number of students admitted in the category and also according to the degree and type of disability. So the principal ensures that whether the existing facilities are enough to meet their requirement and also make necessary changes for this purpose.

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

Hostel Facility

There are 2 ladies hostels available for students and staff. Both of them are inside the campus.

• Recreational facilities, gymnasium, yoga etc.

The college has a multi-gym and the establishment of a yoga and meditation hall under Sree Narayana Study and Research Center is under progress. These facilities can be used by the inmates of the ladies hostels which is inside the campus.

- Computer facility including access to internet in hostel
 At present the college does not provide computer and internet facility inside the hostel.
- Facilities for medical emergencies

All departments maintain first aid kits. In case of emergencies college avails the help of nearby hospitals. There are more than 10 hospitals and one medical college within 15 km radius. The Church nearby the college has an ambulance facility.

- Internet and Wi-Fi facility
 Internet and Wi-Fi facilities are not provided inside the hostels.
- Recreational facility-common room with audio-visual equipments
 There are recreational spaces inside the hostel, but common room with
 AV equipments is not available.
- Available residential facility for the staff and occupancy
 Staff members can use the Hostel facilities provided by the college, but presently no staff members are staying in the hostels.
- Constant supply of safe drinking water
 All hostel are well equipped with safe drinking water
- Security
 College has 4 watchmen, they provide round the clock security.
- 4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

The College has a fitness centre, a yoga club and also courts for indoor and outdoor sports. The staff and students can utilize these facilities for maintaining fitness. All departments maintain first aid kits. In case of emergencies college avails the help of nearby hospitals. There are more than 10 hospitals and one medical college within 15 km radius. The Church nearby the college has an ambulance facility.

4.1.7 Give details of the Common Facilities available on the campus – spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counselling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students,

safe drinking water facility, auditorium, etc.

- Separate rooms for IQAC, Counselling and career guidance, NCC, NSS etc.
- Fitness center
- Auditorium with a seating capacity of 800
- Student activity hall of seating capacity 200
- Seminar hall
- Canteen
- Volley ball, badminton and Kabaddi courts
- Parking facility for two wheelers

4.2 Library as a Learning Resource

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

Yes, as per G.O. (MS) + 69 - 28/12/1994 Library have an advisory committee, consisting Principal, Manager, Librarian, members of teaching staff, Office superintendent and one student representative. The committee support and guide all kinds of library activities.

- Each academic year new students are given a briefing on effective use of the library, to be conducted programme wise.
- Improvement of internet and e-resource facilities in the library.
- Implementation of library automation.
- Use of the library software COHA.

4.2.2. Provide details of the following

- Total area of the Library 5100 Sq.ft.
- Total seating capacity 100
- Working Hours 9.30 a.m. to 4.30 p.m.

- Layout of the library There 80 individual reading carrels, 20 undivided spaces in the IT zone for accessing internet.
- 4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

T.21	2010-11		2011-12		2012-13		2013-14	
Library holdings	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Text books	226	1,05,801	640	4,73,900	900	4,05,884	251	2 01 200
Reference Books	25	1,03,601	57	4,73,900	289	4,03,004	48	3,01,290
Journals/ Periodicals		55,420		15370		18400		93,750
e-resources		5000		5000		5000		5000
Any other (specify)				-				

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

- In-house /remote access to e-publications
- Internet and IFLIBNET
- Library automation is partial, work for complete automation is under progress.
- Total No. of computers for public access 17
- Total No. of printers for public access 2
- Internet band width / speed 2 mbps
- Institutional Repository is available in the library

4.2.5. Provide details of on the following items:

- Average No. of walk-ins 40,000 / year 225/day
- Average No. of books issued / returned 100/89

- Ratio of library books to students enrolled 1:27
- Average No. of login to e-resources 30/day
- Average No. of e-resources downloaded/printed 30/day
- Number of information literacy training organized -1
- 4.2.6 Give details of the specialised services provided by the library
 - Reference Yes
 - Reprography Yes
 - Information deployment and notification Yes
 - Download Yes
 - Printing Yes
 - In-house / remote access to e-resources Yes
 - User orientation & awareness Yes
 - INFLIBNET/IUC Facilities Yes
- 4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.
 - Applying for Scholarships online
 - PSC & UPSC and other Job applications online
 - Support dissertation work for PG students
 - Support project works of UG students
- 4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.

Presently library is not providing any special facilities to the VH/PH students. Providing a Catalogue for VH students is under consideration.

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

Yes. From P.G. students, Research scholars and staff members feedback is taken formally. The library has installed a suggestion box to get feedback from the students. Apart from this the library takes regular feedback verbally from its users. The issues are discussed in library advisory committee meetings and forwards them to the principal for appropriate actions.

4.3 IT Infrastructure

4.3.1. Give details on the computing facility available (hardware and

The college is keen in augmenting the computer and its associated accessories for the student community. The list is as follows

Computers	-	137
Laptop	-	9
Scanner	-	8
Printer	-	10
Barcode Reader	_	05

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

- Computers are provided in the library. Computer lab and the departments have direct internet connection which serves the purpose.
- Students can access internet from the library and from different computer labs (for students of respective departments)
- The campus has Wi-Fi connection within the office and its surroundings and in library, protected by password. There are enough

computers with internet facility within the library and departments for students and staff.

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

The college management has decided to establish a complete Wi-Fi campus in the near future. The Local Area Network facility is to be augmented soon and the efforts related to this are in progress. The FIST scheme of Department of Science and Technology has been allocated the purchase of three interactive white boards in the departments of Botany, Chemistry and Physics. The fund for which is to be released in the second installment. Already the college has installed two interactive white boards and the management is planning to purchase three more in the next academic year.

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

Academic Year	Name of Items purchased and their c	Total amount spent	
2011-2012	Desktop	3	81,000
	UPS	3	6,900
	Printer	1	10,000
	LCD Projector	1	42,798
2012 – 13	NIL		0
2013 – 14	Desktop	5	1,58,750
	UPS 600 VA	5	10,250
	Laptop	2	71,000
	LCD Projector		42,798
2014-15	Laptop	3	90,000
	Desktop	3	90,000
TOTAL			603496

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

Each teaching department has computers with broadband internet facility, laptop, LCD projectors and screens to facilitate system aided teaching. The departmental seminar technology class rooms are arranged in the college for enriching the learning process. Students can access OER (Open Educational Resources) and can enjoy the free video teaching. The training programmes have been conducting for students and staffs by the library to ensure recent information on e- journals and INFLIBNET.

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

Technology rooms in the college are used for online learning along with library. In addition, each department has equipped LCD projectors and majority of teachers use these to make the teaching process more effective. The internet facility in the departments and library enable the students to use the on-line learning resources to prepare notes, assignments, conduct seminars, and collect data for projects. The teaching staffs provide basic information to the student community for choosing the apt, recognized and standard websites (websites of well known universities and research centres in India and abroad) for their study purpose.

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

The college is utilizing the services provided by DEL-NET and INFLIBNET. The faculty members are keen to promote these activities, especially to post graduate students to ensure the study leading to research.

4.4 Maintenance of Campus Facilities

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

Sl.No.	Item	Amount
a.	Building	1,00,00,000
b.	Furniture	32,25,000
c.	Equipment	18,00,000
d.	Computers	27,50,000
e.	Vehicles	NIL
f.	Anyother	24,00,000

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

College maintains a head in budget every year for the purpose of maintenance and repair of infrastructural facilities and equipments. This allocation is done by taking instructions and recommendations by the college council. After the budget is accepted the amount is released on detailed request by the college or departments.

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

At present the college having UV-VIS Spectrometer, Trinocular Steriozoom and Light microscope. The calibration has been made at the time of installation. Since the above said equipments providing good results, no attempt has been made to calibrate these. The imported and sophisticated equipments which will be purchased under FIST-DST scheme in the near future, the college will take necessary steps for its regular monitoring and calibration through AMC.

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

The UV-VIS Spectrophotometer installed in the Research Lab of Botany is in an air-conditioned cabin. Microscopes are kept in dust free areas and are used under proper ventilation. All these will be shifted to the newly creating air-conditioned centralized Research Lab along with other sophisticated instruments to be purchased under FIST-DST.

The voltage condition is study in this area. However proper measures will be taken to protect them from voltage fluctuations if any.

Uninterrupted water supply will be ensured for the smooth functioning of Double-Distilled Filtration Unit and Millipore Filtration Unit to be installed by the FIST scheme.

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

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

Yes, the institution publishes its updated handbook every year. The following information is provided to the students through the handbook.

- Vision, Mission, objectives and Motto of the institution
- Profile of the institution
- History of the institution
- College Prayer
- Details of the Management representatives, Departments, Faculty and Administrative staff along with their contact information
- Academic programmes and details of CBCS system
- The details of the courses of study and course code and rules of admission
- Attendance and leave of absence
- Issue of certificates
- General rules of discipline
- MG University Code Of Conduct Rules
- Library rules
- Tutorial System
- Guidelines for internal assessment
- Fees support system
- Fee concession, Scholarship, Endowment and Prizes
- Other activities and facilities
- Academic calendar of MG University
- MG University Phone number
- Form of application for certificate and leave

2010-11 admission onwards, the college is not publishing the prospectus for the aided programmes as the MG University has implemented Centralized Allotment Process (CAP). However an updated prospectus is published every year for the Self financing courses.

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

On the P T A General body day institutional Endowments are awarded to the meritorious students of the previous academic year. The details of the endowments instituted, the amounts and the criteria for receiving the same are given below.

Sl. No.	Name of the Endowments	Criteria	
1.	Prof. K N Vidya Sagaran	Final year Degree and P G Botany	
	Endowments	students who secure highest marks in the	
		university exam.	
2.	PTA	Top ranking students and second place	
		winners of all classes	
3.	Prof. C SivaSankaran	Two students in II B A / B Sc / B Com	
	Memorial	who secure top mark in part I Eng. In	
		University Exam every year.	
4.	Silver Jubilee Memorial	Students who secure highest marks in	
		B.Sc. physics main in the university	
		Examination Every year.	
5.	Prof. P G Sunanda	Who secured highest marks in the B.Sc.	
		zoology final year university	
		examination.	
6.	Prof. M S Sugathan	Students of II BA/B.Sc. who secured	
	Memorial	highest marks in part I English in the	
		University Examination	
7.	P V Raman Memorial	Who secure highest marks in B.Sc	
		chemistry in the University Examination	
8.	Mr. S.G. Sugeeth Memorial	Best outgoing M.Sc Physics students	

9.	Prof. C P Lalitha	Students of Final year M A Economics	
		who secure highest Marks in	
		University Examination	
10.	Dr. Saravana Rajan	Twenty backward hindu students from	
		economically backward families and	
		of good academic merits.	
12.	Silver Jubilee Memorial	B.Sc Chemistry main students to the	
	Ever rolling Trophy	winner of inter-departmental quiz	
		competition.	
13.	Smt. M.R. Usha	Final year B.Com students who secure	
		highest marks in the university	
		examinations.	
14.	Saga	Cash awards given to students of all	
		subjects who secure highest marks in	
		the university examinations.	

Other than the above endowments and financial aid are given to economically weak students based on their academic performance from the fund of Parent Teachers Association

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

20.8 % of students receive financial assistance from different agencies?

5.1.4 What are the specific support services/facilities available for

Students from SC/ST, OBC and Economically weaker sections

- An active Remedial Coaching is working in the college and given special coaching to the under privileged category
- Peer learning is encouraged
- The Equal Opportunity Centre conducts seminars, workshops and lectures for students from SC/ST, OBC and economically weaker Self Study Report of SNM College, Maliankara, Ernakulam Dt., Kerala-2014

- sections to motivate them in their studies and enable them to compete with the general category
- NET/SET coaching classes are given for SC/ST, OBC and minority students with financial assistance from UGC
- The college provides financial assistance to them in addition to the stipend from the government
- Tutorial and mentoring systems help to identify their problems and address them positively.

Students with physical disabilities

- Special care and facilities are provided for students with physical disabilities in the class rooms
- Special attention is given to them during examinations including extra time, separate room, scribe etc.

Overseas students

Nil

Student participation in various competitions (National & State Level)

- Students are encouraged to participate in various State, University and intercollegiate competitions.
- Competitive books and Computers with internet facilities are available to prepare for various competitive examinations
- Expenses and the registration fees to participate in the competitions are provided by the college.
- Expert trainers are arranged at the expense of the college to provide coaching to students in the University level competitions

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

- Medical check-up for first year UG and PG students is done every year.
- NSS and NCC conduct blood group detection and donation camp every year.
- Eye check up camps and organ donation awareness camps are organised regularly by NSS.
- PTA arranges transportation facility in emergency situations.

• Women's Cell, NSS, NCC and other Departments organise health awareness programmes regularly.

Organizing coaching classes for competitive exams

- Coaching classes for various competitive exams including Bank Tests,
 KPSC tests etc are provided by the "Coaching for Entry into Service"
 under the UGC financial assistance.
- UGC sponsored NET coaching is conducted for PG students. Some departments provide special coaching for NET in their respective subjects.
- Career guidance classes are given by Career Guidance Cell and Equal Opportunity Centre.

Skill Development (Spoken English, Computer literacy, etc.,)

- The State Government sponsored programme, Additional Skill Acquisition Programme(ASAP) by Directorate of Higher Education is working in the college.
- Add-on courses are being conducted in computer basics and applications by the department of Commerce.
- A skill development programme, Walk With a Scholar is implemented by the State Government.
- Women cell regularly conducts soft skill and personality development classes.
- Classes are conducted to improve Communication skills of students.

Support for "Slow learners"

- Remedial coaching in the relevant subjects is given to slow learners.
- Scholar Support Programme, SSP is implemented recently by the Directorate of Higher Education for slow learners
- Peer learning is encouraged
- Counselling and motivation are given to the slow learners.

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

 As a part of curriculum, industrial visits, study tours, on job training etc are conducted

Publication of student magazines

- The College brings out a College Magazine under the leadership of the Student Union.
- As part of the association activities, most of the departments publish Manuscript Magazines.
- Most of the departments, Women's Cell, NSS and NCC publish wall magazines on current issues, upcoming events and celebrating days etc.

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

The institution makes efforts to facilitate entrepreneurial skills among the students through the functioning of an entrepreneurship club in the college with the collaboration of commerce and economics departments. They conduct seminars and face-to-face interactions with the successful entrepreneurs. NSS also organizes workshops to develop entrepreneurial skills among the students.

From these exposures the students are benefited with management capacity, business skills, problem-tackling skills and leadership qualities.

- 5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and cocurricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.
 - additional academic support, flexibility in examinations
 - special dietary requirements, sports uniform and materials
 - any other

The institution is committed to attract students for participating in various extracurricular activities by ensuring consistent encouragement and motivation. The necessary facilities are provided and adequate funds are allotted. The sports and cultural committees supervise the extracurricular activities. Coaching by external experts is provided to the college teams participating in University level competitions at the expense of the college. Athletes and sports students are encouraged to participate at the state/regional/national events and are given sports uniform, coaching, travel support as require to students who are proficient in sports. The students who participate in the sports activities or other extracurricular are provided with extra classes so that the time they have given in for the various activities can be compensated for. Special exams are taken for them so that they can have an assessment of their preparations for the final examinations. Diet to the sportsmen is borne by the institution as per the requirements.

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

The following support and guidance are provided by the college to get students equipped with skills necessary for career advancement.

- The career guidance cell conducts coaching classes and training sessions to prepare the students for competitive examinations.
- Campus placement opportunities are provided to the students by the placement cell in both Public and Private sectors.
- NET coaching was conducted for the post graduate students with the financial aid from UGC.
- Equal opportunity centre conducts personality development and communication skill development programmes.

The following students qualified NET/JRF in the last three years.

	Department	Name of the student	NET/JRF
1.	Chemistry	Geethu Jayanthan	NET
		Jaison	JRF
		Liya Jose	JRF
		Gayathri	JRF
		Saranya	JRF
		Liniya	NET
		Sherin	NET
		Preena	JRF
		Harikrishnan	JRF
2.	English	Drisya Dileep	NET
		Parvathy	NET
3.	Physics	Krishnaprasad	NET
		Smitha	NET
		Manu	NET
4.	Zoology	Archana K S	NET
5.	Commerce	Krishnapriya	NET
		Reena	NET
6.	Commerce (Self)	Ajeesh Bose	NET
		Alsha Albert	NET
7	Maths	Devika	NET
		Ninu S Lal	NET
8	Malayalam	Viji M P	NET

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

Yes, A counselling centre is functioning in the college. The tutor in charge-cum-counsellor is in charge of a class. Trainings are given periodically to help students to face tests and interviews held by the major recruiting agencies. The cell conducts various academic and career guidance orientation programmes and contact classes for the students in the college. There is also a provision for mentoring and tutorial systems for monitoring academic and personal guidance to the students.

Apart from this personality development classes, motivational classes for academically weak students, and classes for enhancement of moral and ethical values among the students are organised by the counselling cell.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the

Yes, The institute has a structured mechanism for career guidance and placement cell is working in the college to help the students for their future job opportunities. Principal is the Chairperson of the cell and under her supervision a group of teachers are working in the cell to give the students proper guidance.

Following are the functions of the cell

- 1. The cell provides information to student about various courses
- 2. The cell conducts career guidance programmes
- 3. Classes on personality development programmes, skill development programmes and interview techniques are also provided by the cell.
- 4. Campus Recruitment programme are conducted regularly in the college
- 5. The students get details of the employment opportunities and vacancies that arise in various organizations through the notice board and through departments.
- 6. If the recruitment is conducted outside the campus students are directed to the respective institutions
- 7. The co ordinator and faculty members of the department provides training for the selected candidates

Following are the various programmes conducted by the cell

Year	Name of Programmes	No. of candidates
	Orientation Talk	200
2011 – 12	Awareness talk	250
	Orientation talk on Emolument	300
	Group discussion	150

	Interview Techniques	
	Presentation skills	80
	Training in sales & marketing	180
	Exhibition on Higher education in	600
	India	
	Skill development	300
	Career guidance	800
2012 - 13	Interview techniques	250
	Group discussion and interview	30
	C.V. preparation	120
	Awareness talk	250
	Presentation skill	80
	Awareness talk	150
	Group discussion	80
2013 – 14	Bank test coaching programme	120
	PSC coaching programme	180
	UGC-NET coaching	60

List of employers and number of students selected during the last year are listed below:

Year	Name of firm/employer	No.of students selected
2011 – 12	ASAP-skill development executives	13
2011 – 12	Federal bank	2
	KNCHOR	2
	IT	1
	Syndicate Bank	1
	SBT	2
	SBI	1
2012-13	Port	1
2012-13	Vodafone	1
	Manorama	1
	Spices board	3
	Ship	1
	KFRI	1
	Wipro	2

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

Yes, A Grievance redressel cell is functioning under the guidance of the Principal. It includes ten members, among them six are female teachers. The grievance redressel cell conducts meeting once in a month and it helps to keep a cordial atmosphere in our college.

There is an opportunity for solving the student's problems at any time with their tutor. If it is not solved he is directed to HOD and then to the Principal. The cell actively participates in the day to day activities for maintaining a calm and serene atmosphere. It also deals with the issues related to infrastructure, academic, and personal needs of the student. With the guidance and support of management and principal the committee members tackle the problems easily. It also addresses the issues related to students like misbehaviour, use of drugs etc. In short it aims to develop good manners for the future life.

As part of grievance redressal two suggestion boxes are placed in the college one in the college office and other in the library. The grievances of the students are heard and sorted out in the class monitor meeting which held twice a year in the presence of the Principal and IQAC co-ordinator. The college gives immediate attention to the concerned problem of students.

The functions of the Cell are the following

- i) Grievances related to academic matters related to teaching-learning process, assignments, internal marks, and attendance.
- ii) Grievance related to students' basic needs like drinking water, toilet facilities, and green room facilities.
- iii) Grievance related to basic infrastructural facilities like maintenance of class rooms, laboratory, college playground and library facilities.
- iv) The matters related to code of conduct among the students and faculty members are taken up and appropriate actions are taken according to the discussions

The major grievances redressed during the last four years include the following

- 1. Maintenance of college building
- 2. Ensures clean class room
- 3. Providing drinking water
- 4. Improve the services of library, internet facilities and reprographic facilities
- 5. Services of the store for providing the basic materials for the study

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

The college has a discipline committee under women cell for resolving issues related to sexual harassments. The committee consists of a group of lady teachers to check misbehavior towards the girl students.

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

Yes, Anti-ragging cell is functioning in the college. The cell prevents ragging, indisciplined activities by any student or students which cause annoyance, hardship or psychological harm or to raise fear or apprehension etc. This cell also conducts Seminars and awareness classes against ragging and legal issues every year for the students. So far no disciplinary action have been taken towards students.

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

 Cash awards instituted by the PTA in the name of Prof. K.N.Vidyasagaran (former Principal) to final year Botany degree and PG students who secure highest marks in the university examination.

- PTA gives proficiency prizes to the top ranking students of all classes.
- Prof. C. Sivasankaran Memorial cash award instituted by the members
 of the teaching staff to two students of II BA/B.Sc./B.Com. who
 secure highest marks in Part I English in the University Examination
 every year.
- Silver Jubilee Memorial rolling trophy instituted by the B.Sc. chemistry main students to the winner of the interdepartmental quiz competition.
- Silver Jubilee Memorial endowment instituted by the B.Sc. Physics
 Main students for giving cash prize to the students who secure highest
 marks in B.Sc.Physics Main in University Examination
- Cash award instituted by Prof.P.G. Sunanda (former Head, Dept of Zoology) to the students of final year B.Sc.Zoology main, who secures highest marks in Zoology in the University Examinations.
- Prof. M.S.Sugathan memorial cash award instituted by Prof.A.R.Madhurabhashini (former head, Dept of Hindi) to the student of II B.A./B.Sc. who secures highest marks in part I English in the University Examination.
- P.V.Raman (former manager, S.N.M. group of educational institutions)
 memorial endowment instituted by V.R.AjithKumar (former selection
 grade lecturer, Dept of chemistry) to the student who secures highest
 marks in B.Sc. Chemistry main in the University Examination.
- Mr.S.G.Sugeeth Memorial award: Permenant endowment instituted by his parents Dr.K.P. Subhash and Prof.B.Geetha devi (Rtd.Head, Dept of Physics, SNMC) to award a Prize money to the Best outgoing M.Sc.Physics student of the College.
- Cash award instituted by Prof. C.P. Lalitha (former Head, Dept of Economics) to the students of final year M.A. Economics who secures highest marks in the University Examinations.
- Dr. Saravana Rajan offers a comprehensive scholarship programme for the UG students of the college. It is a unique programme envisaging not only financial assistance to the students but also aims at all round

development of personality and abilities of the students. Twenty other backward Hindu students from economically backward families and of good academic merits will be awarded the scholarship.

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

The college has a two tier Alumni association. One is convened in the college which includes all old students. The other is association for old students who is working abroad, named SAGA. There is a tie up between two and they organize programmes together for the society.

The Alumni meeting is conducted every year in the second Saturday of December. Department alumni meet is also held annually. Alumni provide cash awards for the best students every year and honours Ph.D awarded teachers every year. They also honour eminent personalities of Alumni who serve the society best through their profession or position. SAGA also conducts cultural meet, sports meet, nature trips, blood donation camps etc.

5.2 Student Progression

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

Student progression	%
UG to PG	15.72
PG to M.Phil.	44
PG to Ph.D.	1.2
EmployedCampus selectionOther than campus recruitment	2.9 16.8

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

Name of Programme	YEAR		Pass Percentage	
	2011-14	2010-13	2009-12	2008-11
B A English	51	48	52	51
B A Malayalam	63	64	64	62
B A Economics	73	82	86	86
B.Sc. Mathematics	55	79	100	85
B.Sc. Physics	68	79	86	90
B.Sc. Chemistry	86.7	82.14	82.75	84.2
B.Sc. Botany	92	91	85	94
B.Sc. Zoology	97.14	89.66	87.5	97.14
B.Com Taxation	100	91.66	92.85	85
B.Com C A (Model II)	90.32	92.42	87.5	91.2

Name of Programme	YEAR	Pass	Percentage	
	2012-14	2011-13	2010-12	
M A Economics	Result Awaiting	63	75	94
M.Sc. Physics	55	56	56	44
M.Sc. Mathematics	Result Awaiting	58	72	82
M.Sc. Chemistry		78.57	50	64.3
M.Sc. Botany		50	77	57
M.Sc. Zoology		61.10	56.25	62.50
M.Com (S.F)	"	78.57	77	81

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

- The institution facilitates so many infrastructure equipments frequently.
- Each department conducts Bridge course for the 1st year students and counciling for all the students in the college.
- Career oriented programmes like ASAP & Job securing programmes etc. were conducted by English Department
- Coaching for UGC-Net is conducting in the college. NET Mathmatics.

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

A large No. of students from poor family are admitted in this institution. To know their financial and other problems each department is appointed tutors in a classes. Remedial measures are takes to check the students drop outs from the college. The main reasons for the drop out are family problems, financial crisis and psychological causes.

The college has taken a lot of efforts in order to reduce the above problems through the precautionary measures like counciling. parents meeting etc. In the case of psychological problems counciling is an effective method to reduce the problems personal discussions are conducted with the studetrns and parents by the concerned tutors and HODs.

5.3 Student Participation and Activities

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

Sports & Games

To develop student's potential abilities and qualities for sportsmanship, team spirit and physique, college provides sports and games facilities to the Self Study Report of SNM College, Maliankara, Ernakulam Dt., Kerala-2014

students interested and selected students are given training during academic year in the following items:

- Volley ball,
- Kabaddi.
- Ball Badminton,
- Cricket.
- Foot ball,
- Shuttle badminton,
- Judo.
- Best physique,
- Chess,
- Hand Ball & Athletics

Cultural and Extra Curricular Activities

The college union, Department associations, NSS, NCC, Women cell, SreeNarayana study and Research Centre, Arts and cultural club, film clubetc provides platform to exhibit the talents of the students through the Arts and cultural festivals, exhibitions, competitions etc.

NSS conducts cultural festival celebrations, classes regarding social discipline, drug abuse etc, in addition to their routine works such as social works and camps. NCC also develops discipline among students, conducts awareness programmes and affords opportunities for military training. SreeNarayana study centre also conducts regular classes to revive spirituality and increase concentration power of students. They also conducts literary competitions related to it. Women cell conducts food festival, classes & competitions in fabric painting, stitching, flower arrangement, ornament making etc. College union also arranges film festivals, exhibitions, Art & Cultural Festivals, competitions. Each department association also encourages extracurricular activities & conducts celebrations, gives opportunities to proclaim their abilities through competitions, processions, exhibitions etc.

The college union as well as most of the departments separately prepares magazines through which Literary abilities of the students are expressed.

NCC

Blood Donation Camps

Every year NCC organizes blood donation camp to create awareness among students and staff for promoting the need and importance of blood donation. NCC has a blood donation club with ample database of rare groups of students including alumni and they cater to the needs of our neighboring villagers during medical emergencies. Usually it is done in collaboration with NSS and Red Ribbon Club.

AIDS awareness rally

In every year, December 1st, NCC cadets along with NSS volunteers organize an AIDS awareness rally through the neighboringgramapanchayaths for developing awareness among them against the consequences of this dreadful disease and disseminating methods to avoid its spread. Speeches and notices are circulated among the public during the rally.

Anti-Water pollution rally

In 2014-15, a cycle expedition rally was organized through the villages of PallipuramGramaPanchayath for creating awareness against polluting natural sources of water and conserving them. The slogan regarding rationalized uses of water and the conservation of natural sources of water were displayed. The same was explained to the villagers at the main junctions during the rally.

Environment day celebration

Every year, June 5th is celebrated as Environmental Day by NCC in collaboration with NSS, Forest Department and Research department of Botany. Sampling of rare and useful trees are collected from Botany department and forest department and are distributed to students and staff for planting in their households. About 50 saplings are planted each year in the campus. An oath is taken by the students to make them aware, and to protect

these 50 saplings for at least one year during the occasion.

Anti-drug rally

An anti-drug run conducted during November 2014 for creating awareness among students and public against the use of drugs in coordination with State Excise department, NCC units of SNM High School and SNM Higher Secondary School.

Anti-Alcoholic Forum

An anti-alcoholic forum is introduced for giving awareness for the students. Various seminars and talks are conducted in the college in association with the State Excise department. They offer financial assistance for the awareness. This forum also conducts counseling classes for students.

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

Students Achievements:- Non Academic

2013-14

Shiyamol .P.J. II BSc Chemistry-Recitation (Mal), A Grade, MG University youth festival

Vishnupriya II B Com - II Prize

Manorama and federal bank Quiz competition (district level)

2012-13

Binu Sadanandan, I BA Economics Instrumental music ,A Grade, MG University youth festival

2011-12

Aneeja, I BA Economics, Folk dance ,A Grade, MG University youth festival Self Study Report of SNM College, Maliankara, Ernakulam Dt., Kerala-2014

<u>2010-11</u>

Drama First prize, MG University drama fest, Kattapana

Best actress – Athira Krishnan, I BA Economics, MG University Drama fest

Sl. No.	EVENTS	VENUE	ACHIEVEMENT
1	Kabaddi (M)	BCM college Kottayam	First Place
2	Ball Badminton (W)	NSS College , Changanassery	First Place
3	Best Physique (70Kgs)	St Thomas ,Pala	First Place
4	Ball Badminton (M)	NSS College , Changanassery	Second Place
5	Volleyball (W)	University Stadium, Kottayam	Third Place
6	Athletics (Triple Jump -M)	Maharaja College, Ernakulam	Fourth place
7	Cricket (M)		N Z Quarter finals

• 2012-13

Sl. No.	EVENTS	VENUE	ACHIEVEMENT
1	Kabaddi (M)	SNM College, Maliankara	First Place
2	Ball Badminton (W)	NSS College, Changanassery	First Place
3	Best Physique (70Kgs)	Maharajas College, Ernakulam	First Place
4	Ball Badminton (M)	NSS College, Changanassery	Second Place
5	Volleyball (W)	St Xavier's College for Women	Third Place
6	Handball(M)		Participation

• 2011 - 12

Sl. No.	EVENTS	VENUE	ACHIEVEMENT
1	Ball Badminton (W)	NSS H College	First
2	Ball Badminton(M)	NSS H College	Second
3	Kabaddi (M)	St Engg. Kottayam	Second Place
4	Volleyball(W)		Third

• 2010 - 11

Sl. No.	EVENTS	VENUE	ACHIEVEMENT
1	Ball Badminton (M)	NSS H College, Changanassery	First Place
2	Ball Badminton (W)	NSS H College , Changanassery	Second Place
3	Kabaddi (M)	SNM College, Maliankara	First
4	Volleyball		Third

• 2009 - 10

Sl. No.	EVENTS	VENUE	ACHIEVEMENT
1	Ball Badminton (M)	SNM Training College, Moothakunnam	First Place
2	Ball Badminton (W)	SNM Training College, Moothakunnam	Second Place
3	Volleyball(W)		Third place
4	Kabaddi(M)		Third place

	NAMES	CLASS
	RENJU PRIYA K P	I M.Com
	KRISHNAPRIYA M G	II BA ECONOMICS
	SRUTHI N P	III B.Sc ZOOLOGY
	ROHINI K H	II BA MALAYALAM
	SURYALEKSHMI M P	I B.Sc ZOOLOGY
N. N.	AISWARYA K U	I B.Com
INTC	RADHIKA K P	I BA ECONOMICS
BALLBADMINTON WOMEN TEAM	KARTHIKA K K	I BA ECONOMICS
LBA	SURYA ROY	I B A ENGLISH
BAI	LIMA MOHANLAL	II BA ECONOMICS
	NAMES	CLASS
	ANEESH BENNY	III BSc ZOOLOGY
	ALKASIR M K	III BSc BOTONY
	ABIN VARGHEESE	II BSc BOTONY
	JINIL T G	II BSc ZOOLOGY
DI	ARJUN KRISHNA	II BA ENGLISH
ABADDI In team	ALAMEEN S	II BSc PHYSICS
KA]	SHYAMILIN T S	III BA ENGLISH
	DEVADAS K S	IIIBSc MATHEMATICS
	MUHAMMED NIZAR	I BA ENGLISH
	VISHNU C R	I B A MALAYALAM
	SANDEEP V M	III B.Sc BOTANY
	PRAVEEN KUMAR V P	I BBA

BEST PHYSIQUE	NAMES	CLASS
70 CATEGORY	ANSALAM TINU M J	III B A ECONOMICS

M G UNIVERSITY RUNNERS

	NAMES	CLASS
	AKHILESH A P	III BCOM
	ARUN P PRASAD	III BCOM
Z	AKHIL KUMAR K P	I BA ENGLISH
INTC	PRAJITH P P	I BCOM
LBADMINT MEN TEAM	NAVEEN K P	II BA MALAYALAM
BALLBADMINTON MEN TEAM	AKHAY KUMAR K S	III BCOM
BA	VISHNU E B	III BCOM
	VISHNU R VARMAN	III BCOM
	VISHNU GOPAL BABU A	III BCOM
	SAJIL M P	III BCOM

M G UNIVERSITY SECOND RUNNERS

	NAMES	CLASS
	SALU K S	II M.A ECONOMICS
	RAKHEE M G	I M.A ECONOMICS
	SURYA ROY P	II B.A ENGLISH
VOLLEYBALL WOMEN TEAM	LIMA MOHANLAL	II B.A ECONOMICS
VOLLEYBALI VOMEN TEAN	AKHILAMOL M K	I B.A ECONOMICS
VOLI	ASHITHA DEVI K U	III B.Com TAX
	RENJU PRIYA K P	I M.Com
	KARTHIKA K K	I B.A ECONOMICS
	AISWARYA K U	I B.Com TAX
	JENSA C S	II B.Com FIN

INTER COLLEGIATE PARTICIPATIONS

	NAMES	CLASS
	SANDEEP K H	I BSc MATHEMATICS
	ANNESH BENNY	III B.Sc ZOOLOGY
	MIDHUDAS	II BCOM CA
TCS	NAVEEN K P	II BA MALAYALAM
ATHLETICS MEN TEAM	SHYAMILIN T S	III BA ENGLISH
ATH	ARJUN KRISHNA	II BA ENGLISH
	JINIL T G	II B.Sc ZOOLOGY
	AL AMEEN	II B.Sc PHYSICS
	VISHNU PRAD	
	SHARON K P	II B.Sc PHYSICS

	NAMES	CLASS
	RAJALAKSHMI P R	III BCOM
ATHLETICS	SURYAROY P	II BA ENGLISH
WOMEN TEAM	JENSA CS	II BCOM CA
ILAN	LIMA MOHANLAL	II BA ENGLISH
	RAKHEE M G	I MA ECONOMICS
	MEN TEAM	CLASS
	KARTHIK SAJEEV	IIBCOM CA
	ASHIK M	IIBCOM CA
	MINDHUNN DAS T M	IIBCOM CA
CRICKET	AJITHLAL P P	II B.Sc CHEMISTRY
CR	DHILLU C S	II BA ECONOMICS
	EBIN KUMAR K S	IIBCOM CA
	ROSHIN P SHAJI	I B.Sc CHEMISTRY
	PRINCE DICOTHA	IIBCOM CA

SARUN SAGAR	IIBCOM CA
VISHNU SAJEEV	IIBCOM CA
ANWIN SILVIN	IIBCOM CA
RISWAN MOHAMED	II BSc MATHEMATICS
SARANJITH V S	II MCOM
UMASANKAR C J	II MCOM
VISHNU T B	II MCOM
VISHNU K V	III BCOM

	MEN TEAM	CLASS
	C DIL S KUMAR M J	III BSc PHYSICS
	ARUN C M	IBCOM
Œ	ANURAJ M R	III BSc PHYSICS
PHYSIQUE	AMAL JOSE	I B COM C A
	KARTHIK SAJEEV	II BCOM CA
BEST	ASHIK M	II BCOM CA
m	LINTO PAULOSE	I BA ENGLISH
	VISHNU V	I BSC ZOOLOGY
	VISHNU K S	I BA ECONOMICS

OUTSTANDING PLAYERS

SL No	Name	Present Class	Outstanding Performance
1	RENJUPRI YA K.P	I M.com	College Team Captain, Senior State 3rd
2	SURYALE KSHMI M.P	I Bsc Zoo	1) Junior Nationals 2 nd 2) Senior National 3 rd 3) Federation National4 th ,4) Star of Kerala 5) Junior State 1 st 6) A I U participation 7) M.G.Uty. Team Player 8) Senior State 3 rd
3	KRISHNAP RIYA M.G	II BA Eco	 Senior National 3rd 2) Federation National 4th Star of Kerala 4) Junior State 1st 5) A I U participation M G Uni. Team Player 7) Junior State 1st
4	RADHIKA K.P	I BA Eco	1) Junior Nationals 2 nd 2) Senior State 3 rd 3) Junior State 1 st 4) A I U participation5) M G Uni. Team Player
5	AISWARY A K.U	IB.com Tax	 A I U participation M G Uni .Team Player 3) Junior State 1st 4) Senior State 3rd
6	ROHINI K.H	II BA Mal	Senior State 3 rd
7	ANEESH BENNY	III B.Sc. Zoo.	College Team Captain, three Times M G Uni. Team Player
8	ABIN VARGHEE SE	II B.Sc. Bot.	M G Uni. Team Player, Senior State 3rd
9	MUHAMM ED NIZAR	I B A. Eng.	M G Uni. Team Player, Senior State 3rd

10	ARJUN KRISHNA	II BA. Eng.	M G Uni. Team Player, Senior State Participation
11	AL - AMEEN S	II B.Sc. Phy.	Junior State Participation
12	AKHILESH A P	III B.com Tax	College Team Captain, M G Uni. Team Player
13	ARUN P PRASAD	III B.com Tax	M G Uni. Team Player
14	RAKHEE M G	I MA Eco	A I U 2 nd , M G Uni. Team Player
15	ANSALAM TINU M J	III BA Eco	AIU Finalist, M G Uni . Team Player
16	SANDEEP K H	I BSc. Maths	Tripple Jump M G Uni. 4 th Place

Year 2013 - 14

- 1) MEN KABADDI TEAM M G UNIVERSITY GOLD
- 2) WOMEN BALL BADMINTON TEAM M G UNIVERSITY GOLD
- 3) BEST PHYSIQUE 70 KG ANSALAM TINU M G UNIVERSITY GOLD
- 4) MEN BALL BADMINTON TEAM M G UNIVERSIT SILVER
- 5) WOMEN VOLLEY BALL M G UNIVERSITY BRONZE
- **6**) ATHLETICS (TRIPLE JUMP) M G UNIVERSITY 4TH

INTERCOLLEGIATE TEAMS, 2012-2013

M G UNIVERSITY WINNERS

	NAMES	CLASS
	ROSENA JOY	III B A ECONOMICS
	KRISHNAPRIYA M G	II BA ECONOMICS
NO M	SRUTHI N P	III B.Sc ZOOLOGY
IINT	ROHINI K H	II BA MALAYALAM
BALLBADMINTON WOMEN TEAM	SURYAROY P	I B A ENGLISH
LB,	ASHITHA DEVI K U	II BSC CHEMISTRY
BAI	RAKHY V D	III B A ECONOMICS
	JENSA C S	I BCom
	SALU K S	I MA ECONOMICS
	LIMA MOHANLAL	I BA ECONOMICS

	T	
	NAMES	CLASS
	ANEESH BENNY	II BSc ZOOLOGY
	ALKASIR M K	II BSc BOTONY
	ABIN VARGHEESE	I BSc BOTONY
	JINIL T G	I BSc ZOOLOGY
KABADDI MEN TEAM	ARJUN KRISHNA	I BA ENGLISH
BAL	ALAMEEN S	I BSc PHYSICS
KA	VISHNU C R	III BSc PHYSICS
, ,	AKHESH C V	III BSc PHYSICS
	VIVEK T V	III BSc MATHEMATICS
	SREERAJ K D	III BA ENGLISH
	SARATH PS	III BSc ZOOLOGY
	ULLAS	III B.Com TAX

BEST PHYSIQUE	NAMES	CLASS
70 CATEGORY	ANSALAM TINU M J	II B A ECONOMICS

M G UNIVERSITY RUNNER UP

	NAMES	CLASS
	AKHILESH A P	II B Com
	ARUN P PRASAD	III B Com
NO	AKHAY KUMAR K S	II B Com
IINT AM	VICTOR RAJ M V	III B Sc MATHEMATICS
BALLBADMINTON MEN TEAM	NAVEEN K P	II B A MALAYALAM
LB,	AKHAY KUMAR K S	II B Com
BAI	VISHNU E B	II B Com
	VINU P SHAJU	III B A MALAYALAM
	GEEMON M G	III B A MALAYALAM
	MANEESH K P	III B Sc MATHEMATICS

M G UNIVERSITY SECOND RUNNER UP

	NAMES	CLASS
	SALU K S	II M.A ECONOMICS
	RAKHEE M G	I M.A ECONOMICS
 	SURYA ROY P	II B.A ENGLISH
3AL)	LIMA MOHANLAL	II B.A ECONOMICS
VOLLEYBALL WOMEN TEAM	AKHILAMOL M K	I B.A ECONOMICS
OLL	ASHITHA DEVI K U	III B.Com TAX
> %	RENJU PRIYA K P	I M.Com
	KARTHIKA K K	I B.A ECONOMICS
	AISWARYA K U	I B.Com TAX
	JENSA C S	II B.Com FIN

INTER COLLEGIATE PARTICIPATIONS

	NAMES	CLASS
ATHLETICS	VISHNU P SHAJU	III B A MALAYALAM
MEN TEAM	AMAL RAVEENDRAN	III B.COM CA
	ANEESH BENNY	II BSc ZOOLOGY
	CDIL S KUMAR	II BSc ZOOLOGY

	NAMES	CLASS
ATHLETICS	ROSENA JOY	III BA ECONOMICS
WOMEN TEAM	SALU K	I MA ECONOMICS
	RAKHY V D	III BA ECONOMICS
	RAKHEE M G	I MA ECONOMICS

CRICKET MEN TEAM

NAMES	CLASS
KARTHIK SAJEEV	I B Com CA
ASHIK M	IB Com CA
MINDHUNN DAS T M	I B Com CA
AJITHLAL P P	I B Sc CHEMISTRY
DHILLU C S	I B A ECONOMICS
EBIN KUMAR K S	IB Com CA
ROSHIN P SHAJI	I B Sc CHEMISTRY
PRINCE DICOTHA	IB Com CA
SARUN SAGAR	IB Com CA
VISHNU SAJEEV	IB Com CA
ANWIN SILVIN	IB Com CA
RISWAN MOHAMED	I B Sc MATHEMATICS
SARANJITH V S	I M Com
UMASANKAR C J	IM Com
VISHNU T B	IM Com
VISHNU K V	II B Com

KABADDI WOMEN TEAM

NAMES	CLASS
ARATHI K B	I B Com TAX
ASHITHA DEVI	II B Sc CHEMISTRY
AISHA K A	III B A MALAYALAM
JENSA C S	I B Com
GEETHU A K	II B Sc BOTANY
ASWATHY O V	II B Sc BOTANY
ROSENA JOY	III B A ECONOMICS
SARNYA C R	II B.COM CA
RAKHY V D	III B A ECONOMICS
ROOMIYA C RAJAPPAN	I M A ECONOMICS
APARNA P S	II B.Com TAX
KRISHNANDHA GOPI	II B Sc ZOOLOGY

L H	NAMES	CLASS
SIQU	ANSALAM TINU M J	II B A ECONOMICS
HYS	ARUN K P	III B Sc CHEMISTRY
ST P	CDIL S KUMAR	II B Sc PHYSICS
BE;	VISHNU P SHAJU	III B A MAYALAM

	NAMES	CLASS
	JOHN JOSEPH	IB Com TAX
	RAHUL SATHYAN	I B Com CA
	SREEJITH S KUMAR	I B Com
	UNNIKRISHNAN	III B A ECONOMICS
HANDBALL MEN TEAM	BINU SADANADAN	III B A ECONOMICS
DB/	SREEHARI T S	III B Sc CHEMISTRY
IAN	SHYAMLIN	II B A ENGLISH
	AKHIL K P	III B Sc CHEMISTRY
	VINU P SHAJAN	III B A MALAYALAM
	VISHNU T B	III B Com TAX
	SAJITH KUMAR N S	II B A MALAYALAM
	SAMJITH KUMAR N S	II B A MAYALAM
I	1	

MEN KABADDI TEAM WOMEN BALL BADMINTON TEAM BEST PHYSIQUE 70 KG ANSALAM TINU MEN BALL BADMINTON TEAM WOMEN VOLLEY BALL ATHLETICS (TRIPLE JUMP) MG UNIVERSITY - GOLD
 MG UNIVERSITY - BRONZE
 MG UNIVERSITY - 4TH

- 5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?
 - The departments collect feed backs from students as well as parents and necessary action are also being taken accordingly.
 - Feed backs are also collected from outgoing students and other staffs.

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- Suggestions on academic and non academic matters from students and other staffs of the college are also collected.
- A strong and effective PTA which plays an important role in the efficient functioning of college.
- NSS, NCC, Red Ribbon Club, Youth Red Cross, Women Cell, Health & Fitness Club, anti ragging cell, discipline committee etc promotes students aesthetics, intellectual, social, physical, mental and cultural aspects.
- An efficient management which monitor and follow up the progress of the college.
- An alumni association which actively participate on the all round development of the college and also provides necessary suggestions.
- Academic council meetings are regularly conducted and they provides exemplarary help in the curriculam based developments.
- IQAC meetings are also regularly held and they take necessary actions for the overall developments of the college.
- SreeNarayana study & Research centre of the college aims to provide moral education to the students by conducting various value based classes, seminars etc. and it provides a Certificate Course.
- Department Associations help for improving the performance of each departments.
- 5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.
 - Journal of current studies Inter disciplinary Journal published by SNMC.

- College magazine is published under the leadership of the students Union of the college.
- 'Malayanma' Manuscript magazine published by Malayalam department.
- 'Dalangal '_ Manuscript magazine published by Mathematics department.
- 'Poomottukal'_ Manuscript magazine published by Botany department.
- Seminar Journals published by various departments.
- Class bulletin boards.
- blog_ published by English department.
- 'Ambal'_ face book page of Botany department.
- Photography exhibition by commerce department.
- Handloom exhibition conducted by Commerce department & Economics department
- SUPW & ornaments exhibition conducted by Commerce & Self Finance wing.
- Handicraft exhibition& competition conducted by the department of Mathematics.
- Every Department gives Orientation program to Istyear Degree students.

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

Yes - The Student Union is elected every year in the college. A student representative is selected from each classes and then from them Chairman, Vice chair person, General secretary, Arts club secretary, two University Union Councilors, Magazine editor and 5 representatives are selected. Two teachers are assigned as chief magazine editors and two teachers as Staff advisors.

After constituting the Students Union, the activities start with oath taking ceremony. After the inauguration of college union, arts club, and film club, college union conducted arts competition, Painting and pencil drawing competitions, film fest etc. At the time of college day on March, a college magazine is released. The fund for union activities is collected from students at the time of admission.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

Various kinds of academic and administrative bodies are functioning in the college. The main among them are NCC, NSS, canteen committee, health and fitness club, Vivekananda yoga club, student entrepreneurship scheme, IQAC, Discipline committee, Equal opportunity Centre, Ethics Committee, Anti ragging squad, Anti ragging Committee, Library Committee, Women cell, Anti-Alcoholic forum, Association of each department etc.

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

Through the internet and website, the college maintains a close relationship with the previous students who studied in this college. Facebook, Whatzapp, etc. are also utilized by the college for the same purpose. An alumni association is held on 2nd Saturday in December every year. The college also gets an active support from the previous students studied in this college who are working new in abroad, and they have formed an organization named "Saga". It provides scholarship for the top scorers in each year. The students gets some mere scholarship benefits which are granted by Dr. Saravanarajan and the college staff cooperative society which is functioning in this college.

CRITERION VI - GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

Institution vision

The academic community of the college is totally committed for the evolvement of new generation for social reconstruction. Our thrust is on the creation of such youngsters who have learned the skills of working together in the rhythm of compassion and mutual understanding to attain our social goals of liability and equality. They should also have the moral integrity to take the lead flag of social harmony.

Mission

Vision of the college is in agreement with the vision of the Great Sree Narayana Guru to liberate the weak and the oppressed of the society through education of fellow men's lives.

As the college is situated in a village and hence most of the students are coming from rural background with economically weaker sections of the society. As it was established in the name of Great Sree Narayana Guru, his thoughts and values has taken as a base for the foundation of the college. The words of Guru 'Enlightenment through Education' is the motto of the college. The college satisfies not only the needs of the students and the society but also uplifts the traditional values.

The college provides comprehensive education through:

- Value based education.
- ICT enabled teaching

- Career guidance and placement cell.
- INFLIBNET
- Skill development programme
- Computer lab facility for science streams.
- Infrastructural facility
- Organizing seminars and workshops by eminent personalities.
- Women empowerment programme.

The Vision for future:

To impart holistic education to young men and women from all strata of society and enable them to develop as intellectually mature, globally competent, employable, morally upright, socially responsible and spiritually inspired young leaders to serve the society.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The management consists of the Secretary, President, Manager, Executive Committee and Principal. They make efficient plan of action for the successful functioning of the institution. The Academic council of the college is comprising of the Heads of all the departments. All the important decisions relating to academic and non-academic matters are taken by this council. The plans taken by the top management are executed through the Academic council. The faculty members also implement the policy for the benefit of the students.

6.1.3 What is the involvement of the leadership in ensuring:

• The policy statements and actions plans for fulfillment of the stated mission.

Top management holds periodic meetings to keep in flow with the implementation of the action plans. Usually the following positive measures are taken:

- Financial assistance
- Infrastructural facilities: Smart class rooms, Rest rooms, computer labs

- Curricular and extracurricular activities
- > Enrichment programmes for the students
- In co-operation with Sree Narayana Guru Study Centre, arranging necessary lecturers in topics with contemporary relevance.

Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan:

- > The management makes efficient plan of action based on feedback for the successful functioning of the institution.
- The plans taken by the management are executed through the college council.
- ➤ The plans are assigned to the respective committees for implementation.

Interaction with Stakeholders

- The PTA of the college is functioning in an efficient way. PTA conducts General body meetings annually and provides financial assistance to the toppers of each subject. P.T.A. executive meetings are being held periodically.
- Class PTA's provides an opportunity for the interaction between parents and teachers.
- The college has an 'Old Students Association' consisting of the entire students of the college. Ph.D holders are honoured in the annual meeting.
- There is an alumni association of old students in foreign countries called SAGA (SNM college Alumni Global Association). SAGA provides scholarships to highly talented students of the college every year.
- Besides this, alumni association meet is held occasionally in each departments
- ➤ Association of Maliankara Botany Alumni (AMBAL) has started in 2012 and annual meetings are conducting every year in October. A cash award is placed to best students in Botany as a token of encouragement.

Proper support for policy and planning through need analysis, research inputs and consultation with the stakeholders

The PTA functions effectively in the college. It also provides financial assistance for seminars and workshops. Management consults with the PTA

- for proper policy making and planning and implements them on the priority of needs.
- Two research centres are currently functioning in the college and a proposal for sanctioning another one research centre is being processed. The management provides all infrastructural facilities for research centres.
- ➤ In association with PTA and management, the college provides mementos to the staffs who have awarded with Ph.D.

Reinforcing the culture of excellence

- > The faculties are encouraged to pursue research and projects by the management.
- ➤ In order to keep in touch with the recent trends in research and areas of knowledge, National Seminars are being conducted.
- > Students are honored in their merit of excellence.

Champion Organizational Change

The promotions are purely based on seniority.

- 6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?
 - ➤ Based on feedbacks the management and Principal execute plans and policies for the college.
 - ➤ The College council takes important decision including the action plan for the academic year and implemented through various committees formed for the purpose.
 - ➤ The Principal monitors and co-ordinates the day to day running of the college
 - ➤ The Head of the department conducts departmental meetings in order to discuss the policies and plans and in assisting their duties.
 - > IQAC evaluates the implementation of action plans and give suggestions.
 - Financial assistance are provided by the UGC for quality education.

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6.1.5 Give details of the academic leadership provided to the faculty by the top management?

- > Staff meetings are being organised periodically by the management.
- ➤ Regular interaction between the manager and principal helps for the academic progress by assigning responsibilities for the faculty based on their interest.
- ➤ The management encourages the faculties for attending seminars, workshops, conferences and doing research by availing leave.
- Financial assistance is provided to various departments for the conduct of seminars and workshops.
- The management also supports research in various departments by giving financial assistance for infrastructural facilities.

6.1.6 How does the college groom leadership at various levels?

- The Management appoints the senior most teacher as the Principal.
- In each department, the senior most teacher is nominated as the HOD.
- The college council is formed from the HODs and two staff union representatives.
- For the academic and non-academic activities of the college, the Principal appoints teacher co-ordinators. Various clubs are formed with these faculties and student representatives.
- The management appoints a Superintendent as per seniority to lead the office administration.
- College conducts a parliamentary mode of election with the assistance of three staff members, among them one is functioning as a returning officer.
- College union is formed with four staff advisors and student representatives.
- The department associations have a convenor selected from the faculties for organizing various academic and non academic programmes.

- The leadership quality of the students is ensured by organizing various programmes
- 6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

The management and Principal make effective plans for the smooth functioning of the college. These plans are executed through college council, departments and different committees and they are given full authority and freedom for the effective implementation of the programme. The wholehearted participation of the teaching and non teaching staff ensures the successful implementation of the programme.

6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes. A participative management system is encouraged by the institution.

The management along with the principal makes efficient plans for the successful functioning of the institution. These plans are executed through the college council, teaching and non teaching staffs of the college. Respective committees are formed from faculty members and their co-operation with teaching and non teaching staff ensures the smooth functioning of the college activities.

6.2 Strategy Development and Deployment

6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes. The institution had a formally stated quality policy. The aim of the Institution is imparting quality education and moral values to the economically and socially backward students of the region. Through qualitative education, the institution enables the students to realize their full potential. It provides them other qualities like independent thinking, self-reliance, leadership co-operation, expression of cultural talents and social service.

- Lectures, workshops, and seminars on personality development, debates, quiz competitions on various topics are arranged for the selfdevelopment of the student.
- The NCC, NSS units of the college arrange various camps such as blood donation camps, visit to old age homes, hospitals etc. to encourage social service among students.
- The association of various departments arrange various types of best practices such as old age home visit, lunch a day programme road cleaning, medicine collection etc. in order to inculcate co-operation, self-relation, social service among the students.
- Women's cell promoter the activities to build self-reliance, leadership and cultural talents to girl students.
- The college Union arranges the co-curricular and extra curricular activities of the students for cultural talent and social service.
- Innovative techniques using ICT are adopted to import comprehensive learning experience to the students.
- Value education classing, charity auction etc. promote a sense of service in the students.
- The career guidance council has been giving proper guidance to the students for getting various job.
- Inorder to develop quality education, infrastructural facilities are improved.
- Professional programmes, research centres, As AP, Add on Programmes etc. make the institution a centre of excellence.
- The management periodically review the execution and deployment of the stated quality policy with the periodical and the IQAC Co-ordinator and others involved in strategy development.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes, the management has a perspective plan for development. The management plans for the future institutional development as the basis of the stated quality policy of the college.

6.2.3 Describe the internal organizational structure and decision making processes.

In the college the activities such as co-ordination, allocation & supervision are directed towards the achievement of institutional aims. It affects our institution in two ways.

- It provides the foundation on which standard operational procedures and routines rest.
- 2) It ensures the participation of the staff in decision making process which are eventually used for shaping the institutional action.

Organizational Structure of the college consists of

• Managing Council

The managing council consists of representatives from the management, Principal and staff representatives. Major decisions regarding the administrative aspects of the College are taken by this council.

Staff Council

The staff council consists of Principal and head of the departments. All the decisions regarding the academic aspects, the day to day administrative decisions and decisions regarding the discipline of the college are taken by this body.

IQAC

IQAC discusses academic quality related subjects and ensures that a proper academic ambiance is maintained inside the campus.

6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following

Teaching and Learning:

Apart from the traditional methods, the teachers effectively use ICT in teaching and tries to teach the subject by introducing latest developments in various disciplines. The teachers help the learners in academic and non-academic matters ensuring their effective participation in the process. After completion of each module or chapters teachers collect feed back from students. Some of the improvement strategies in teaching learning process are:

- Organizing workshops, conferences and sympsia with joint participation of the faculty.
- Collaborative degree programs
- Human resource development programs by the faculty
- Providing grants and scholarship to students
- Personality development programmes
- Add on programmes
- Remedial teaching
- Internal examinations
- National Seminars

Research and Development

- Many of the faculty members are having their research degrees.
 Besides this eight teachers are pursuing their research. There are five teachers are serving are research guides.
- Faculty is encouraged to get full use of FDP as a part of promoting research.
- PG departments of Botany and Chemistry are upgraded as centres of research by Mahatma Gandhi University in 2011.
- Projects of UG and PG programmes as part curriculum

Many faculty members are very much active in research and they are
publishing number of papers in peer reviewed journals of National and
International repute. Dr. C.N. Sunil, Associate Professor of the
Department of Botany has introduced eighteen plant species new to
science.

Community Engagement

- Organizing blood donation camps
- Free Medical check up for aged ones
- One day for informing and giving precautions against cancer
- Collaboration with excise department conducted class and campaign against the use of drugs and alcohols.
- Use of college grand is permitted for community
- One day meal program to patients in Government hospital
- Cycle rally to create awareness about water pollution.
- Medicine collected by students and teachers are given to Government hospital.

Human Resource Management

The human resource potential of the college which include faculty and supporting staff whose intelligence and capabilities are deployed effectively to ensure smooth functioning of the institution and for the upliftment of society.

Industry Interaction

- Establishment of industry institute interaction cell.
- Organizing workshops, conferences and symposia with joint participation of faculty and industries.
- Participation of experts from industry in curriculum development
- Joint research programmes and field studies by faculty and people from industries.
- Visits of faculty to industry for study and discussion or delivering lectures on subjects of mutual interest.

- Short-term assignment to faculty members in Industry
- Professional chairs sponsored by industries at the institute
- Practical training of students in Industries
- R & D sponsored by industries at the institute.
- Scholarships and fellowships instituted by industries at the institute.
- 6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

From every classes tutors collects feed back of teachers and subjects and the report is handed over to HOD. A summary of the report is given to Principal. It is transferred to college council for evaluation and suggestions for improvement. Principal execute the suggestions and improvement measures via HOD and tutors.

College maintain a record of the feedback and personal contact and is accessible to parents, management etc.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

In the beginning of every academic year, the management calls upon a staff meeting including teaching a non-teaching participation. Every department is given an opportunity to inform the departmental wise needs, suggestions and other facilities required for its well functioning. The management offers ample financial and personal support according to the needs.

- Renovation of old blocks and construction of new buildings
- Beautifying the campus
- Maintenance of college ground

- Renovation of college auditorium
- Campus cleaning
- Providing new furnitures
- Laptops for each department
- Awards given for the achievers at academic/sports level on college day
- Staff representation in Education Committee and Management admission committee
- 6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.
 - Building up of new blocks
 - Purchase of new computers and computer accessories
 - Furnishing the departments
 - Steps for cleaning and maintenance of campus
 - Sanctioning of development fund for departments
 - Appointment of faculty in the place of retired ones.
 - College election at Parliamentary made
 - New facilities for students
 - Digitalizing the Library
 - New seminar hall with AC facility
 - Renovation of college front garden
- 6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?
 - Yes, procedures are underway for getting the autonomous status.
- 6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

In our institution there is a students Grievances Redressal Committee constituted by Principal. The committee consists of 3 teachers nominated by the college council of which one has to be a lady teacher. The Chairman of the college union as well as the Secretary are the ex-officio members of the committee. The committee generally discusses various problems, of the students teachers and non-teaching staff of the college and suggest and implement remedial measures.

In order to address the grievance of the students a 3 level grievances redressal mechanism is envisaged. A student can go to the upper level only if the grievances is not redressed by the lower level.

Level 1 : Department Level : The department cell chaired by the Head.

Level 2 : College Level : College level committee with principal as chair person, HOD of the concerned department and a senior teacher nominated by the college council as member.

Level 3: University Level - Committee constituted by the V.C.

6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

Nil

- 6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort?
 - Evaluation of teachers by student
 - Suggestion box placed in the college for students suggestions
 - Alumnae feed back
 - Parent's feed back
 - Student can offer suggestion through their tutors

Outcome

- Yearwise uniform identification
- Name tag made compulsory
- Parking facility for students vehicle
- Purified drinking water facility in the college
- Tie up with the local kudumbasree unit for the smooth functioning of college canteen

6.3 Faculty Empowerment Strategies

- 6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?
 - One day induction programmes
 - Refresher courses and orientation programmes for faculty members.
 - Training program to reinforces values to faculty
 - Collaboration among faculty members to improve teaching
 - Providing performance feedback
 - Individualized career development plan
 - Providing duty leave for participators in seminars and paper presentation national level seminars, workshop and conferences
 - Management encourages the faculty to serve as resource persons in various seminars and to undertake research activities
 - Two research centres are functioning in the college for the promotion of research.
 - Providing coaching on the use of ICT
 - Computer awareness classes for non-teaching staff
- 6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

- Faculties are sent to workshop and conferences organised by UGC and other institutions
- Regular training program for the entire faculty once in year.
- Motivational and training classes by experts from outside
- Training in MS Office and Salary computation for office staff
- 6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.
 - 360 degree feedback to measure interpersonal skill
 - self appraisal reports are maintained
 - Rating scales representing job related performance continuous such as dependability initiative, output, attitude etc.
 - Teacher collect self-appraisal report/feedback from students and summary of the feedback given to HOD who include his/her own suggestions about teachers and hands it over to the principal. After countersigning, Principal forward the report to the Manager.
- 6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

Management scrutinized the performance appraisal report and decision are taken accordingly to ensure further development. Short comings, if any are informed to the faculty by the Principal. Proper guidance is provided by the management to overcome any draw back.

6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

Other than the schemes implemented by the government the college maintains a welfare scheme for both teaching and non teaching staff. The scheme called Staff Retirement Benefits Scheme (SRBS) collect a fixed amount every month from the staff members. At the time of their retirement this collected amount is used to give a farewell party for the teachers.

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

There is a staff retirement benefit scheme (SRBS) for teaching and non teaching staff to which they contribute a small amount at frequent intervals. The fund is available to the staff at the time of retirement. There is a cooperative society functioning in the college campus with the similar functions of a bank. There are 72 teaching and non-teaching staffs are members in it. It also collects small savings from staff and provide loans upto Rs. 3 Lakhs. It distribute 25% dividend in every year the members. About 80% staff of the college has availed its loan facility at a low interest rate of 9.5%.

Following measures are adopted by the institution

- Appointment of eminent scholars as new faculty Six of the newly appointed teachers are Ph.D. holders
- Academic freedom is given to all teachers
- Institution provide well furnished departments which contains computers, free internet access and other necessary provisions.
- Faculty are encouraged to use their expertise as resource persons

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

The top level organ of our management consists of Secretary, President, Manager and Executive Committee members with great administrative skill. Out management has a black and white idea about the financial management affairs of the institution. All the payments related to purchase/construction is made through manager. The PTA fund, UGC grant payments, TA/DA to resource

person etc. is made through principal as the authorized signatory. The policy concerned with the financial management refers to the efficient and effective management of money (funds) in such a manner as to accomplish the objectives and vision statement of out institution. It is concerned about both long term budgeting and short term resources of the institution. To monitor the utilization of funds, a financial planner (Finance Manager) has been appointed by our management.

The major purchases of out institution are managed by different committees A purchase committee has been established for independent review and evaluation of purchasing documentation. Its role is to recommend the most appropriate supplier or service provider based on price, quality, stock availability etc. We have also ensured the presence and supervision of the management in a democratic manner.

The UGC funds have been effectively monitored by the UGC Coordinator. A clear and genuine distribution of the UGC funds to various department/office/ Library has been done by the Coordinator. He is also maintaining its account for verification by UGC and for external audit.

The college has a purchase committee for purchase of equipments using funds of UGC and other external agencies.

The work done by the Purchase Committee

- => To analyse the quotations provided by the suppliers
- => To ensure that all documentations are accurately completed.
- __ To request technical input from relevant staff as required.
- => Ensuring transparency, accountability and fairness in the procurement process.
- => Involving in the evaluation discussion
- => Ensuring that the Quote Evaluation from (QEF) is completed accurately.

- => Ensuring that samples are available for review if relevant and are returned to unsuccessful bidders.
- 6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

Our internal audit teams are providing independent assurance concerned with the risk management, governance and internal control processes of the institution. These internal auditors are fundamentally important to the survival and prosperity of our institution. The internal audit documents are being submitted to the principal periodically.

Internal audit of various purchases with the support of management funds are performed on a continuous basis. Before the external audit out internal audit team will examine the UGC purchases carried by the UGC purchase committee. At the end of academic year the different stock holding of office, Library and departments are also being conducted by the team of internal auditors.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

Under the Govt. aided scheme, the college is acquiring financial support (salary grants) from the state Govt. of Kerala for paying the salary to faculty members and office administrative staff. The governmental funding is also extended for maintenance and for purchase of books.

The lion's share of institutional funding is contributed by the self-financing courses of our college, UGC and state Govt. are the next two funding agencies respectively. For the better functioning of the self-financing department we have recruited may talented human resources to that segment

for the proper management. The major share of the income which comes from that department is utilized for the salary of teaching and non -teaching staff. It acts as a financial incentive to them. This fund is also utilized for creating a sound infrastructure for the better teaching - learning to the self-financing students.

The management meets the expenses for the salary of additional support staff for the effective and smooth sailing of the college. Amounts accumulated over the years are employed for construction and restructuring of buildings, and for extending support facilities and services for the whole staff and students. The deficit needed for many of our proposals are availed from the Management Fund of HMDP Sabha. From 2013 -14 onwards the department of Commerce have been started an add-on programme in collaboration with Tax Study Eentre, Ernakulam. As per the agreement with that franchise we are eligible to 25% of the total fees collected from the students. With the support of our management we are employing this amount for the welfare of college and also the Commerce Department.

The major sources of institutional receipts and funding are

- => State Govt. Grant (by salary)
- => State Govt. (by scholarship)
- => Books and journals fund
- => Maintenance fund
- => Students Fee.
- => PTA Contribution
- => UGC Grants
- => PD Account
- => Self-financing Programmes
- => Fund raised through Add on programme organized by Dept. of Commerce

- 6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).
 - => Efforts taken by the Alumni Association for funding for the renovation activities of the institution.
 - => Additional financial Assistance from the management of HMDP Sabha on various activities
 - => The expenditures regarding computer maintenance, seating arrangements in seminar hall, High power generator, etc. are frequently provided from the management fund.
 - => College had applied for additional grant from UGC
 - Add on programme organized by the Dept. of Commerce had paved another internal source of income to the college. The surplus shared between the college and the franchisee is used with the permission of the management.

6.5 Internal Quality Assurance System (IQAS)

- **6.5.1** Internal Quality Assurance Cell (IQAC)
- a. Has the institution established an Internal Quality
 Assurance Cell (IQAC)? If 'yes', what is the institutional
 policy with regard to quality assurance and how has it
 contributed in institutionalizing the quality assurance
 processes?

Yes. The prime task of IQAC is the development of conscious, consistent and catalytic improvement in the pervasive performance of our college and to channelize all efforts and measures of the institution towards promoting its holistic academic excellence. Since quality enhancement is a continuous process, the IQAC is a part of our institution's system to work towards realizing the goals of Total Quality Management in the teaching-learning process of 21st century.

Functions - SNMC-IQAC

Some of the functions of SNMC IQAC are

- => Development and application of quality benchmarks/parameters for the various academic and administrative activities of the college.
- => Dissemination of information on the various quality parameters of higher education.
- => Imparting knowledge and expertise to the faculty members with regards the themes of various issues and promotion of QC (Quality Circles)
- => Documentation of various activities leading to quality improvement.

Strategies - SNMC-IQAC

IQAC of our college evolves mechanisms and procedures for :

- => Ensuring timely, efficient and progressive performance of academic, administrative and financial task
- => Optimisation and integration of modern methods of teaching, learning and evaluation.
- => Ensuring the adequacy, maintenance and functioning of the support structure.

Benefits Derived-SNMC-IQAC

IQAC of our college facilitates and contributes to:-

- => The enhancement and integration among the various activities of the institution and to institutionalise many good practices.
- => Providing a sound basis for decision making to improve institutional functioning
- => The betterment of internal communication.
- b. How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?

Following decisions of IQAC have been approved by the management and were implemental during the last four years.

- Conduct seminars and workshops by all the departments in our college.
- ❖ Add on programme in Dept. of commence.
- ♦ New UG Courses -BBA, B.com (Office Management and secretarial practice) B.com Taxation (SF), B.Com(CA)
- ❖ Purchased new gadgets i.e. computer, laptops, LCD Projector etc.,
- Support for Research activities
- * Roof mount LCD Projectors in some class rooms.
- ❖ Audio-Video facility in library
- Furniture for staff rooms
- Improvement of toilet facilities.
- Venture for Green campus
- New Name boards of departments, college office, library.
- Orientation programme for freshers in association with departments.
- Wi-Fi connectivity.
- Language Laboratory
- ❖ A smart class room facility with advanced technology of interactive board, mounted LCD projector, speakers etc.,
- * Waste bins for all floors and toilets.
- Give a new face to the college website
- First aid medicine provided to each department.
- Publication of multi disciplinary academic journal named as JOURNAL OF CURRENT STUDIES (JCS)
- Orientation programme to the newly recruited teaching and non-teaching staff
- Provided Mentoring forms to each department.
- Issued Teachers Work Diary.
- Organised campaigning for skill development of youth in association with ASAP.
- Visited old age homes as a part of social responsibility of our college.

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Yes, we have four external members

Mr. Babu is a representative of the present PTA who provides valuable suggestions for the better functioning of our college. As he is working in Excise Department he delivered many awareness programmes on drug abuse, narcotics etc.,

d. How do students and alumni contribute to the effective functioning of the IQAC?

The students and Alumni give many valuable suggestions for quality enrichment of our college. The feedback given by them have been very much helpful for the smooth functioning of IQAC. Students councils are working as an organ of students representation of IQAC.

The Alumni Association working under the Leadership Mr. Vinod and Dr. Kishore gives us many valuable and healthy suggestions for improving the social commitment of IQAC by providing a plan of free one day lunch for the patients and bystanders in the nearby govt. hospital

e. How does the IQAC communicate and engage staff from different constituents of the institution?

The IQAC convenes meetings with the representatives from the faculty members and discusses various topics i.e. unit level plans and the proposals forwarded by the staff council and general staff. The librarian and office superintendent are the representative members from the non-teaching staff. Major decisions and plans of IQAC are discussed in the council and they will give necessary advices for implementation of the programme.

Staff members are informed of executive meeting decisions through notices that are circulated to all the departments. The communication to the external stake holders are done through PTA, and Alumni Association. Our website is also providing many valuable information to the concerned stake holders. Our principal takes active role in IQAC by catering an overall supervision and feedback for providing Total Quality Management in IQAC works.

Yes, the college IQAC team provides solid basis for creating a Quality Circle among the teaching and non-teaching staff. The IQAC gives a standardized work format to all the Human Resources working in an organisation. IQAC acts as a brain of creative academic and effective administrative initiatives. All are performed by following the principle of equity and discipline. Finally the principal converts this idea into action by the support of college council.

ACADEMIC:

- => College strictly follows an Academic calendar for getting higher discipline and punctual for their activities. This calendar comprises of 1st June to 31st March (Academic Year)
- => All departments schedule their activities based upon the college calendar
- => All departments are ensuring strict academic schedule for implementing the concerned work load of faculty members.
- => For ensuring dominance in the concerned module, teachers following test paper/unit tests in class room.
- => Department follows the method of providing real life assignments for the students.
- => Internal examinations are scheduled well in advance by considering the revision time to students.
- => Continuous evaluation of assignments and seminars is conducted.
- => The performance of students is reported to their parents on time.
- => Students having attendance shortage are suggested for condonation for appearing University Exams.
- => College has good DQAC work for attaining better results.

- => Providing remedial teaching to those students showing poor performance
- => By the application of a sound academic approach Dept. of commerce attained a 100% result in the university examination (2013-13) It is a real reflection of Total Quality Management approach of our IQAC team.

ADMINISTRATIONAL:

- => The topmost part of the administrative body of the college is the Principal
- => The Supreme decision making authority of the college is college council. It comprises of Principal HOD, Staff representatives, Office Supdt. and Librarian.
- => Superintendent is the supreme person in office, administration and the Head Accountant, UD Clerk, LD Clerk, Typist, Office Assistants and Peons are under the Superintendent.
- => Separate working counters are in the College office for serving the students

The Manager of the College acts as the link between Management Executive Committee and the College. Both the Principal and manager acts as regulators of the College affairs. Proper Communication between manager and the principal makes the academic and administrative work so smooth and handy.

Yes the college has IQAC and various other committees which consists of members of teaching and nonteaching staff for quality assurance of the curricular, Co-curricular, extracurricular and administrative activities.

=> The IQAC collects information from the various committees, based on which it proposes comprehensive plans for effective implementation. The qualitative aspects of the academic programmes are mentioned by IQAC.

- => The college formulates various working bodies for managing cocurricular and academic activities. These bodies are vested with the responsibility of implementation innovative and academic activities in the college.
- => The principal makes a perfect monitoring and ensures better execution of the plans. This ensures, a transparency in the process.
- => The efforts of administrative activities are monitored by the principal and the Office Superintendent.
- => IQAC has its own mechanism for collecting information either directly or through feedback system.
- => The principal submits the suggestions that arise in the meeting to the College Manager. Manager will take decision after the proper consultation with executive committee of the Management.

6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

Yes. For the fruitful performance of the staff members, the college has taken necessary steps for training them properly to cater the needs of 21st century to the students and their stakeholders. For the execution of the quality awareness programme, the college has taken decisions in it's staff meeting with a democratic discussion about the programme. Training have been given to the non-teaching staff of the college.

The College has arranged an awareness and orientation programme to the newly developed teaching learning process in higher education. It is helpful to them for acquiring knowledge about the higher education with special emphasis on NAAC, IQAC, DQAC etc., workshops are conducted for enriching communicative and other soft skills. All these training are very much helpful to improve their morale and skills.

6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

The college takes all necessary steps to work according to the academic calednder and teaching plan which is circulated among the students at the of every academic year. For implementing this in an effective manner, Principal and HOD conducts an Academic Audit. Principal verifies the academic records.

Analysis of results of internal and external exams are carried out regularly. The HOD's, IQAC and staff council monitors these activities with necessary support from the principal.

The University exam final results are the ultimatum to measure the academic performance of the college. Academic audit is also conducted.

6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The internal quality assurance mechanisms is aligned with the requirements of the relevant external agencies such as Mahatma Gandhi University, UGC, NAAC, Govt of Kerala and Department of Higher Education.

The internal quality assurance mechanisms IQAC was formed in accordance with the directions of UGC and NAAC. Proper interaction with Mahatma Gandhi University ensures the incorporation of state Governments suggestions and

The college follows the rules of Higher Education department in the matters of workload, number of students per division, student teacher ration allocation of optional papers, subjects etc. The college strictly follows the syllabus prescribed and rules of admission as well as exam schedule by

Mahatma Gandhi University. Valuable suggestions from alumni has also helpful to IQAC.

6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

The teaching -learning process is facilitated through qualified, trained and experienced faculty with support from office staff. The perfection and effectiveness of teaching-learning process is reviewed in a number of ways.

- => Attendance in class
- => Class interactions/Seminars/Debates
- => Assignments/Class tests/project
- => Participation in curricular, extra curricular and extension activities.
- => Results in activities as well as exams
- => Feedback from students

Methodologies of operations are as follows:-

- => Preparing academic calendar and teaching plans
- => Internal examinations/Class tests
- => Arranging extra classes in Saturdays and holidays
- => Remedial coaching classes for poor performing students.
- => Maintaining work diary by faculty members
- => Special attention to weak students
- => Encouraging the students to handle seminar with the support of PPTS
- => ICT enabled teaching process. Some of the classes are equipped with mounted projector for transforming the classes into a modern way.

The institution has the following mechanisms to measure and review the teaching learning process, they are :

a)=> Academic Council

b)=> IQAC Committee

c)=> Principal's meeting with the staff.

The Heads of the department take the responsibility to make sure that the academic calender is strictly followed by the staff and the syllabus is completed on time. PTA meetings are conducted regularly and the attendance of students is collected and remedial actions are taken for smoothening teaching-learning process. The college also has an internal examination team. It will ensure the smooth functioning of exams on time and handover the mark list to the Principal.

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The college communicates its quality assurance policies, mechanisms and practices to internal stakeholders (i.e. staff & students) through various platforms like staff meetings, various committees and college activities. The college conveys its quality assurance policies to the external stakeholders and Management through Development Committee meetings, Alumni Association meetings and through parent-teachers Association meetings. The college calendar, notice board and college website are also used for communication of quality assurance policies.

The college continuously looks for opportunities leading to continuous improvement in total quality management system. Data from various sources are collected, analysed and actions are initiated. The reviews are

- => Quality policy, Quality Objectives and its monitoring
- => External Audit findings
- => Internal Audit findings
- => Review meetings from Management

- => Remedial and Preventive action
- => Students feedback
- => Parent's/Guardian's feedback
- => Alumni's feedback
- => Under the leadership of Department of commerce the college has started a new programme in collaboration with TAX STUDY CENTRE, Ernakulam. It acts a new academic exposure to the commerce students and a new source of income to the college.

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1. Does the Institute conduct a Green Audit of its campus and facilities?

The institution is keen to keep the campus clean and green. For this, all departments, especially Botany department and the Nature Club help to monitor and maintain eco-friendly campus and surroundings. The campus has a well maintained garden and is well shaded by trees. Environment awareness campaigns and programmes are conducted by NSS and NCC of the college from time to time to keep the college campus eco-friendly.

- In order to minimise the use of plastics, the students of the department of physics are encouraged to use carry bags made of paper and cloth.
 Classes are also held on decomposition plastic materials.
- Planted a tree every year at different locations in the campus by the department of chemistry.
- Promoted organic farming and collected the crops periodically in suitable season by the department of chemistry.
- Waste bins are provided in UG, PG classes and lab of all the departments.
- Seminar and interdepartmental debate competitions were conducted on global warming, consequences of endosulphan etc.
- Students of the department of chemistry collected rain water, sieved it and used for laboratory purposes.
- Heavy metals like mercury and cadmium are collected in separate containers and disposed of.
- All organic solvents and some reagents are collected, distilled and reused.

- Every year the college garden was beautified and various saplings were planted by NSS volunteers.
- An anti-plastic campaign and campus cleaning programme was conducted by NSS.
- One day workshop for anti-plastic campaign and waste management in collaboration with KIDS, Kottapuram.
- Special days such as world ozone day, world forest day, world water day, world environment day, wild life week are commemorated by organizing seminars, chart and poster exhibitions, processions, street plays etc.

7.1.2. What are the initiatives taken by the college to make the campus eco-friendly?

Energy Conservation

The students are well oriented by the faculty on the conservation of our natural resources. The consumption of electrical energy has been minimized upon the advice. The works using electricity is being done collectively and not individually to save the power. The department of Physics conducted "Save Energy Campaign Programme" for making public awareness on the importance of energy conservation.

Use of renewable energy

Biogas plant facility is available in the college canteen.

Water Harvesting

A huge rainwater harvesting system is implemented by the college. Students are aware of the need of harvesting the rainwater and they are digging mall ditches or puddles within their home premises to keep the water settles down in earth.

Check dam Construction

Nil

Efforts for Carbon Neutrality

Planting trees is the only mode of conserving our mother earth. For which a campaign has been conducting every year on the occasion of world environment day and the programme sustains till next environment day.

Plantation

Several economically and medicinally valuable plants were planted in the premises of our College. In order to make the campus green and shady trees were planted and conserved at different locations of the campus which in turn reduce environment pollution.

Hazardous Waste Management

Different types of contagious and non-contagious waste from laboratories of various departments are segregated and disposed of following standard waste disposal guidelines.

E-Waste Management

E-Waste were collected from different departments and sold to suitable shops.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

• Aids awareness rally: A rally was conducted by the NCC unit of S.N.M College, Maliankara among the villager's of Vadakkekkara Grama Panchayath for creating an awareness regarding the deadly disease Aids. 100 NCC cadets participated in the rally. Placards with messages regarding the various aspects of spreading of AIDS and the methods to be followed for avoiding its spread were displayed by students in their mother tongue. Red ribbons were distributed among the villagers for

spreading the message. Help from local police officers were obtained during the same.

- Anti water pollution cycle rally: A cycle expedition rally was conducted among the villagers of Cherayi and Vadekkekkara Grama Panchayath for creating awareness against polluting water sources. 20 Boys and 6 girl cadets of NCC started off at 9.30am from the college portico. Placards carrying messages for protecting sources of water were displayed on cycles. Rally went through the villages and had a halt at Cherayi beach.
- Mobile lessons: As part of reinventing the present teaching-learning process the Department of English has framed innovative mobile lessons which can be easily transmitted to the students.
- Plantation of Critically endangered tree species: Critically endangered tree species included in the red data book" Syzigium travencorium" is planted by the Botany department in front of the college as a mark of our motto of conservation of natural resources. Besides several economically and medicinally valuable plants were growing in the premises of our department.
- Nattuppookkale Ariyan: Botany Department organized a
 programme in the name of Naattupookkale ariyan (Know your
 indigenous flowers) to aware not only for botany students but for the
 students of other departments on what are the flowers in our premises.
 This has made good attention to the entire student community of our
 college
- **Karunyasparsham**: This is a programme organized by the department of Physics to evoke moral values and social commitments among students. As part of this programme the students are made to visit old

- age home every year. They are given an opportunity to interact with differentially abled children.
- Reading Week: In collaboration with college library the English
 department introduced new books with innovative concepts to the
 students and to encourage them to read more books.
- Computer Literacy Mission: Department of Mathematics organized a workshop on basic computer lessons for Kudumbasree members.
- The Department of Physics invites students of the neighbouring schools every year and they are given classes and demonstration of experiments based on their syllabus to create interest in physics and motivate them for higher education.
- Water quality testing from local places in and around Maliankara was done by The Department of Chemistry.
- Special fitness training and guidance are given for the college staff and students.
- Aerobic dance programme are provided for the students and college staff.
- Inorder to minimise the use of plastic the students of the Department of Physics are encouraged to use carry bags made of carry bags made of paper and cloth. Classes are also held on the decomposition of plastic materials. One day workshop for anti plastic campaign and waste management in collaboration with KIDS Kottappuram was conducted by N.S.S
- Training was given to Degree and P.G students in jewellery making and glass painting which will help them to find money for their education.
- Students of the Department of Chemistry managed to distribute lunch packets to the people in nearby hospitals once in every month. Each class takes turn in contributing the lunch packets. This made the students to keep their eyes and heart open to the needs of our fellow beings.

7.3 Best Practices

7.3.1 Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.

Presentation of Practice-1

1. Title of the Practice: 'Sree Narayana Study and Research Centre'

2. Goal

Describe the aim of the practice followed by the institution. Brief the underlying principles or concepts

Sree Narayana Study and Research Centre established **in 2000** is a cultural and research organization intended to give general awareness to students in topics of common interest and help them to study and conduct research on the Teachings and Philosophy of Sree Narayana Guru. It helps to develop a secular outlook among the students through various programmes. A Value Based Education based on the principles of the Guru is propagated via its certificate course.

The reading corner in Study Centre gives a holistic outlook of the philosophy and teachings of the great social reformer, Guru. It inspires the students to propagate values of universal brotherhood and nonviolence and progress of the humanity

The centre also provides a golden opportunity for the local people to listen the various classes of veterans on the principles laid by Guru and how it is applicable in the 21st century.

Yoga class conducted by the centre helps the participants to feel more energetic, happy and peaceful.

In short, the Sree Narayana Study and Research Centre serve as a panacea to instill pride and self confidence in the minds of the downtrodden and outcasted sections of people,and also to the young minds of the 21st century

3. The Context

Describe any particular contextual feature or challenging issues that have had to be addressed in designing and implementing the Practice.

In the modern materialistic world, where values are deteriorating and where students are getting more and more self-centered, it is really a challenge to catch the attention of younger generation towards a value-based and ethical life. In the present semester system the teachers are not getting enough time to address these moral and ethical issues related to the students.

The strategies adopted by the college to face the challenges are-

- The centre conducts classes on convenient Saturdays
- As an encouragement for the students cash awards and prizes in the form of books are given to the toppers of the course. Various competitions on 'Guru Darsanam' is also conducted to attract the students.
- Further discussions related to the above mentioned topics are conducted frequently among the students.
- 4. Describe the Practice and its implementation. Include anything about this practice that may be unique in the Indian higher education. Please also identify constraints or limitations, if any.

A certificate course is running under the study centre to promote students basic and fundamental qualities as truthfulness, co-operation universal brotherhood love and companion each year **since 2000.**

Library in the centre helps the young students to learn the changing values of the society. It enables the students to analyse the characteristic attributes of modern values and significance of traditional values in the development of individual and society.

As an extension activity, Sree Narayana Jayanthi is also celebrated along with the other institutions under this management each year. Various

competitions like essay writing, drawing, recitation of the works of guru, quizzes etc are also conducted. Prizes are given to the winners. A talk on Sree Narayana Darsananam by an expert is also held on the same day.

The college begins each day by chanting the Daivadasakam of Guru.

As part of the centenary of Daivadasakam, the members of the college recited the same near the Gurudeva Pavilion.

5. Evidence of Success

Provide evidence of success such as performance against targets and benchmarks and review results. What do these results indicate?

- The centre has got 225 books regarding Sree Narayana Guru from a well wisher of the college as a contribution to the library.
- The centre enables its members to possess the capacity of moral reasoning appropriate to their age and to develop ability to resolve value conflict.
- Discussion on various topics is also held in open spaces in the college.
- Yoga classes help the students to grow up into integrated personality and to be healthy physically, mentally and emotionally.
- Participation of the local people in different classes on the teachings of Sree Narayana Guru is also a great success of the centre.

6. Problems Encountered and Resources Required

Please identify the problems encountered and resources required to implement the practice.

Problems Encountered

Excess of materiality and lack of the genuine search of spirituality in the modern world reflects in the newly burgeoning young generation also. The teachers find it hard to attract them towards these realms of wisdom and inward journey. Due to the semester system the teachers are facing the most difficult

challenge. They are not getting enough time for its activities. Limitation of proper fund for the smooth running of the centre is another challenge.

Resources Required

- Human Resources for classes
- Fund for arranging classes.

7. Notes (Optional)

Any other information that may be relevant and important to the reader for adopting/implementing the Best Practice in their institution.

The centre began its activities only as an academic one, but now it has gained much regularity as a centre of moral and social empowerment. It also propagated Sree Narayana Darsanas to the young generation. The yoga classes helps for the harmonious development of body mind and spirit.

Presentation of Practice-2

Title: Women Empowerment Programme

Objectives of the Practice:

The programme mainly aims at empowering lesser privileged women through skill development and counseling and bringing them to the main stream of the society. The main objectives are

- to give career oriented and technical education to the under privileged women to make them self dependent
- to counsel and motivate women to lead a dignified life
- to make women aware of their legal rights and social responsibilities
- to contribute to national development
- to stand against social inequalities.
- to create a mental climate for ensuring gender equity.

The Context:

S.N.M college, Maliankara is a co-ed college with the majority of girls. Most of the students are coming from financially backward families. The college is situated in a rural area which is densely populated. Majority of the students lack exposure to the modern world. They are brought up in a traditional atmosphere which demands them to remain within the boundaries of the family. Most of the female students are in a pathetic condition which limits their growth and development. In Contemporary society, the students are highly ignorant about the problems of the society where they live in. So there arises a necessity for making them realize the importance of women empowerment.

Various programmes are organized by different departments of the college, NSS, NCC and Women cell to equip lesser privileged women with skills which enable them to become economically independent and gain confidence. Apart from this, various enrichment programmes are also provided which help them in their future life.

The Practice:

The college is carrying out it's women empowerment programme through various units. With an aim to make each and every woman active in different areas, the college has formed the women cell. The NSS and NCC units are also very active in bringing the female students to the forefront of the society. All this units are actively enganged in co-ordinating various programmes for counseling and skill development to women from lesser privileged sections of the society.

Skill development: Various skill development classes are offered to the female students which helps them to make an earning during their courses. Vocational training classes like tailoring classes, beautician classes, jewellery making etc. are imparted to help them gain control of their lives and help them to become self dependent. The girls are given training in Fabric Painting, painting, Basic Computer knowledge, Detergent Making etc. Different

competitions like thiruvathirakkali, food fest etc. is also held every year to improve their talents and skill.

Counselling and personality development: The programme also offers various counseling classes which help the girls to cope up with physical and mental challenges. The female students are given a legal awareness class for making them aware of their legal rights and how they can stand against many social issues like dowry ,sexual harrasement etc.which exists in the society. Career guidance classes and personality development classes are also provided to give them better career options. Medical awareness classes are given to all the female students where as the final year students are separately given premarriage classes. Special sessions like yoga class, motivation classes are also arranged regularly which enable the students to cope up with stress and face the modern world with self confidence.

Self protection: Self protection classes are given to our female students which help them to handle risky situations. The classes include several safety tips and rules that women should follow to keep themselves safe. A karate class was arranged to limited number of students to train them in emergency situation to protect themselves. The college is planning to extend the class to all the female students shortly.

Extending women empowerment programme to the society by different departments: With a vision to extend the women empowerment programme to the society several extension activities were arranged by different departments for the public. The programmes include a computer literacy programme by the Mathematics Department and paper bag and soap making classes by Chemistry Department for the Kudumpasree unit. A mini camp was also conducted at HDPY high school, mattupuram for the awareness of women empowerment by the NSS unit.

Evidence of Success:

- The students had gained confidence and a sense of self –esteem
- The training given to students enables them to be economically independent in future.
- The programme had given them the courage to speak for themselves and also for their fellow beings.
- The students had developed a positive attitude towards life despite of the various challenges faced by them.
- The students were now able to handle risky situation.

Problems Encountered and Resources Required:

The major problem encountered was the examination schedule of the university. The U.G and P.G students will have the start of the semester at different times and the examination schedule is also different. To arrange a programme at a time in which all the students are available is difficult. So each and every programme is not contributing to all students equally. Another problem was the lack of co-operation from certain group of students who are not well aware of the importance of this programme in making the students self dependent.

Resources Required

- Human Resources for skill development
- Human Resources for Counselling
- Fund for arranging skill development programmes

Evaluative Report of the Research & Post Graduate Department of Botany

1. Name of the Department : Botany

2. Year of Establishment : 1970

- 3. Names of Programmes/Courses offered: Ph.D., PG and UG
- **4.** Names of Interdisciplinary courses and the departments/units involved:
 - The Department of Botany offers complementary course to Zoology students.
 - Open course (Agri-based Micro-enterprises) to students from Economics, English, Chemistry, Commerce, Mathematics, Malayalam and Physics Departments
- **5.** Annual/ semester/choice based credit system (programme wise): Choice Based Credit Semester System (CBCSS)
- **6.** Participation of the department in the courses offered by other departments:
 - Fifth semester students of the department attended open courses offered by Department of English, Commerce, Mathematics, Malayalam, Physics & Physical education.
- **7.** Courses in collaboration with other universities, industries, foreign institutions, *etc.*: Nil.
- **8.** Details of courses/programmes discontinued (if any) with reasons: Not Applicable
- **9.** Number of teaching posts:

Designation	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	5	5
Assistant Professors	3	2

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil. etc.)

2011-2012

Name	Qualification	Designation	Specialisation	Number of
				years of
				experience
Dr. Suma K.P	M.Sc,	Associate	Ecology, Fungi	31
	Ph.D,M.phil	Professor		
Dr. K.D.Girija	M.Sc, P.hD	Associate	Ecology,	29
		Professor	Phytochemistry	
Smt. P.P. Mini	M.Sc.,	Associate	Pteridology	29
	M.Phil.	Professor		
Sri. T.S. Rajeev	M.Sc.	Associate	Microbiology,	28
		Professor	Biophysics and	
			Microtechniques	
Dr. C.N. Sunil	M.Sc., Ph.D.	Associate	Plant Taxonomy	28
		Professor	& Biochemistry	

2012 - 2013

Name	Qualification	Designation	Specialisation	Number of years of experience
Dr. Suma K.P	M.Sc , Ph.D,M.phil	Associate Professor	Ecology, fungi	31
Dr. K.D.Girija	M.Sc, P.hD	Associate Professor	Ecology and Phytochemistry	29
Smt. P.P. Mini	M.Sc., M.Phil.	Associate Professor	Pteridology	29
Sri. T.S. Rajeev	M.Sc.	Associate Professor	Microbiology, Biophysics and Microtechniques	28
Dr. C.N. Sunil	M.Sc., Ph.D.	Associate Professor	Plant Taxonomy & Biochemistry	28
Dr. C.M. Sreejit	M.Sc., Ph.D.	Associate Professor	Phytochemistry &Ethnobotany	18
Dr. M.G. Sanilkumar	M.Sc., Ph.D.	Assistant Professor	Phycology & Wetland Ecology	1
Dr. E.C. Baiju	M.Sc., Ph.D.	Assistant Professor	Forest Ecology and Phytochemistry	1

2013-2014

Name	Qualification	Designation	Specialization	Number of years of experience
Dr. K.D. Girija	M.Sc., Ph.D.	Associate Professor	Phytochemistry &	30
			Ecology	
Smt. P.P. Mini	M.Sc., M.Phil.	Associate Professor	Pteridology	30
Sri. T.S. Rajeev	M.Sc.	Associate Professor	Microbiology,	29
			Biophysics and	
			Microtechniques	
Dr. C.N. Sunil	M.Sc., Ph.D.	Associate Professor	Plant Taxonomy &	29
			Biochemistry	
Dr. C.M. Sreejit	M.Sc., Ph.D.	Associate Professor	Phytochemistry	19
			&Ethnobotany	
Dr. M.G.	M.Sc., Ph.D.	Assistant Professor	Phycology & Wetland	2
Sanilkumar			Ecology	
Dr. E.C. Baiju	M.Sc., Ph.D.	Assistant Professor	Forest Ecology and	2
			Phytochemistry	

11. List of senior visiting faculty:

- Mr. Siju John Mathai, Agricultural Officer, State Seed Farm, Aluva, Ernakulam District
- **Dr. Rejil T.** Marine Biologist and Section Officer, CUSAT, Ernakulam
- Dr. Amithab Bachan, Director, Western Ghat Hornbill Foundation
- **Dr. Sujanapal, P.**, Scientist C., Kerala Forest Research Institute, Peechi, Thrissur
- **Dr. Remasree.A.B.**, Deputy Project Director, Centre for Medicinal Plant Research (CMPR) under Kottakkal Arya Vaidyasala, Kottakkal, Malappuram
- Dr. Prasad V.P., Senior Scientist, Botanical Survey of India, Pune
- Dr. Madan Mohan, Scientist, Central Silk Board, Palakkad
- **12.** Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

Year	Name of temporary faculty	Lectures delivered	Practical classes
	Smt. Simi. M.S.	10%	10%
2010-11	Smt. Jyothi K.J.	10%	10%
	Smt. Neethu	10%	10%
2011-12	Smt. Simi. M.S.	10%	10%
2012-13	Smt. Neethu N.D	10%	10%

2013-14	Smt. Neethu N.D	10%	10%

13. Student - Teacher Ratio (programme wise):

UG= 8 students/faculty

PG= 3 students/faculty

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled.

Sanctioned: 5 Filled: 5

Lab assistant : 3
Herbarium Keeper : 1
Gardener : 1

15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ MPhil/PG.

Ph. D – 04 + One faculty submitted thesis;

M.Phil - 01

PG - 01

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Major Project: 1

Minor Project: 1

Major Research Projects – ongoing/ sanctioned

Sl No	Name of the Faculty	Topic of Research	Funding agency	Grant received
1	Dr. C.N. Sunil	Studies on flowering plant	UGC	Rs.8,75,800/-
		diversity of Ernakulum		
		district		

Minor Research Projects – ongoing/ sanctioned

Sl	Name of the	Topic of Research	Funding	Grant
No	Faculty		agency	received
1	Dr. E.C. Baiju	Bioprotective activity of	UGC	Rs.60,000/-
		Syzygium travancoricum		
		G. – a rare endangered		
		species of Western Ghats		

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Funding agency	Grant sanctioned	Grand received
UGC	Rs. 14,44,800/-	Rs. 9,35,800/-
FIST	Sanctioned	Not received

18. Research Centre /facility recognized by the University:

Our department has well maintained Research Centre approved by Mahatma Gandhi University

19. Publications:

Dr. K.D. Girija

- Girija K.D. and Remya K. 2013. The effect of different pre-treatments on seed germination in Flacourtia jangomas (Lour.) Raech. Journal of Current Studies.
- Girija K.D., Sreekala and Thara K Simon. Amino acid composition and nutritional value of two species of Podostemaceae of Kerala rivers. International Seminar on Molecular secrets of Plant medicine, Department of Biotechnology, CMS College, Kottayam.

Dr. C.N. Sunil

Peer reviewed Journals

- C.N., Sunil, M.K., Ratheesh Narayanan, M. K. Nandakumar, Sujana, K.A., Jayesh P. Joseph & N. Anil Kumar. Eriocaulon kannurense (Eriocaulaceae), a new species from Kerala, India. International Journal of Plant, Animal & Environmental sciences 3 (2): 116 119. 2013
- M.K. Ratheesh Narayanan, C.N., Sunil, M. K. Nandakumar, Sujana, K.A., Jayesh P. Joseph & N. Anil Kumar. *Lindernia madayiparens* (Linderniaceae) A new species from Kerala, India. *International Journal of Plant, Animal & Environmental sciences* 2 (3):59 62. 2012
- C.N., Sunil, M.K., Ratheesh Narayanan, M. K. Nandakumar, Jayesh P. Joseph, V. Abdul Jaleel & N. Anil Kumar. *Rotala khaleeliana* sp.nov. (Lythraceae), a new species from lateritic of Kannur, Kerala, India.

- *International Journal of Plant, Animal & Environmental Sciences.* 1 (2): 14 16. 2013
- 4. Narayanan M.K. Ratheesh, Kumar N. Anil, Joseph Jayesh P, Sunil C.N., Shaju T. *Impatiens johnsiana* (Balsaminaceae), A new scapigerous Balsam from Western Ghtas, India. *Journal of the Research Institute of Texas*. 6 (1): 113. 2012
- C.N., Sunil, V.V. Naveen Kumar & T.S. Rajeev. Sonerila sreenarayaniana (Melastomataceae), a new species from Ernakulam district of Kerala, India. International Journal of Advanced Research 2(3): 701-704, 2014
- C.N., Sunil, V. Abdul Jaleel, M.K., Ratheesh Narayanan& V. Balakrishnan. 2014. *Lindernia nelliyampathiensis* (Linderniaceae), a new species from Kerala, India. *International Journal of Advanced Research* 2(3): 136 139. 2014
- 7. M.K., Ratheesh Narayanan C.N., Sunil, MK Nandakumar .T., Shaju,VMini KTSatheesh & V.Balakrishnan Sonerila raghaviana sp.nov.(Melastomataceae),a new species from southern Western Ghats of Karnataka,India.International Journal of Advanced Research 2014.
- 8. C.N., Sunil & V.V. Naveen Kumar *Hygrophila polysperma* (Acanthaceae), a new record for Kerala. *Journal of Economic and Taxonomic Botany*. 2014.
- 9. C.N., Sunil, V.V., Naveen Kumar & M.G., Sanil kumar. A new species of Garnotia (Poaceae) from Kerala, India. *Journal of Research Institute of Texas*. 8:519-523, 2014.
- 10. M.K., Ratheesh Narayanan, C.N. Sunil, T., Shaju, V. Abdul Jaleel, M. Sivadasan & A.H. Alfarhan *Rotala dhaneshiana*, a new species of Lythraceae from Kerala, India.. *Phytotaxa*. Accepted

- 11. C.N. Sunil & V.V. Naveen Kumar. 2014. *Thottea adichilthottiana* (Aristolochiaceae), a new species from Ernakulam, Western Ghats, India. *Webbia: Journal of Plant taxonomy and geography*. Accepted.
- 12. C.N., Sunil &V.V., Naveen Kumar. A New Species of *Arundinella* (Poaceae: Panicoideae: Arundinelleae) from Kerala, India. *Webbia: Journal of Plant taxonomy and geography.* 2014. (Accepted).
- 13. C.N., Sunil, A.K., Pradeep & Thoiba Kottekkattu *Tripogon idukkiana* (Poaceae: Chloridoideae), a new species from India . *Phytotaxa*. Accepted.
- 14. C.N., Sunil, M.K. Ratheesh Narayanan, M. Sivadasan, Alfarhan Ahmed & V. Abdul Jaleel. *Eriocaulon vandaanamensis*, a new species of Eriocaulaceae from Kerala, India. *Nordic Journal of Botany*. 2014. Accepted.
- 15. C.N., Sunil, V. Abdul Jaleel & V.V. Naveen Kumar New records of Grasses for Kerala. *Indian forester*. 2014. (Accepted).
- 16. M.K., Ratheesh Narayanan, T., Shaju & C.N., Sunil. A new Species of *Sonerila* (Melastomataceae) from Kerala. *International Journal of Plant, Animal and Environmental science*. 2014.(Accepted)

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- 1. C.N. Sunil & Naveen Kumar V.V. *Spigelia anthelmia* L. (Spigeliaceae): A New Record for Kerala. *Zoo's print*
- 2. C. N. Sunil & Naveen kumar, V.V. *Hemigraphis hirta* (Vahl) T. Anders. (Acanthaceae): A New Record for Kerala. *Journal of threatened taxa*
- 3. C.N. Sunil, M.K., Ratheesh Narayanan, M. Sivadasan & Prameesh, *Arundinella kalindiensis*, a new species from Kerala, India. *Bangladesh Jouranal of Taxonomy*.

4. C.N. Sunil, K.M., Prabhu, V.V. Naveen Kumar, & E.C. Baiju. A striking species of *Justicia* L. (Acanthaceae) from Western Ghats of India. *Kew Bulletin*

PAPER PRESENTATIONS

- C.N. Sunil & M., Sivadasan. 'Aquatic and Wetland Angiosperms of Ernakulam District, Kerala'. IAAT International Seminar at Klyani University, Kolkata on 11 – 13 October.
- C.N. Sunil & V.V. Naveen Kumar. Endemic plants of Western Ghats: A survey from Ernakulam district of Kerala, India. IAAT National Seminar at Nagpur RTM University on 29.12.2013.
- 3. V.V. Naveen Kumar & C.N. Sunil. Diversity of mangroves and its associates in Ernakulam district, Kerala. National seminar on 'Role of Plant systematic in Biodiversity and its Conservation' at Cherthala S.N. College on 05.03.2014.
- 4. V.V. Naveenkumar & C.N. Sunil. Invasive alien plant species of Ernakulam district, Kerala, India. National Seminar cum workshop on Herbarium Technique at K.K.T.M. College, Kodungallur on 24.09.2014

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- 1. C.N., Sunil & M., Sivadasan. *Flora of Alappuzha district, Kerala, India*. Bishen Singh Mahendra Pal Singh, Dehra Dun. 2009.
- 2. M.K. Ratheesh Narayanan, T. Shaju, C.N. Sunil, A.K. Abdul Salam & V. Abdul Jaleel. *Orchids of Wayanad*. Lead Books, Calicut.2013

Dr. M.G. Sanilkumar

Peer reviewed Journals

1. Anit M. Thomas, Sanilkumar, M.G., Vijayalakshmi, K.C., Mohamed Hatha A.A. and Saramma A.V. 2014. *Proboscia alata* (Brightwell) Sandström bloom in the coastal waters off Bekal, southwest India. *Current Science*, 106:1643-1646.

- Anit M. Thomas, M. G. Sanilkumar, K. C. Vijayalakshmi, A. A. Mohamed Hatha, and A.V. Saramma 2014. Dynamic Changes in Bacterial Population and Corresponding Exoenzyme Activity in Response to a Tropical Phytoplankton Bloom *Chattonella marina* Journal of Marine Biology, Article ID 918614, 6 pages http://dx.doi.org/10.1155/2014/918614
- 3. C.N. Sunil, V.V Naveenkumar and M.G. Sanilkumar A new species of Garnotia (Poaceae) from Kerala, India *Journal of the Botanical Research Institute of Texas* 8:519-523, 2014 (accepted)
- 4. Sanilkumar, M.G., Anit M. Thomas, Vijayalakshmi, K.C., Mohamed Hatha A.A. and Saramma A.V. 2012. *Chattonella marina* bloom in the coastal Sea off Mahe, Southwest India. *Current Science*, 103:624-626.
- Sanilkumar, M.G, A.V. Saramma K.J. Joseph and L.B. Cahoon 2011. Monsoon effects on biomass and composition of microphytobenthic diatoms in Cochin Estuary, Southwest India. *Journal of North Carolina Academy of Sciences*, (NCAS, USA), 127:1-12.
- 6. Sanilkumar, M.G, A.V. Saramma and K.J. Joseph. *Vertical distribution of microphytobenthos in Cochin estuary*, 2009. *Journal of the Marine Biological Association of India*, 51:61-68.
- 7. Sanilkumar, M.G, K.B. Padmakumar, N.R. Menon, V.N. Sanjeevan K.J. Joseph and A.V. Saramma 2009. Algal Blooms along the coastal waters of southwest India during 2005-08. *Journal of the Marine Biological Association of India*, 51:69-74.
- 8. Sanilkumar, M.G and K. John Thomas 2007. Indigenous medicinal usages of some wetland/wetland associated macrophytes of the Muriyad wetland, in Vembanad-Kol, Ramsar site, Kerala. *Indian Journal of Traditional Knowledge* (CSIR), 6:365-367
- 9. Sanilkumar, M.G and K. John Thomas, 2007. Fringe plants of Muriyad wetlands (Part of Vembanad-Kol Ramsar site) and its economic importance. *Journal of Economic and Taxonomic Botany*, 31: 123-132.
- Sanilkumar, M.G and K. John Thomas, 2006. Diversity and seasonal variation of algae in Muriyad wetland. (Part of Vembanad- Kol wetlands Ramsar Site). *Journal of Economic and Taxonomic Botany*, 30: 656-666.

11. C.N., Sunil, V.V., Naveen Kumar & M.G., Sanil kumar. A new species of Garnotia (Poaceae) from Kerala, India. *Journal of Research Institute of Texas*. 8:519-523, 2014..

Contributor

Sanilkumar, M.G and K.J. Joseph. Benthic microalgae in Southeast coast of India 2012. In, 'Marine benthic microalgae of India - A monograph' (published by Ministry of Earth Sciences, Govt. of India).

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- 1. Sanilkumar, M.G, Anit M. Thomas, S. Syamkumar, Rosamma Philip, V.N. Sanjeevan and A.V. Saramma 2009. First report of *Protoperidinium* bloom from Indian waters. *Harmful Algae News*, published by the Intergovernmental Oceanographic Commission (IOC), UNESCO, Vol.39.
- 2. Jithesh Krishnan, R and Sanilkumar, M.G, 2009. *Microcystis eruginosa* bloom in a high altitude lake in the Western Ghats of India. *Harmful Algae News*, published by the Intergovernmental Oceanographic Commission (IOC), UNESCO, Paris Vol. 40.
- 3. Padmakumar, K.B., Sanilkumar, M. G., Saramma A. V. Sanjeevan V. N and N. R. Menon 2008. *Microcystis eruginosa* bloom on Southwest coast of India. *Harmful Algae News*, published by the Intergovernmental Oceanographic Commission (IOC), UNESCO, Paris, vol. 37.
- 4. Padmakumar, K. B. Sanilkumar, M. G. Saramma, A. V., Sanjeevan V. N. and N. R. Menon 2008. "Green tide" of *Noctiluca miliaris* in the Northern Arabian sea. *Harmful Algae News*, Published by the Intergovernmental Oceanographic Commission (IOC), UNESCO, Paris vol. 36.
- 5. Padmakumar, K.B., Sanilkumar, M. G., Saramma A. V. and N. R. Menon 2007. A 'Red tide' caused by the diatom *Coscinodiscus* along the Southwest coast of India. *Harmful Algae News*, published by the Intergovernmental Oceanographic Commission (IOC), UNESCO, Paris, vol. 35.

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- 1. Sanilkumar, M.G. and K. John Thomas, 2005. Macrophytes of Muriyad wetlands: Ecological role in relation to rice cultivation and fishing. In: *Aquatic Ecosystems- Conservation, Restoration and Management*. T.V. Ramachandra, N., Ahalya and C. Rajasekharamurthy (Eds.) Capital Publishers, New Delhi pp.174-177
- 2. Sanilkumar, M.G, K.J. Joseph and A.V. Saramma 2013. Distribution of planktonic microalgae along the estuarine and coastal regions of Kerala. In: "Estuaries of India: Biodiversity, Ecology, Conservation and Management, D.V. Rao (Ed.) (ISBN: 978 93 82258 05 6, NBI, Kolkatta) pp 241-270.

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- Sanilkumar M.G., Anit M. Thomas, Padmakumar, K.B, Shyam Kumar S., Mohamed Hatha A.A., Sanjeevan V.N and A.V. Saramma 2010. Blooms of phytoplankton along the near-shore waters of SW India. Paper presented at the National seminar on Indian Ocean Marine Living Resources (INDOMLR) organized by CMLRE, Ministry of Earth Sciences, Kochi. Book of abstracts, pp. 36-37.
- 2. Sanilkumar, M.G, K.J. Joseph and A.V. Saramma 2010. Diversity of phytoplankton along the Southwest coast of India. Paper presented at the 1st Indian Biodiversity Congress (IBC), Thiruvananthapuram, Book of abstracts, p.150.
- 3. Anit M. Thomas, Sanilkumar M.G. and A.V. Saramma 2010. Bacteria associated with *Protoperidinium* bloom. Paper presented at the National seminar on Indian Ocean Marine Living Resources (INDOMLR) organized by CMLRE, Ministry of Earth Sciences, Kochi. Book of abstracts, pp. 36-37.
- 4. Vijayalakshmy.K.C, Shyam Kumar. S, Sanilkumar. M. G, Anit. M. Thomas, A.V. Saramma and V.N. Sanjeevan 2010. Optimization of culture conditions of *Prymnesium parvum* Carter. Paper presented at the National seminar on Indian Ocean Marine Living Resources (INDOMLR) organized by CMLRE, Ministry of Earth Sciences, Kochi. Book of abstracts, pp. 36-37.
- 5. Sanilkumar, M.G, K.B. Padmakumar, N.R. Menon, V.N. Joseph K.J. and A.V. Saramma 2009. Distribution of toxic microalgae along the Kerala coast, paper presented at the National conference on recent developments in cultured algae, organized by OASTC, Andhra University, Visakhapatnam. Book of abstracts, pp. 36-37.
- Sanilkumar, M.G and K. John Thomas 2007. Macrophytes of Muriyad wetland and Implications of the Recent Invasion of *Limnocharis flava*, (L), Buch. 3rd Kerala Environment Congress, held at Thiruvananthapuram, Kerala, Book of Abstracts.
- 7. Padmakumar, K.B. Sanilkumar, M. G., Saramma A. V. and N. R. Menon 2007. Harmful microalgae of the Indian EEZ. 8th Asian Fisheries Forum, Book of Abstracts, pp: 270.
- 8. Sanilkumar, M.G. and K. John Thomas, 2005. *Traditional medicinal usages of some macrophytes of the Muriyad wetland system, in Vembanad-Kol, Ramsar site, Kerala*. Proceedings of the National seminar on Wetland Resources of India. Organized by LAK.

- 9. Harikrishnan, E., Sanilkumar, M.G., Rejil, T., Sivadasan, K.K., Saramma, A.V. and K.J Joseph, 2005. *Marine Microphytobenthos from Southern Coast of India*. Presented at the International Conference on Science & Technology for Sustainable Development, SB College, Changanassery, Kerala. (Abstracts) p.47.
- 10. John Thomas K., S. Sreekumar, K.K Subhash Babu, M.G. Sanilkumar and Raju Varghese, 2003. *Emerging trends of land use practices and its implications on the ecology and species diversity of Muriyad wetlands within the Vembanad-kol, Ramsar Site*. Regional seminar on the Ramsar Site wetlands of Kerala, CWRDM, Kozhikode (Abstracts) p.61
- 11. Sanilkumar, M.G. and K. John Thomas 2002. *Species diversity of Desmids in Muriyad wetlands*. Proceedings of the National seminar on Ecology and Conservation of Wetlands, organized by LAK, pp 89-91.
- 12. Sanilkumar, M.G. and T.V. Ramachandra, 2002. *Riparian vegetation of Saravathi River, Shimoga district, Karnataka (selected sites)*. Proceedings of the National seminar on Current Environmental Problems and Management, organized by Christ College, Irinjalakkuda, pp 43-47.

PAPERS COMMUNICATED

- 1. Anit.M.Thomas, K.C. Vijayalakshmi, Akhil. P. John, Abhijith Muralidharan, M.G. Sanilkumar, A.A. Mohamed Hatha and A.V. Saramma 2013. Occurrence of algal bloom dominated by *Fragilariopsis oceanica* from the coastal waters of Southwest India. Communicated to Harmful Algae News, Intergovernmental Oceanographic Commission (IOC), UNESCO, Paris.
- 2. Sanilkumar, M.G. and K. John Thomas. Macrophytes of Muriyad wetland within the Vembanad Kol, Ramsar site, India: Taxonomic diversity, traditional usages and implications of recent invasion of *Limnocharis flava*, (L), Buch. Communicated to *Asian Journal of Plant Sciences*.

Dr. E.C. Baiju

Peer reviewed International Journals

- 1. Baiju,E.C, T.Jeslin, K.B. Ajaikumar and J.Padikkala. 2014. Free radical scavenging and anti-inflammatory activities of *Punica granatum*, Linn Fruit rind. Journal of Research in Biology (Accepted Proof ready)
- 2. Chandrashekara U.M., Sankaran, K.V. and Baiju.E.C. 2012. Impact of landuse transformation on arbuscular mycorrhizal fungal diversity in the

- Kerala part of Nilgiri Biosphere Reserve, India. Journal of Research in Biology, 2(5):448-459.
- 3. Chandrashekara U.M. and Baiju E.C. 2010. Changing pattern of species composition and species utilization in homegardens of Kerala, India. Tropical Ecology, 51(2):221-233 (IF = 0.768).

National Journals

- 1. Chandrashekara, U.M., Balasundaran, M., Baiju, E.C. and Nishad, V.M. 2011. Combined effect of microbes and earthworms on compost and its influence on crop growth and yield. Journal of Soil Biology and Ecology, 31(1&2): 183-194.
- Chandrashekara, U.M., B. Gowda, R.K. Maikhuri. K.T. Prasanna, M.P. Sujatha, A.N. Sringeswara, B.V. Chinnappa Reddy, E.C. Baiju, A. Rane, B.S. Rajani D. Dangwal, S. Mishra and A.N. Balakrishna. 2009. Characterization of benchmark sites of the conservation and sustainable management of belowground biodiversity project in India, Journal of Soil Biology and Ecology (Special Volume), 1-22.
- 3. Chandrashekara. U.M. and Baiju. E.C. 2007. Plant diversity utilization in homegardens of Kerala: A changing scenario. *Evergreen (KFRI News letter)* No. 59 and 60: pp. 4-6.
- 4. Chandrashekara. U.M. and Baiju.E.C. 2005. Use of News paper for weed management in teak nursery beds. *Evergreen (KFRI News letter)* No. 53 and 54: pp. 10-11.
- 5. Baiju,E.C, T.Jeslin, K.B. Ajaikumar and J.Padikkala. 2003. Antioxidant and anti-inflammatory activities of *Punica granatum*, Linn. *Amala Research Bulletin*, 23: 136-142.
- 6. Ajaikumar, K.B., Asheef, M., Babu, B.H., Baiju, E.C. 2003and J. Padikkala. The inhibition of gastric mucosal injury induced by aspirin and ethanol by *Punica granatum*, Linn. (Pomegranate) methanolic extract. *Amala Research Bulletin*, 23: 153-161.

Papers Communicated

- 1. E.C. Baiju and U.M. Chandrashekara. 2014. Structural and functional characteristics of homegardens of rural Kerala (Communicated in Tropical Ecology)
- 2. Chandrashekara U.M., Baiju, E.C., Sujatha, M.P. and Sabu, R. 2014. Decomposition and nutrient release patterns of singles species and

- mixed species green mulch in a homegarden of Kerala. Journal of Tropical Agriculture (communicated).
- 3. E.C. Baiju and U.M. Chandrashekara. 2014. Phytosociological status of forest ecosystems adjacent to Chaliyar River basin in Nilgiri Biosphere Reserve, India (Submitted to Indian Forester).
- 4. Deepa, T., Sindhu G., Baiju, E.C., Nafer, A., Ajaikumar, K.B. and Jose Padikkala. 2014. Gastroprotective activity of Cyperus rotundus, Linn. against aspirin-induced gastric damage in rats. (Accepted in Journal of Ethanopharmacology).
- 5. Baiju.E.C and Padikkala, J. 2014. Direct shoot organogenesis in *Ophiorrhiza rugosa*, D. Don. from leaf explants, *Current Science* (Accepted in Current Science).

Chapters in Book

 Chandrashekara U.M., E.C. Baiju and Sankaran, K.V. 2011. Mycorrhizal fungal abundance and diversity in different landscape units in the Kerala part of Nilgiri Biosphere Reserve. In: P. Kathireswari . Soil Biota. Ridhi Publications, India

International Databases

- 2. Chandrashekara U.M., E.C. Baiju and Mujeeb Rahman, P. 2008. Landuse transformation and loss of belowground biodiversity An analysis (10). http://www.tsbfsarnet.org/CSM-BGBD/CSM-BGBD-main-links/phaseII.html
- 3. Chandrashekara U.M., P. Mujeeb Rahman and Baiju E.C. 2008. Soil health analysis using earthworms as the indicator Possibilities and constraints (9). http://www.tsbfsarnet.org/CSM-BGBD/CSM-BGBD-main-links/phaseII.html
- 4. Chandrashekara U.M., E.C. Baiju and Mujeeb Rahman, P. 2008.On-farm participatory activities of soil fertility improvement and belowground biodiversity conservation An ex-ante evaluation (12). http://www.tsbfsarnet.org/CSM-BGBD/CSM-BGBD-main-links/phaseII.html

International Proceedings

1. U.M. Chandrashekara and E.C. Baiju. 2005. Site characters and socioeconomic characters of farming community in the Kerala part of Nilgiri Biosphere Reserve, National Workshop on Conservation and Sustainable Management of Belowground Biodiversity organized under

CIAT/TSBF/UNEP/GEF/ JNU/KFRI at Kerala Forest Research Institute, Peechi, (Kerala) during 21-23 June 2005.

National Proceedings

- 2. E.C. Baiju, Aswathy, V. and Lima O.S. 2014. Phytochemical screening and anti-bacterial activity of Syzygium travancoricum Gamble a critically endangered tree species of Western Ghats. In Proceedings UGC Sponsored National Seminar Cum Workshop on Techniques in Biosciences held at KKTM Govt College, Pullut on 18-19 February 2014. 58p
- 3. E.C. Baiju, P.P. Mini and K.J. Arya. 2014. In Proceedings of UGC sponsored National Seminar cum Workshop on Plant Systematics and Herbarium Techniques held at KKTM Govt College, Pullut on 24-25 September 2014,. Diversity and utilization of plant species in homegardens of Lokamaleswaram Village, Kodungallur, Thrissur. 56p
- 4. **Baiju, E.C.** and U.M. Chandrashekara. 2011. Structural and functional characteristics of homegardens of rural Kerala. Proceedings of 23rd Kerala Science Congress, 29-31 January 2011, Thiruvananthapuram, pp 8.
- 5. Chandrashekara U.M., Sankaran, K.V. and **Baiju.E.C**. 2010. Impact of landuse transformation in Kerala on arbuscular mycorrhizal fungal diversity. Proceedings of 22nd Kerala Science Congress, 29-31 January 2010, Thiruvananthapuram, pp 83-85.
- 6. **Baiju, E.C.** and U.M. Chandrashekara. 2008. Ecology and economics of arecanut based mixed farming system of Kerala. In Proceedings of National Symposium on Plant Resources of India: Linking Conservation, Livelihood and Culture, 14-15 March 2008 held at Sri JCBM College, Sringeri, Karnataka, pp. 88-93.
- 7. **Baiju, E.C.** and U.M. Chandrashekara. 2007. Transformation of paddy fields to different landuse systems in Vazhikadavu Panchayat. In Proceedings of 19th Kerala Science Congress, 29-31 January 2007, Kannur, pp 388-390.

(The details of publications are supplemented in the Evaluative Reports of the respective departments)

• Number of papers published by faculty and students in peer reviewed journals: National: 10 International: 18

- 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: 1
- Chapter in Books: 3
- Books edited: 3
- Books with ISBN/ISSN numbers with details of publishers: 1
- Citation index:
- SNIP:
- SJR:
- Impact factor:
- 20. Areas of Consultancy and income generated

Dr.C.N.Sunil

Identification of plants in the Musiris heritage site, Pattanam, Ernakulam

- Identification of plants in the campus of FACT, Karimukal, Ernakulam on World Biodiversity Day
- Identification of wetland plants in some regions of Thrissur district for PhD thesis for Prof.Tomy Francis, St. Alosyius College, Thrissur
- Identification of *Sida* species for the project work in SRM University, Chennai
- 21. Faculty as Members in
 - a) National Committees : Nil
 - b) International Committees : Nil
 - c) Editorial Boards : Nil
- 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 institutions i.e., in research laboratories/Industry/other agencies: nil
- 23. Awards or Recognitions received by faculty and students
- **Dr. M.G Sanilkumar**, Recipient of "Young Scientist Award" at the 3rd Kerala Environment Congress 2007, for the best paper presentation, held at Thiruvananthapuram, Kerala, India.
- **Sri. C.M.Sreejit**, Associate professor was awarded best paper in the National Conference held at Mangalore.2011
- **Smt. Nithya Madanan V** of M.Sc. Botany won the first prize in the project presentation competition organised by Kerala Botanical Society on July 30, 2013 at S.H.College, Thevara.
- **Sri. V.V. Naveenkumar**, Research Scholar of the Department of Botany under the guidance of Dr. C.N. Sunil received Third Prize for the Paper Presentation in UGC sponsored National Seminar cum Workshop on 'Plant Systematics and Herbarium Techniques' held at KKTM Govt College, Pullut on 24-25 September 2014.
- **Ms. Lima O.S.**, Post Graduate student of Botany under the guidance of Dr. E.C. Baiju, bagged the First Prize for the Poster Presentation in UGC Sponsored National Seminar Cum Workshop on Techniques in Biosciences held at KKTM Govt. College, Pullut on 18-19 February 2014.
- 24. List of eminent academician and scientists/visitors to the department
 - Mr. Siju John Mathai, Agricultural Officer, State Seed Farm, Aluva, Ernakulam District
 - **Dr. Rejil T.** Marine Biologist and Section Officer, CUSAT, Ernakulam
 - Dr. Amithab Bachan, Director, Western Ghat Hornbill Foundation
 - **Dr. Sujanapal, P.**, Scientist C., Kerala Forest Research Institute, Peechi, Thrissur
 - Remasree.A.B., Deputy Project Director, Centre for Medicinal Plant Research (CMPR) under Kottakkal Arya Vaidyasala, Kottakkal, Malappuram
 - **Dr. Prasad V.P.**, Senior Scientist, Botanical Survey of India, Pune
 - Dr. Madan Mohan, Scientist, Central Silk Board, Palakkad
- 25. Seminars/Conferences/Workshops organized and source of Funding

a) National : Nil

b) International : Nil

26. Student Profile Programme/Course wise

Year		Applications Selected (both received management Enrolled				Pas percen				
	received			management & merit seats)		UG	J	PG	percen	liagi
									UG	PG
	UG	PG	UG	PG	Male	Female	Male	Female		
2010-'11	CAP	CAP	37	15	8	29	0	15	97	57
2011-'12	CAP	CAP	34	15	8	26	1	14	93	77
2012-'13	CAP	CAP	37	15	8	29	1	14	87	50
2013-'14	CAP	CAP	40	15	5	35	0	15	ı	-
2014-'15	CAP	CAP	37	14	0	37	0	14	-	-

27. Diversity of Students

	Name of	% of students	% of students	% of students
	the Course	from the same	from other	from abroad
		state	states	
2010-'11	PG	100	-	-
	UG	100	-	-
2011-'12	PG	100	-	-
	UG	100	-	-
2012-'13	PG	100	-	-
	UG	100	-	-
2013-'14	PG	100	-	-
	UG	100	-	-
2014-'15	PG	100	-	-
	UG	100	-	-

28. How many students cleared national and state competitive examination such as NET/SLET/GATE/Civil Services, Defence services etc.? – NIL

29. Student Progression

Student progression	Against % enrolled
UG to PG	17.6%
PG to M.Phil	20%
Ph.D to Post Doctoral	Nil
Employed	
Campus selection	Nil
Other than campus recruitment	10%
Entrepreneurship/Self –employment	10%

- 30. Details of infrastructural facilities
 - a) Library A well established departmental library maintained which includes books related to UG, PG and Research curriculum.
 - b) Internet facilities for Staff & Students Department has 6 desktop computers with a High speed Broadband Internet facility for student and staff
 - c) Class rooms with ICT facility 2 class rooms with ICT faculty
 - d) Laboratories Two Research laboratories, 2 PG and 1 UG Laboratories
- **31**. Number of students receiving financial assistance from College, University, Government or other agencies

- **32.** Details on student enrichment programmes (Special lectures/workshops/seminar) with external experts
 - Seminar on Practical Approach To Organic Farming by Mr.
 Siju John Mathai, Agricultural Officer, State Seed Farm, Aluva,
 Ernakulam District
 - Seminar on "Mangroves: AnEcosystem in peril" by Dr. Rejil T.
 Marine Biologist and Section Officer, CUSAT, Ernakulam
 - Seminar on understanding our niche in conservation: An experience sharing byDr. Amithab Bachan, Director, Western Ghat Hornbill Foundation
 - Seminar on biodiversity of Western ghats by Dr. Sujanapal, P., Scientist C., Kerala Forest Research Institute, Peechi, Thrissur

- Seminar on "A Journey through Royal Botanical Garden, Kew, London "by Dr. Prasad V.P., Senior Scientist, Botanical Survey of India, Pune
- Work shop on sericulture by Dr. Madan Mohan, Scientist, Central Silk Board, Palakkad
- **33**. Teaching methods adopted to improve student learning

Power point presentation, conducting regular test papers, remedial teaching for weak students

- **34**. Participation in Institutional Social Responsibility (ISR) and extension activities
 - g. Extension
 - Sri.C.M. Sreejit, Associate Professor, has collaborated with Dr. A.
 Banerji, of Amrita Viswavidyapeedam, Kollam on developing
 indigenous growth regulators (IGR) bio prospected from native
 plants for the benefit of sericulture farmers of the state for augmenting
 silk production. They have collaboration with state sericulture farmer's
 association members of Palakkad district Kerala for evaluating the
 effectiveness of the IGRS and popularising the same among the
 farmers.
 - 2. Conducted training programme on mushroom cultivation and sericulture to Kudumbasree units.
- 35. SWOC analysis of the department and future plans

Strength

There are seven permanent teachers in the department and out of which four are PhD holders. One teacher is research guide. One major research project is ongoing in the department funded by UGC, with one project fellow. Five research scholars are registered for their PhD under Mahatma Gandhi University. All the teachers are in good rapport with students. Attention may be given to promote the extracurricular and research aptitude of student

community An alumini of the department (AMBAL –Association of Maliankara Botany Alumini) is in operation and it is providing financial support to academically brilliant students after considering their economic status every year. The economic status of students is very stumpy as most of them are coming from the family of casual labourers, but still the department is keen to cut short or minimise the utilisation of their own funds especially during field trips as prescribed in their syllabus. Beyond all, the faculty members are keen in uplifting the students those who are having less percentage of marks in the entry level by providing proper additional guidance and support, both financial and material.

Weakness

Sophisticated instrument facilities are pivotal for doing the project work of student

Internet ports are limited to only two; it should have at least five.

Opportunities

It is possible to make the department as the top most research department of the Mahatma Gandhi university. Modern teaching amenities like interactive white boards along with conventional system would provide the students competitive in their higher studies.

Society linked extension and consultancy activities, especially related with environmental and agribased.

Threat

Poor transportation facility will keep away students in future. Water scarcity both for drinking and experimental activities should have been cleared. Lack sufficient funds for improving the laboratory and class room facilities.

Future plan

- Provide practical training in organic farming to the students in the campus.
- Add on Course on Horticulture and Plant Breeding

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Evaluative Report of the Research & Post Graduate Department of Chemistry

1. Name of the department: Department of Chemistry

2. Year of Establishment: 1981

3. Names of Programmes / Courses offered : B.Sc Chemistry, M.Sc Pure Chemistry

4. Names of Interdisciplinary courses and the departments/units involved : Complimentary courses are offered to the departments of Botany and Zoology. Open Courses. The open Course Food Science is offered by the departments to the students of all the other departments

Add-on Courses:- Nil

5. Annual/ semester/choice based credit system (programme wise)

M.Sc: Annual scheme 1999-2001; Semester Scheme- 2001 onwards

B.Sc: Annual Scheme: 1982-2008 CBCSS: 2009 onwards

6. Participation of the department in the courses offered by other departments

Complimentary courses offered by the departments Botany and Chemistry. Fifth semester students attend open courses which are conducted by the departments of Zoology, Botany, Commerce, Malayalam, English, Economics and Physical Education.

- **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: **Total: 9 posts**

sanctioned	Filled
Nil	Nil
9	8
Nil	Nil
1	1
	Nil 9

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil. etc.,) 2014-2015

Name	Qualification	Designation	Specialization	Teaching Experience	No. of Ph.D students guided for the last 4 years
Dr. Sleema.B	M.Sc, M.Phil,	Asso.	Inorganic	33	One
	Ph.D	Professor			
Dr. Beena T	M.Sc, M.Phil,	Asso.	Physical	33	
Abraham	Ph.D	Professor			
Dr. M.K.Joshy	M.Sc, Ph.D	Asso.	Polymer	32	
		Professor			
Smt.E.M.Usha	M.Sc	Asso.	Applied	30	
		Professor	Chemistry		
Dr. Sulekha.P.B	M.Sc, M.Phil,	Asso.	Polymer	27	
	Ph.D, B.Ed	Professor			
Smt.T.R.Honey	M.Sc	Asso.	organic	27	
		Professor			
Dr.Cibi	M.Sc, M.Phil,	Asso.	Polymer	25	Two
Komalan	Ph.D	Professor			
Dr. M.G.	M.Sc, Ph.D,	Asso.	Polymer	18	
Bhuvaneswary	B.Ed	Professor			
Smt.Rohini	M.Sc	Guest	Biochemistry	6 months	
Kanakan		lecturer			

- 11. List of senior visiting faculty: Nil
- **12.** Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:
- **a.** B.Sc (Chemistry main) Theory -Nil
- b. B.Sc (Chemistry) Practical -Nil
- c. B.Sc (Botany) Theory Nil
- d. B.Sc (Botany) Practical Nil
- e.B.Sc (Zoology) Theory 100%
- f. B.Sc (Zoology) Practical 100%
- g. M.Sc (Theory) -Nil
- h. M.Sc (practical) Nil.
- 13. Student Teacher Ratio (programme wise)
- a. B.Sc (Chemistry) 14 (116/8)
- b. B.Sc (Botany) 17.5(70/4)
- c. B.Sc (Zoology) 70 (70/1)

d. M.Sc Chemistry 3.6(29/8)

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Four

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.

No of teachers with Ph.D: 6
No of teachers with M.Phil: 4
No of teachers with PG: 2

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Dr.M.G Bhuvaneswary 2012-2014	Modification of eleastomers using nanospinels	Rs.1,30,000/-	UGC
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17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: Rs.385000/-

Name of the Investigator	Title of the project and duration	Amount sanctioned	Funding Agency
Dr.M.G Bhuvaneswary 2012-2014	Modification of eleastomers using nanospinels	Rs.1,30,000/-	UGC
Dr. Sleema B. 2009-2011	Physico-Chemical characterization and analysis of Hydrographic parameters of Well water, Bore-well water, Tap water and River water of Vadakkekara Panchayat in Ernakulam District, Kerala.	Rs.60,000/-	UGC
Dr. Cibi Komalan 2009-2011	Rheological and Transport Property study of dynamically vulcanized Nylon/EPDM blends	RS.95000/-	UGC
Sri.V.N.Madhusu dhanan 2009- 2011	Determination of thermodynamic parameters of hydrolysis of methyl and ethyl acetate by kinetic study	Rs.1,00,000/-	UGC

18. Research Centre /facility recognized by the University: Department was approved as a research centre under Mahatma Gandhi University in 2011

19. Publications:

Total number of publications: 30

National: 17
International: 13

Dr.Sleema B

1. A Comparitive study of Hydrographic Parameters of Kodungallur Estuary at Moothakunnam,Kottapuram and Maliankara, Millennium Zoology VOL 10,10-15,2009.

2. Physico-Chemical Characteristics of Watersamples of Vadakkekara Panchayath,

ErnakulamDistrict, Kerala, SB Acadamic Review Vol XVI, 164-170 2009

- **3.** Antimicrobial Studies of Some Histidine Complexes Millennium Zoology VOL.11,32-35 **2010**
- **4.** A Comparative Study of Hydrographic parameters along the lower reaches of PeriyarEstuary.

Millennium ZoologyVOL12(1),24-29,**2011**

5. Studies on

Mn(II),Fe(II),Co(II),Ni(II),Cu(II),Zn(II),Cd(II),Hg(II),ZrO(II) andUO₂(II)Complexes of oVanillin-2-aminopyridine. Current Studies vol 01,47-52,**2011.**

- **6.** Physico Chemical Studies of Chalakudyriver at Annamala, Chalakudy, Eloor, Moozhikkulam and Kanakkankadavu . Journal of Current Studies vol 02,63-70, **2012.**
- 7. Study of hydrographic parameters of dug wells of Chazhur panchayath in Thrissur district, Kerala State. Journal of Current studies, vol.3, 2013

8. Study of Iron, protein and sugar content in some leafy vegetables. Journal of Current studies, vol.3, **2013**

Dr. Beena T Abraham

- 1. Studies on the use of Cardinol as plasticizer for silica-Filled Nitrile Rubber, Progr.Rubber, plastics and Recy. Tech, Vol.25, 75-90,2009
- **2.** .Cardinal-based Resol phenolics-a comparative study, Progress Rubber, plast. and Recyling Technology, Vol.26,31-50,2010.
- **3.** Role of Vibrio SP in the biodegradation of LLDPE/PVA blends, J. of Current studies, Vol 9,2011.
- **4.** HDPE Ash Nanocomposites, Journal of applied polymer science . Vol.124, 2011
- **5.** Utilization of waste expanded polystyrene, Journal of Materials & Design,2012.
- **6.** Microwave exfoliated reduced graphene oxide epoxy nanocomposites for high performance applications, Journal of polymer, 2014.
- 7. Fabrication of partially exfoliated and disordered intercalated cloisite epoxy nanocomposites via insitu polymerisation; Mechanical, dynamic mechanical, thermal and barrier properties; Applied Clay Science, Article in press.

Dr.M.K Joshy

- 1. Influence of fibre surface modification on the mechanical performance of randomly oriented isora-polyester composites, Inter.J.of polym.Mater, Vol.58,2-20,2009.
- 2. Isora fibre-A natural reinforcement for the development of High performance Engineering Materials, Science and Society, Vol.(8),5-12,2010.

Dr Cibi Komalan

3. "Effect of blend ratio on Morphology and Mechanical properties of immiscible binary blends of Nylon copolymer (PA6, 6-6) and EPDM rubber." **Cibi Komalan**, K. E. George, E. Deenadayalan, C. Ranganathaiah, S. Thomas. *Journal of Applied Polymer Science (Accepted)*.

- 4. "Determination of interfacial tension of Nylon6,66/EPDM blends using Palierne and Choi-Schowalter Method", **Cibi Komalan**, K.E. George, and S.Thomas.J.Current Studies,Vol.(2),41-44,2012.
- 5. "Dynamically Vulcanized Nylon copolymer/EPDM Blends: Effects of Curatives on Morphology and Mechanical properties" **Cibi Komalan**, K.E George, Sinto Jacob, K. T. Varughese, S. Thomas, *Europian Polymer Journal*. (*Communicated*)
- 6. "Study of Morphology influence on Dynamic Rheological properties of Uncompatibilised and in-situ compatibilised Nylon/EPDM blends", **Cibi Komalan**, K. E George, K. T Varughese and S. Thomas (*Communicated*)
- 7. "Electrical properties of a new Thermoplastic elastomer from Nylon (6,66) copolymer/EPDM rubber blends: Effect of blend ratio, dynamic vulcanization and filler addition", **Cibi Komalan**, K.E George, K. T. Varughese and S.Thomas. (*Communicated*)
- 8. "Transport of water through a new Thermoplastic elastomer from Nylon copolymer (6,66) /EPDM rubber blends", **Cibi Komalan**, K.E George, K. T. Varughese and S. Thomas. (*Communicated*)

Dr.Bhuvaneswary M.G

- 1. Control of microvoids in resol phenolics using unsaturated polyester, Journal.of appl. Polym. Sci., Vol.113,802-810,2009
- 2. Modification of Natural Rubber using Novolac resins for improved oil and Age resistance, Journal of Current Studies Vol.2, 2012.
- 3. Modification of Natural Rubber by epoxy resin, Journal of Current Studies Vol.2, 2013.

List of Papers published in National/international Conferences

- Cibi Komalan, K.E George, S.Thomas, Dynamic Rheological properties of dynamically crosslinked Nylon6.6 copolymer/EPDM thermoplastic elastomer, Ist Kerala Women's Science Congress, 10-12 August 2010.
- 2. Nayana M.S, **Cibi Komalan**, K.Girish Kumar , Spectrophotometric determination of Ambroxol,20th Swadesi science congress,CMFRI,Kochi,6-8 November **2010**.
- 3. **Cibi Komalan**, K.E George, S.Thomas Effect of blend ratio on diffusion of water molecules through nylon6/EPDM blends, Indian Science Congress, SRM University, Chennai, 3-7 January **2011**.

- 4. **Cibi Komalan**, K.E George, S.Thomas, Rheological and morphological study of dynamically,610/EPDM blends,100th Indian Science Congress,Kolkatta,3-7January **2013.**
- 5. **Cibi Komalan**, K.E George, S.Thomas, Rheological and morphological study of dynamically vulcanised nylon 6,6/EPDM blends,The India Isreal meeting on Material Science and Nano Science,M.G University, Kottayam,31January-1st February **2013**.
- 6. Viju S M, Cibi Komalan, Sony C George, S.Thomas, The Non-Oxidative thermal degradation behaviour of functionalized liquid rubber modifiedEpoxy resin, India Isreal meeting on Material Science and Nano Science, M.G University, Kottayam, 31 January-1st February 2013.
- Sreni ,Cibi Komalan,Structural and mMagnetic Properties of Cobalt ferrite synthesised by Sol-gel Method" 23rd Swadeshi Science Congress at M.G University Kottayam,6-8 November 2013.
- 8. Divya E.K, **Bhuvaneswary M.G**, Synthesis and characterisation of nano Alumina and comparative study of adsorption on synthesised and nano alumina, Proceedings of the national conference on 'Recent trends in the development of Nano materials and nano devices', **2013**.
 - Number of publications listed in International Database (For E.g.: Web of Science, Scopus, Humanities International Complete, Dare Database
 International Social Sciences Directory, EBSCO host, etc.): Nil
 - Monographs: Nil
 - Chapter in Books : Dr. Beena T Abraham Contributed chapters to two reference books.
 - Books edited:
 - Books with ISBN/ISSN numbers with details of publishers:

Sl No.	Name of the Author	Name of the Book	Publisher	Year
1	Dr.P.B Sulekha	Synthesis, Charactrisation and	LABERTS	2012
		Uses of Polymer Bound	Academic	
		antioxidants	Publishers	ISBN:978-3-
				8484-9490-3
		LAMBERT Academic		
		Publishing,USA		
2	Dr.Cibi Komalan	Compatibilization and	LABERTS	2013
		dynamic vulcanization of	Academic	

	Nylon Copolymer/EPDM	Publishers	ISBN 978-3-
	Rubber blends		659-39611-3

• Citation Index:

• 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 etc.

Nil

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme	2009-10 UG-100 PG-60	2010-11 UG-100 PG- 50	2011-12 UG-100 PG- 40	2012-13 UG- 100 PG-40	2013-14 UG-100 PG-35
b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies	PG-40	PG-50	PG-60	PG-60	PG-65

23. Awards/ Recognitions received by faculty and students

Faculty

Awards/ Recognitions received by faculty and students

Name	year	Awards
Dr.Jehosheba P Mathews	2012	'BHARAT SHIKSHA RATAN AWARD'
Athira Krishnan	2012	University best actress
Rajmohan	2012	University first-Malayalam poetry

Asheeda	2013	Judo university player
Chandana & Mridula	2011	Quiz competition –second

24. List of eminent academicians and scientists/ visitors to the department

- Dr. K.L. Sebastian, Indian Institute of Science, Bangalore.
- Prof Rani Joseph-Dept. of Polymer Science and Rubber Technology, CUSAT
- Prof Eby Thomas Thachil- Department of Polymer Science & Rubber Technology, CUSAT
- Dr. P.K. Krishnan Namboori (Head, Computational Chemistry Group Amrita Vishwa Vidyapeetham-University, Amrita Nagar, Ettimadai, Coimbatore).
- Dr P. Parameswaran (Assistant Professor, NIT Kozhikode)
- Dr R.S.Swathi (Assistant Professor, IISER, Thiruvanathapuram)
- Dr Baby Thomas (Associate Professor, St Dominic's College, Kanjirapally).
- Prof.S.Murugan, retired HoD, Chemistry, S.T.Hindu College, Nagarcoil.
- Dr.C.T Aravindakumar, Professor& Director, School of Environmental studies, M.G University, kottayam.
- Dr.I.M Krishna kumar, General manager, AKAY flavours and Aromatics, Aluva
- Dr.K.N Rajasekharan, UGC BSR Faculty, Department of chemistry, Kerala University, thiruvanathapuram
- Dr. G. Sivasubramanian, Asst. Professor, Amrita Viswa Vidyapeetham, Kollam
- Dr.Joby Thomas, Associate Professor, St. Thomas college, Thrissur.
- Dr.Cyriac Mathew, Associate Professor, St, Alberts College ,Ernakulam.
- Prof. C .G Ramankutty ,Retd HoD ,U C college , Aluva.
- Dr. N. Gopalakrishnan, Director, IISH, Thiruvanathapuram.

25. Seminars/ Conferences/Workshops organized & the source of funding

- ➤ National seminar on "Quantum Chemistry and Nano Techniques" was held on 19th and 20th November 2009. Dr.Cibi was the convener of the seminar.
- A two day National level seminar cum workshop on 'Computational Chemistry and its applications' was held in the college on March 25-26, 2013, sponsored by Kerala State Council for Science, Technology and Environment, Thiruvananthapuram. Around 150 participants from

all over Kerala representing industries, professional institutions, faculties and students attended the programme. Dr. Sulekha.P.B was the convener of the seminar.

- ➤ A two day UGC sponsored national seminar on "Stimulating concepts of green chemistry" on November 13th and 14th 2014. Dr. Cibi Komalan was the convenor of the programme.
- ➤ With PTA supported the Chemistry Association used to organize seminars and lecture series of relevant topics every academic year.

26. Student profile programme/course wise:

The process of selection to both post graduate and graduate course is done by the University through a central processing facility and the department has no role in the student selection process.

The details of the last batch passed out from the department is given below:

Name of	Applications	Selected	En	rolled	Pass
course/Programme	received	Selected	Male	Female	percentage
B.Sc (Chemistry)	CAP	30	11	19	86.7(2014)
M.Sc (Chemistry)	CAP	14	nil	14	78.6(2013)

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)	100	0	0

28. How many students have cleared national and state competitive examinations such as NET,

SLET, GATE, Civil services, Defense services, etc. ?

CSIR/JRF-5, NET-6

Sl.No	Name	Year	National
1	Harikrishnan E.S	2010,Dec	CSIR/JRF
2	Gayathri.T.H	2010,Dec	CSIR/JRF
3	Saranya T.V	2012	CSIR/JRF
4	Sreekuttan Unni	2009	CSIR/JRF
5	Vijayadas K.N	2010	CSIR/JRF

6	Liya Jose M	2009	NET
7	Preena.N	2012	NET
8	Jaison M.J	2010	CSIR/JRF
9	Liniya Francis	2012	NET
10	Krishnapriya.R	2012	NET
11	Geethu Jayanthan	2010 June	NET
12	Akhila.B	2010, Dec	NET
13	Vidhya K.V	2012	NET

STUDENT PROGRESSION

Student progression	Against % enrolled
UG to PG	25
PG to M.Phil.	Nil
PG to Ph.D.	5
Ph.D. to Post-Doctoral	Nil
Employed	
☐ Campus selection	Nil
☐ Other than campus recruitment	20
-	

30. Details of Infrastructural facilities

a) Library

The department has a well stocked library with around 250 books which meets the needs of the UG & PG students and teaching staff of the department. There is a reading room attached to the library.

b) Internet facilities for Staff & Students

The computer lab is well equipped with five computers, including two laser printers, two photocopy machine. We have two computers with internet facility

c) Class rooms with ICT facility: one

d) Laboratories

The Department has **three** well equipped laboratories and a computer lab. They include

- **a. B.Sc. Chemistry Laboratory: -** There is one B.Sc. Chemistry laboratory for Chemistry main students and Subsidiary Chemistry students.
- **b. M.Sc. Chemistry Laboratories :-** There are two M.Sc. Chemistry laboratories One for Organic and Inorganic Chemistry practicals and one for Physical Chemistry practicals
- **c. Research Laboratory :-** The department has a well equipped research lab. The minor and major research projects were done in this lab. At present, the Ph.D. research scholars are working in this laboratory.
- 31. Number of students receiving financial assistance from college, university, government or other agencies 10
- **32.** Details on student enrichment programmes (special lectures / workshops /

seminar) with external experts

Details of the talks organized during last 5 years

- Talk on Water pollution and control measures by Dr. Kochu Baby Manjooran, Dy. Manager (Energy & Evrmt) BPCL Kochi, Refinery, Ambalamugal.
- 2. International Year of Chemistry 2012 was celebrated with a talk by Dr. Joby Thomas, St.Thomas College, Thrissur.
- 3. Training programme for science students on methodology of chemistry-Dr.Sreenivasan U.C College, Aluva
- 4. Seminar on Pericyclic Reactions –Dr Cyriac Thomas ,St Alberts college ,EKM
- 5. Workshop on Chemistry in every day life for Higher secondary students and teachers by Prof V N Madhusoodhanan ,Dept of chemistry ,SNM College ,Maliankara
- 6. Workshop on Hardware and Net working
- 7. Seminar on Spectroscopy Current trends by Dr. Unnikrishnan K.P, U.C College, Aluva
- 8. Seminar on Mysteries in Science by Dr.Ravi Divakaran, St.Albert's College, Ernakulam.
- 9. Seminar on Polymer Composites from macro to Nano scale by Dr.Sreekala, S.S College, Kaladi.
- 10. Seminar on Quantum Mechanics by Dr. Ananthapadmanabhan, K.K.T.M College, Pullut.
- 11. Seminar on Green Chemistry by Prof. Joseph Konikara ,St josephs,Irinjalakuda.
- 12. Talk on Liquid Crystals by Dr.C.G Ramankutty, U.C College Aluva

33. Teaching methods adopted to improve student learning

An interactive method of teaching is adopted and the students are encouraged to give seminars and assignments. We also make them do powerpoint presentations. Using models etc

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

The Department of Chemistry is actively involved in bringing science to society by undertaking various outreach activities. Paticipation in blood donation organized by NSS.

"Awareness of chemicals in daily life and their harmful effects" was given to Kudubasree units Maliankara.
Vegetable seeds were given to students in collaboration with agricultural ofiice, N.Paravur and competitions were held for the best cultivation of vegetables.

Classes given to +2 students in nearby schools to generate interest in chemistry.
Water purity analysis is done in ponds and wells in and around Maliankara
Classes were given to parents with topics like global warming and ozone depletion
Green campus clean campus compaign is done and motivated the students to clean the locality too.
Students were given projects to analyse the adulterants in milk, food grains, tea etc.
Students were given projects to analyse the harmful chemicals in perfumes, talc powder, lipsticks etc
Edible oil purity tests were also conducted.
Seminars are conducted and given opportunity to nearby institutions to participate in it.
Self defence classes were given to girl students
Chemistry exhibitions is conducted for higher secondary students and teachers
Debates and quiz competions are done regularly on current topics
Healthy food habits are generated in students by conducting food fest.
Food science is one of our open course topic which covers all the hazards and merits of healthy food
Awareness is given to students about harmful effects of alcohols and drugs.

35. SWOC analysis of the department and Future plans Strength of the department

- a) Qualified, committed and experienced faculty.
- b) Improvement in the number of students qualifying competitive exams like NET,CSIR
- c) Good placement record.
- d) Sophisticated instrumentation centre.
- e) Computational chemistry lab
- h) Good collection of library books.
- e))Rich exposure to eminent personalities and centres of excellence.

Weakness

- a) Lack of infrastructure and supporting staff to maintain department library with more reference books.
- b) Lack of proper funding for maintenance of instruments
- c) Non-availability of technical staff for maintaining sophisticated instruments
- d) The majority of the students of the department are coming from economically and socially backward communities.
- e) Girl students tend to marry during the course. This is one of the major reasons for the large number of drop outs and it reflects in the results of both P.G. and U.G. course.

Opportunities

- a) Wide opportunity in the industries is available for the students. The students get opportunities in the R&D wings of other industries.
- b) Students being exposed to research, are also encouraged to go for Ph.D.
- c) Availability of well qualified faculty to enhance research activities.

Threats

- a) To educate and train weaker students.
- b) To motivate the girl students to pursue higher education
- c) Low enrollment rate of male students

Challenges

The department is planning to conduct a UGC-CSIR NET coaching for students.

FUTURE PLANS

- a) To conduct an add-on course to the degree students as per the norms of the UGC.
- b) Faculties of the department are planning to apply for major and minor projects, giving more emphasis to the research activities of the department.
- c) Industrial collaboration with various industries are planned and MOU's to be signed with various industries.
- d) A UGC-CSIR net coaching for the M.Sc students (both of the department and others) are being planned.

- e) Entering in to collaboration with Industries and research institutions to start short term and long term research projects.
- f) Invite eminent industrial experts as guest lecturers.
- e) Conducting technical workshop in collaboration with industry or training institute to provide better technical skill to the students.
- f) To mould the students to meet the challenges of the present professional environment.
- g)To improve the existing infrastructural facilities.

Evaluative Report of the Department of Commerce

- **1. Name of the department.** COMMERCE.
- 2. Years of Establishment. 1981
- 3. Names of programmes/courses of (UG, PG, M.Phil, Ph.D, Intergrated Masters, Intergrated Ph.D etc).

UG

4. Names of the Interdisciplinary courses and the departments/units involved .

Add-on course: TAX STUDY CENTRE 2012-13

5. Annual/semester/choice based credit system(programme wise).

B.Com CBCSS

6. Participation of the department in the courses offered by other departments.

The students of commerce department opted the following Open courses:-English for Careers, Fundamentals of Economics, Malayalam Pathra prevarthanam, Energy and Environmental Studies, Management of Ornamental & Rabbit farming etc. and Physical, Health, Life Skill Education, vocational zoology and agri-based micro enterprises.

7. Courses in collaboration with other universities, industries foreign institutions etc.

An ADD ON COURSE in collaboration with TAX STUDY CENTRE, Ernakulum from 2013-2014 onwards.

8. Details of courses/programmes discontinued (if any) with reasons.

Not Applicable

9. Number of teaching post.

2011-12

	Sanctioned	Filled
Professors		
Associate Professors	4	4
Asst. Professors		

2012-13

	Sanctioned	Filled
Professors		
Associate Professors	2	2
Asst. Professors	2	2

2013-14

	Sanctioned	Filled
Professors		
Associate Professors	1	1
Asst. Professors	2	2

10. Faculty profile with name, qualification, designation, specialization, (DSc/D.Litt/Ph.D /M.Phil etc)

<u>2011-12</u>

Name	Qualification	Designation	Speciali- zation	No.of years of experience	No.of phd students guided for the last 4 years
RANGANATHAN K C	M COM, M PHIL	Associate Professors		32	
K S VENUGOPALAN	M COM, M PHIL	Associate		32	

		Professors		
M R USHA	M COM, M PHIL	Associate Professors	29	
P S DEVADAS	LLB	Part Time Law Lecturer	28	

<u>2012-13</u>

Name	Qualification	Designation	Special- ization	No.of years of experience	No.of phd students guided for the last 4 years
K S VENUGOPALAN	M COM, M PHIL	Associate Professors		33	
M R USHA	M COM, M PHIL	Associate Professors		30	
T S REENA	M COM, B Ed.	Asst. Professors		1	
U R KRISHNAKUMAR	M COM, B Ed, DIPLOMA IN MANAGEMENT	Asst. Professors		1	
P S DEVADAS	LLB	Part Time Law Lecturer		29	

<u>2013-14</u>

Name	Qualificati on	Designation	Speciali- zation	No.of years of experience	No.of phd students guided for the last 4 years
M R USHA	M COM, M PHIL	Associate Professors		31	
T S REENA	M COM, B Ed.	Asst. Professors		2	
U R KRISHNAKUMAR	M COM, B Ed, DIPLOM A IN MANAG EMENT	Asst. Professors		2	
P S DEVADAS	LLB	Part Time Law Lecturer		30	

11. List of senior visiting faculty.

K S Venugopalan (Retd. H.O.D of Commerce)

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty.

2011-12 25.39%

2012-13 Nil

2013-14 17.46%

13. Student-teacher ratio (programme wise).

B.com- 45:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled.

Not Applicable

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D /M.Phil/PG.

2011-12	M.Phil- 3	PG- 3
2012-13	M.Phil- 3	PG- 3
2013-14	M.Phil- 2	PG- 4

16. Number of faculty with ongoing projects from

- a) National. NIL
- b) International funding agencies and grants received. NIL
- c) Grants received.

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received.

Sl No.	Principal Investigator	Title	Duration	Funding Agency	Amount in Rs.	Status
1	Reena TS	Consumer Acceptance of supplyco in Ernakulam	Starts from 12-03-14	UGC	Santioned 50,000 Received 32,500	Ongoing
2	Krishnakumar U.R	Financial inclusion	Starts from 12-03-14	UGC	Santioned 42,000	Ongoing

practices of			
SBT in		Received	
Ernakulam		33,000	

18. Research Centre/facility recognized by the University.

Not Applicable

19. Publications:

Not Applicable

- Publication per faculty
- 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 Science 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.

Prof. K.S Venugopal has assisted Methala Credit Socities for preparing its Articles of Association and Prof. Krishnakumar .U.R has rendered his service for the selection of Last Grade Servant in SND Yogam Vavakad. Our department has no income from consultation, because we are considering it as a part of our ethics.

<u></u>	aliankara, Er	aliankara, Ernakulam Dt., I

Criterion VII Innovations and Best Practices

21. Faculty as members in

- a) National Committees.
- b) International Committees.
- c) Editorial Boards....

Not Applicable

22. Student projects

As a part of Curriculum each student of Semester VI of UG has to submit

a project report (one copy is kept in the Dept. library.)

- a) Percentage of students who have done in-houses projects including inter departmental/programme.
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies.

Not Applicable

- 23. Awards/ recognitions received by faculty and students.
- 24. List of eminent academicians and scientists/visitors to the department.
 - 1) Subhash T, Faculty Member Time Institute, Ernakulam.
 - 2) Anilkumar K, Manager & Branch Head, Metlife India Insurance, Ernakulam.
 - 3) Rupa Shenoy, HR Consultant, Amritha Institute of Technology, Ettimada, Coimbatore.
 - 4) Aneesh Yohannan, Vidyabharathi Institute, Ernakulam.
 - 5) Ahamaed Kabir, Assistant Manager, Indian Institute of logistics, Chennai.
 - 6) Kunjhi Mohammed, Assistant Professor, Mahdin College of Commerce & Management studies, Malappuram.

7) Abdul Haseem, Assistant Professor, Mahdin College of Commerce and Management studies, Malappuram.

25. Seminars/ conferences/ workshops organized and the source of funding

- a) National.
- b) International.

Not Applicable

26. Student profile programme/ course wise:

Year of	Name of the	Application	Selected	enroll	ed	Pass %
Admission	course/programme(refer Q.No 4)	received		*M	*F	
2011-12	B.Com	CAP	70	33	37	100
2012-13	B.Com	CAP	65	20	45	-
2013-14	B.Com	CAP	61	18	43	-

^{*}M=Male *F=Female

27. Diversity of students

Name of course	% of students from the same state.	% of students from other states.	% of students from abroad.
B.Com	100		

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense Services, etc...?

Not Applicable

29. Student progression

Student progression	Against % enr	olled		
	2011-14	2010-13	2009-12	2008-11
UG to PG	28	30	27	30
PG to M.Phil	NIL	NIL	NIL	NIL
PG to Ph.D	NIL	NIL	NIL	NIL
Ph.D to Post-Doctoral	NIL	NIL	NIL	NIL
Employed - Campus selection - - - Other than campus recruitment	Popular Motors	2 students in ASAP Indian bank, ICICI Bank, HDFC, Medical Rep	Indian bank, ICICI Bank, HDFC, Medical Rep	Indian bank, ICICI Bank, HDFC, Medical Rep
Entrepreneurship/Self- employment				

30. Details of Infrastructural facilities

• Library.

We have a small library having 100-150 books. This book banks are created by using the complementary books given by the publishing agency and donors of old students.

• Internet facilities for Staffs and Students.

Our department is equipped with 2 computers having enough internet facility.

• Classrooms with ICT facilities.

We have 1 classroom with ICT facility.

• Laboratories.

Not Applicable

31. Number of students receiving financial assistant from college, universities, government or other agencies.

SC-12, OEC-3, KPCR-28

- **32.** Details on student enrichment programmes (special lectures/workshops/seminar) with external experts.
 - 1) Seminar on "Accounting Standards" Its global Relevance by Sri. Subhash T Faculty member, Time institute, Ernakulam on 13-09-2012
 - 2) Seminar on "Career in Insurance Industry" By Sri. Anilkumar K, Manager & Branch Head, Metlife India Insurance, Ernakulam on 17-09-2012.
 - 3) Seminar on "Importance of Education in Adversity"- co-hosted with English department on 20-08-2012 By Ms. Rupa Shenoy, HR Consultant, Amritha Institute of Technology, Ettimada, Coimbatore.
 - 4) Seminar on "Career Plans" by Aneesh Yohannan, Vidyabharathi Institute, Ernakulam on 12-03-13.
 - 5) Seminar on "Job Oppurtunities in Logistics Industry" By Sri. Ahamaed Kabir, Assistant Manager, Indian Institute of logistics, Chennai on 14-03-13.
 - 6) Workshop on financial education for young investors organized in association with **Securities & Exchange Board of India-** led By Kunjhi Mohammed, Assistant Professor, Mahdin College of Commerce & Management studies, Malappuram.

33. Teaching methods adopted to improve student learning.

Our department had arranged remedial coaching and other special classes for slow learners and weak students. ICT enabled teaching methods are also adopted by our faculty members.

- -Giving assignments on a regular basis.
- -Assigning seminar topics to all students according to syllabus.
- -Asking questions about previous classes every day.

34. Participation in Institutional Social Responsibility (ISR) and extension activities.

- * We the teachers and students visited Snehatheeram oldage home and orphanage at north Paravur. We spend one day with them by serving food and conducting many cultural activities.
- * We are supplying one day lunch in near by government hosipital for patients and bystanders in Moothakunnam.

Extension Activities

- * A free carier orientation programme was given to near by +2 students by Prof. Krishnakumar U.R
- * An awareness programme to the parents as regards the family budgets and its execution by Prof. K.S Venugopalan.
- * Free consultation service was given by Prof. K.S Venugopalan & Prof. Krishnakumar U.R to nearby credit societies.

35. SWOC analysis of the department and Future plans.

SWOC Anaysis

Our department has 4 faculty members and almost 60 to 70 students every academic year. Only UG classes are provided by the department. Our department secures above 90% result every year. In the year 2013-14 our department has secured 100% result. After the completion of courses 30% of our students have gone to higher studies like PG programmes and many other jobs. There are several students who got recruitment through campus selection and many students proved thier excellence in sports and cultural activities. The department is planning to start PG programmes very soon. No one has acquired Ph.D, from the department so far. Presently the newly appointed faculty members Reena T.S and Krishnakumar U.R are pursuing their doctoral studies. They have also undertaken two minor research projects funded by UGC.

Future Plans

- Conduct National Seminar in recent research areas.
- Use the faculty members of the department as resource person to other institutions.
- Convert all class rooms into ICT enabled class rooms.

Evaluative Report of the Department of Economics

1. Name of the department : Department of Economics

2. Year of Establishment : 1972(BA), 1983(MA)

3. Names of Programmes offered : UG : BA Economics Model I

PG: MA Economics

4. Names of Interdisciplinary courses: Quantitative Economics,

Agricultural Economics

5. Annual/ semester/CBCSS : UG –CBCSS BA Economics Programme Model I (6 semester course, PG- CSS MA Economics programme

- 6. Participation of the department in the courses offered by other departments: No
- 7. Courses in collaboration with other universities, industries, foreign institutions: No
- 8. Details of courses/programmes discontinued (if any) with reasons: No
- 9. Number of teaching posts

2011-2014	Sanctioned	Filled
Associate Professor	5	
Assistant Professors	1	

10. Faculty profile with name, qualification, designation, specialization

				No. of
Name	Qualification	Designation	Specialization	years
				experience
Dr. Ajithan	MA, PhD	Associate	International	32
Menoth		Professor	Trade	
V P Asa Devi	MA,	Associate	Public	31
	M.Phil.	Professor	Economics	
Dr. K Padmaja	MA,	Associate	Health	31
	M.Phil.,	Professor	Economics	
	Ph.D			
P K Premavathy	MA,	Associate	Environment	30
-	M.Phil.	Professor	Economics	
Dr. Sudheer S P	MA, M.Phil	Associate	Agricultural	20
		Professor	Economics	
Dr.T H Smitha	MA, PhD	Assistant	Monetary	8
		Professor	Economics	

Criterion VII Innovations and Best Practices

11. List of senior visiting faculty : Nil

12. Percentage of lectures delivered by temporary faculty: Nil

13. Student - Teacher Ratio

Programme/Year	2011-2012	2012-2013	2013-2014
UG	26.6	25	26.6
PG	6	6.17	5.83

- 14. Number of academic support staff: 6
- 15. Qualifications of teaching faculty with

Dr. Ajithan Menoth	MA, PhD
V P Asa Devi	MA, M.Phil.
Dr. K Padmaja	MA, M.Phil., Ph.D
P K Premavathy	MA, M.Phil.
Dr. Sudheer S P	MA, M.Phil,
Dr.T H Smitha	MA, PhD

- 16. Number of faculty with ongoing projects from :
- Dr. S. P. Sudheer and Dr. T.H Smitha continuing their research work.
- a) National: 2
- b) International funding: Nil
- 17. Departmental projects funded by DST FIST; UGC, DBT, ICSSR, etc. and total grants received

Name	Minor Projects	Outlay
Dr. Ajithan	Impact of Globalization on the Social	Rs. 1,25,000
Menoth	dimensions of Handloom Industries in	
	Ernakulam district.	
Dr. S.P. Sudheer	Production Potential, Cost and	Rs. 1,45,000
	Profitability aspects of Pepper cultivation	
	in Kerala under the WTO Regime	
Dr. T. H Smitha	Feminization of Rural employment in	Rs. 1,05,000
	Kerala- A case study of self- help groups	
	in Paravur district	

18. Research Centre /facility recognized by the University: Nil

19. Publications:

* a) Publication per faculty

Dr. Ajithan Menoth	11
V P Asa Devi	0
Dr. K Padmaja	1
P K Premavathy	0
Dr. Sudheer S P	6
Dr.T H Smitha	1

- * Number of papers published in peer reviewed journals (national /international) by faculty and students: List attached
- 20. Areas of consultancy and income generated : Nil
- 21. Faculty as members in a) National committees b) International Committees
- c) Editorial

Boards....

Dr. Ajithan	Convenor of Kerala Sahithya Academy Publication
Menoth	Committe

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme:

Around sixty percent of the students participated in the departmental projects. The topics of the survey were:

1	Socio-economic survey of fishermen community of Vadakkekara
	panchayat
2	Economic status of the female workers of the Kudumbasree units of
	Moothakunnam region

- 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. Ajithan	Received Thakazhi Award for short story
Menoth	

Student's Achievements

2013-2014

- 1. 59th Junior National Ball Badminton Championship Bhilai [19 to 23 october-2013]- 2nd Runners organised by BBFI
- Represented by MG University February 2104
 All India Inter-University participation Dravadian university, Kuppam
- 3. Mahatma Gandhi inters collegiate-first NSS Hindu college, Changanasherry-2014.
- Mahatma Gandhi inter collegiate –Third[Volley Ball] SPESS M.G. University Nov-2013
- 5. 45th Junior state championship [Sep- 25 to 29]mattom. First organized by [KSBBA].
- 6. 59th senior state championship [Oct- 12 to 14] Chavakkad 2013 organized by [KSBBA].
- 7. 1st Federation cup Inter-District Tournament May 31 1 June 2014, Moothakunnam First.
- 8. 46th junior state championship April 2014 Moothakunnam organized by[KSBBA].
- 9. (Third place)- In 59th senior state championship October 2013-12th 14th, Chavakkad organized by [KSBBA].
- 10. First place- in 45th junior state championship -2013 Sep-28th 29th-mattom, Chavakkad organized by [KSBBA].
- 11. Fourth place-in senior state championship 2012-2013 Dec-21-22-23 Moothakunnam organized by [KSBBA].
- 12. First place- in 46th junior state championship April-2014.Moothakunnam organized by[KSBBA].
- 13. Third place –in 58th junior national ball Bad Minton championship 2012-2013 July -4th-8th.Dindigul-Tamilnadu organized by [BBFI].
- 14. Participation in 1st Federation cup Ball Bad Minton championship 2012-2013 Oct 18th -20, Hyderabad organized by [BBFI].
- 15. Third place –MG university Inter collegiate Volley Ball tournament 2012 October, St. Xaviers College ,Aluva.

- 16. Participation in MG university team represents in the all India Inter University ball Badminton, 2012-2013-NIT Warangal.
- 17. First place in MG University Inter Collegiate ball Badminton Tournament –NSS College Changanashery -2014 January.
- 18. Participiation in MG University in all India Inter University ball Badminton-2013-2014, Dravidian University, Kuppam
- 19. Second place in MG University Collegiate ball Badminton Tournament Nov-2012, University Stadium, Athirapuzha
- 20. Fourth place 2nd Federation cup ball Badminton -2013, Dec -27 to 29 Sreeranga Pattanam, Karnadaka [organised by ball Badminton Federation of India].
- 21. 58th senior national ball Badminton championship Bangaluru. Third place Dec 2012 26-30 organised by [BBFI].
- 22. Star of kerala award in 45th junior state championship 28-29 Sep 2013,Mattom,Chavakkad[organised by Kerala state ball badminton association]
- 23. First place in federation cup Inter District Tournament May 31st -1st June 2014, Moothakunnam.organised by KSBBA.
- 24. Third place in 59th senior national ball badminton championship ,January 2014-11th -15th Khammom,Andhrapradesh organised by BBFI
- 25. Ansalam Tinu M G won First prize as 'Best Physique(M) Championship' in 65kg category in MG University Sports.
- 24. List of eminent academicians and scientists / visitors to the department

#	Academicians and scientists / visitors					
	2011-12					
1	Dr. Muraleedharan Former Reader, Department of					
	Economics, Maharajas college,					
		Ernakulam				
2	Adv. T A Chandrahasan					
3	K.L. Mohanavarma	Well known Malayalam writer				
	2012-2013					
1	Dr. Tommy Varghese	Head of the Department of Economics,				
		U C College, Aluva				
2	Smt. Sandhya. U.K	J.K Family Counselling Centre, Social				
	Welfare Board					
3	Prof. V.J. Antony	Well known councilor and retired				
	Professor of S.H. College, Thevara.					

4	K G Pran Singh	

	2013-2014					
1	Dr. N A Ajithkumar	Leading Narrator and well known				
		Financial Expert				
2	Adv P. N. Sindhu	Advocate				
3	Mr. P R Bijoy	Sub Inspector of Police, Pavaratty Police				
		Station				
4	Dr. Thresiakkutty. K.M	HOD, Department of Economics,				
		Morning Star College, Angamaly				
5	Dr. Murukesan Krishnapillai	Research scientist of college of				
		Micronesia				

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National: Nil

b) International: Nil

- c) Organized College level seminars and workshops funded by PTA
- 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.

Two students cleared UGC NET exam

29. Student progression Student Progression in Percentage

	2014	2013	2012	2011
UG-PG	4%	5.5%	5%	5.5%
PG-M.Phil	-	-	-	-
PG- Ph.D	-	-	-	0.2%

Employed students: a. Campus Selection:

- 1. Geethu Shelton: 2013-14- Selected as Skill development Executive in ASAP
- b. Other than Campus Recruitment:
 - 2. Vidhya- 2013-14- Selected as Accountant in SriRam Finance Company , Ernakulam.
 - 3. Remya T R- 2011-13- Working as Guest Lecturer at SNM College
 - 4. Sarunkumar P S- 2011- Associate Trainee at Infopark.
 - 5. Santhi Krishna- Working as Guest Lecturer at SNM College

30. Details of Infrastructural facilities

a) Library : 1

b) Internet facilities for Staff & Students : Yes

c) Class rooms with ICT facility : Yes

d) Laboratories : No

31. Number of students receiving financial assistance from college, university, government or other agencies

	2011-2012	2012-2013	2013-2014
College	10	9	8
Govt	60	65	70
Others	0	0	0

- 32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts: List attached
- 33. Teaching methods adopted to improve student learning: ICT, Audio learning, OHP
- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Yes
- 35. SWOC analysis of the department and Future plans
 - 1. Planning to register as a Research centre.
 - 2. State level seminar on Financial Crimes of Kerala
 - 3. Projects may be implemented to study the impact of liquor consumption by laborers.
 - 4. Extension activities may be organized to educate the ration card holders regarding APL/BPL, government, benefits etc.

Evaluative Report of the Department of English

1. Name of the department: ENGLISH

2. Year of Establishment : 1964

3. Names of Programmes / Courses offered: UG

4. Names of Interdisciplinary courses and the departments/units involved:

English for Careers

5. Annual/ semester/choice based credit system (programme wise)

B.A English Model II C.B.C.S.S.

6. Participation of the department in the courses offered by other departments:

The students of English department opts the following Open courses:- Fundamentals of Economics, Malayalam Pathra prevarthanam, Energy and Environmental Studies, Management of Ornamental & Rabbit farming etc. and Physical, Health, Life Skill Education, vocational zoology and agri-based micro enterprises.

- 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

2011-12

	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	5	4
Asst. Professors	2	0

2012-13

	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	5	4
Asst. Professors	2	2

2013-14

	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	3	3
Asst. Professors	4	2

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

2011-12

Name	Qualification	Designation	Speciali -zation	No.of years of experience	No.of phd students guided for the last 4 years
K. A SudhishKumar	M.A; B.Ed	Associate Professor		24	Nil
T.G. Ajayakumar	M.A; B.Ed	Associate Professor		23	Nil
K.S. Preetha	M.A.	Associate Professor		22	Nil
V.S. Jainlal	M.A; B.Ed; PGCTE; M.Phil	Associate Professor		22	Nil

<u>2012-13</u>

Name	Qualification	Designation	Speciali -zation	No.of years of experience	No.of phd students guided for the last 4 years
K. A SudhishKumar	M.A; B.Ed	Associate Professor		24	Nil
T.G. Ajayakumar	M.A; B.Ed	Associate Professor		23	Nil
K.S. Preetha	M.A.	Associate Professor		22	Nil
V.S. Jainlal	M.A; B.Ed; PGCTE; M.Phil	Associate Professor		22	Nil
Binsha B.	M.A; B.Ed	Assistant Professor		1	Nil
Ajeesh S.	M.A; M.Phil	Assistant Professor		1	Nil

2013-14

Name	Qualification	Designation	Speciali -zation	No.of years of experience	No.of phd students guided for the last 4 years
T.G. Ajayakumar	M.A; B.Ed	Associate Professor		23	Nil
K.S. Preetha	M.A.	Associate Professor		22	Nil
V.S. Jainlal	M.A; B.Ed; PGCTE; M.Phil	Associate Professor		22	Nil
Binsha B.	M.A; B.Ed	Assistant Professor		2	Nil
Ajeesh S.	M.A; M.Phil	Assistant Professor		2	Nil

Drishya Dileep	M.A, B.Ed,	Guest	1 year &	Nil
	M.Ed, NET	Faculty	6	
			months	
Anupa Asok K	M.A, B.Ed,	Guest	4	Nil
	NET	Faculty	months	
Sreekala KK	M.A, NET	Guest	1 year &	Nil
		Faculty	4	
			months	

<u>2014 - 15</u>

Name	Qualificatio	Designatio	Specia	No.of	No.of
	n	n	li-	years of	phd
			zation	experien	students
				ce	guided
					for the
					last 4
					years
T.G. Ajayakumar					
	M.A; B.Ed	Associate		23	Nil
		Professor			
K.S. Preetha	M.A.	Associate		22	Nil
K.S. I feetifa	WI.A.	Professor		22	1111
		110103301			
V.S. Jainlal	M.A; B.Ed;	Associate		22	Nil
	PGCTE;	Professor			
	M.Phil				
Binsha B.	M.A; B.Ed	Assistant		2	Nil
		Professor			
	3.6.4			2	3.711
Ajeesh S.	M.A;	Assistant		2	Nil
511 511	M.Phil	Professor			2711
Drishya Dileep	M.A, B.Ed,	Guest		1 year &	Nil
	M.Ed, NET	Faculty		6	
				months	
Anupa Asok K	M.A, B.Ed,	Guest		4	Nil
	NET	Faculty		months	
Sreekala KK	M.A, NET	Guest		1 year &	Nil
		Faculty		4	
				months	

Criterion VII Innovations and Best Practices

- 11. List of senior visiting faculty: Nil
- 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 25%
- 13. Student - Teacher Ratio (programme wise): 1:13
- Number of academic support staff (technical) and administrative staff; 14. sanctioned and filled: Nil
- 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. Faculty with M.Phil Degree - 2 Faculty P.G. - 5
- Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil
- Departmental projects funded by DST FIST; UGC, DBT, ICSSR, 17. etc. and

total grants received: Nil

- 18. Research Centre /facility recognized by the University: Nil
- 19. Publications:
 - a) Publication per faculty
 - Number of papers published in peer reviewed journals (national /International) by faculty and students
- *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.)
- *Books with ISBN/ISSN numbers with details of publishers- Ajeesh S.
- (1) Published book entitled *Plurality of Post Modern Representations*.

Publishers: Prabhath Book House, Trivandrum.

Publishing Date: June 2012; ISBN No. 8177001078

- (2) Published a paper entitled 'Analyzing the Political Potentials of Post Modernism' on Journal of current studies (JCS).ISSN No.- 22772707
- 20. Areas of consultancy and income generated: Nil
- 21. Faculty as members in

Self Study Report of SNM College, Maliankara, Ernakulam Dt., Kerala-2014

a) National committees b) International Committees c) Editorial Boards Nil

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/program:30%
- 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: 1 ;funded by the UGC

- b) International:
- 26. Student profile programme/course wise:

Name of the	Applications	Selected	Enro	olled	Pass
Course/programme (refer question no. 4)	received	Selected	*M	*F	percentage
English for Careers	40	16	13	3	90

*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 English	100%	0%	0%

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? NET: 4

29. Student progression

Student progression	Against % enrolled
UG to PG	10%
PG to M.Phil.	2%
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed Campus selection Other than campus recruitment	3
Entrepreneurship/Self-employment	

- 30. Details of Infrastructural facilities
 - a) Library: Nil
 - b) Internet facilities for Staff & Students

Internet browsing terminals in the department and in the technology class room.

b) Class rooms with ICT facility

There is one technology classroom with interactive white board facility.

- d) Laboratories:- Nil
- 31. Number of students receiving financial assistance from college, university, government or other agencies- 17
- 32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts-
 - > Special Lecture in Teaching of English,
 - ➤ Workshops on Public Speaking,
 - > Sessions on mnemonics
 - > Sessions on communication skills
 - > Training in ICT.

- 33. Teaching methods adopted to improve student learning-Instructional Strategy that combines:-
 - > Focused /Direct Instruction
 - Guided Learning
 - ➤ Co-operative Learning
 - > Individual Learning.
- 34. Participation in Institutional Social Responsibility (ISR) and **Extension** activities-
 - > Teacher Training programmes for schools
 - ➤ Communication Skill Workshop for school children
 - ➤ Public Speaking Study Skills Sessions.
 - ➤ Study skill training for higher secondary school students
- 35. SWOC analysis of the department and Future plans

SWOC Analysis

The department consists of 7 faculty members and almost 30 students are admitted every academic year. Only UG classes are provided by the department. The department secures about 55% result every year. After the completion of courses nearly 10% of the students have gone to higher studies like PG programmes and many other jobs. Some students got recruitment through campus selection and many students proved thier excellence in sports and cultural activities. The department is planning to start PG programmes very soon. No one has acquired Ph.D, from the department so far. Presently Sri.V.S.Jainlal ,the senior faculty of the department, and the newly appointed faculty member, Ajeesh S are pursuing their doctoral studies.

Future Plans

- To begin an Add- on course related to communication skills
- To conduct regular training programmes based on ICT enabled teaching-learning for school teachers

Evaluative Report of the Department of Malayalam& Sanskrit

- 1 Name of department---- Malayalam
- 2 Year of Establishment----- 1964
- 3 Names of Programmes offered----- UG
- 4 Names of interdisciplinary courses and departments involved----- Nil
- 5 C B C S System
- 6 Participation of the department in the courses offered by other departments -
- -- participating seminars and discussions of various subjects. Sports activity participation as well.
- 7 Courses in collaboration with other universities, industries, foreign institutions—Nil
- 8 Details of courses discontinued with reasons---- Nil
- 9 Number of teaching posts---

	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	1	1
Assistant Professors	5	5

10 Faculty Profile with name ,qualification, designation, specialization etc.---

Name	Qualification	Designation	Speciali- zation	Experience	Guidence
T.S.Ajith	MA;B Ed.	Associate	Language	25Years	Nil
kumar		professor	& literature		
Dr. Jitha T.H	MA;B	Assistant	,,	10Years	,,
	Ed;Ph.D;	Professor			
	Net; Set				
Sreeja P.R	MA;B Ed;Net	,,	,,	2 Years	,,
	Set				
Ragi Sekharan	MA;M Ed;Net	,,	,,	2 Years	,,
K	Set				
Viji M.P	MA;B Ed;Net	,,	,,	2 Years	,,
	Set				
Dr. Renjith	MA;Ph.D	,,	Indian	2 Years	,,
P.G			Meta-		
			physics		

- 11. List of senior visiting faculty----- Dr.Geethasuraj,Prof. VishnuNaboodiri, Prof. E.K.Prakasan
- 12. Percentage of lectures delivered and practical classes by temporary faculty---- Nil
- 13. Student Teacher Ratio--- 1:20
- 14. Number of academic support staff----- Nil
- 15. Number of teaching faculty with Ph.D---- 2
- 16. Number of teaching faculty with ongoing projects from a) National--- Nil
- 17. Departmental Projects funded by UGC and total grants received--- 2
- 18. Research Centre recognized by university --- Nil
- 19. Publications: a)1. Dr. P.G.Renjith 3
 - b) Number of papers published in peer national journals ----3

- 20. Areasof consultancy and income generated ----- Nil
- 21. Faculty as members in National/International committees ---- Nil
- 22. Student projects: a)Percentage who have done in-house projects ---- 100%
- 23. Awards/Recognitions received by faculty---- One member-Dr. Jitha.T.H
- 24. List of eminent academicians /visitors to the department:

Prof. M.K.Sanoo, Dr. S.K.Vasanthan,

Justice K.Sukumaran, Dr. M Lakshmikumari. Dr. Niveditha Bhidae.....

- 25. Seminars/Conferences/ workshops organized & the source of funding--- a) One national Seminar funded by UGC
- 26. Student profile programme/course wise

Name of the	Application	Selected	Enro	olled	Pass
course	s received		Male	Female	percentage
BA Malayalam	155	25	10	15	
2014 Admission					
2013 Admission	175	26	9	17	
2012 Admission	130	25	7	18	

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- 27. Diversity of students --- All from kerala state only
- 28. How many students have cleared national and state competitive examinations such as NET, SLET,

GATE, Civil services, Defence services, etc?----- 5 students cleared NET exam.

29. Student progression

Student progression	Against % enrolled
UG to PG	50%
PG to M.Phil.	20%
PG to Ph.D.	10%
Ph.D to Post Doctoral	NIL
Employed	
Campus Selection	50%
Other than campus recruitment	
Entrepreneurship/Self- employment	5%

- 30. Details of Infrastructural facilities
 - a) Department Library with 500books
 - b) Provides Internet facilities for Staff&Students
 - C) Class rooms with ICT facility NIL
 - d) Language Laboratory
- 31. Number of students receiving financial assistance from college, university, government or other

Agencies -----22

32.Details on student enrichment programmes (special lectures/ workshops/ seminar) with external

Experts ---

33. Teaching methods adopted to improve student learning:

Lecturing ,ICT with

the help of Language Laboratory

- $34.\mbox{Participation}$ in Institutional Social Responsibility (\mbox{ISR}) and Extension activities
- 35.SWOC analysis of the department and Future plans

Evaluative Report of the Department of Mathematics &Statistics

1. Name of the department : Mathematics & Statistics

2. Year of Establishment : 1979

3. Names of Programmes/Courses offered : UG, PG

- 4. Names of Interdisciplinary courses and the departments/units involved:
 - Complementary Mathematics for B. Sc Physics
 - Complementary Statistics for B. Sc Physics
 - Complementary Mathematics for B. Sc Chemistry
 - Statistics for BA & MA Economics
 - Open Course conducted- Applicable Mathematics
- 5. Annual/semester/choice based credit system(programme wise):
 - B. Sc –CBCSS, M. Sc– Credit & Semester System.
- 6. Participation of the department in the courses offered by other departments:
- The Complementary Course Mathematics is offered to the department of Physics & Chemistry.
- The Core Courses Quantitative tools in Economic Analysis and Quantitative Economics are offered to the department of Economics:
- The students of mathematics department opted the following Open courses:- English for Careers, Pathrapravarthanam, Fundamentals of Economics, Fundamentals of Accounting, Energy and Environmental Studies, Food Science, Agribased, Management of Ornamental Fish Breeding Rabbit farming etc. and Physical, Health and Life Skill Education
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:

Nil

8. Details of courses/programmes discontinued(ifany)with reasons:

Nil

9. Number of Teaching posts

	Sanctioned	Filled
Professors	Nil	
Associate Professors	2	2
Assistant Professors	5	5

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D./M.Phil.etc.,)

Name	Qualifi- cation	Designa- tion	Speciali- zation		Years of erience	No.of Ph.D. Student s guided for the last 4 years
Prof. K R Remadevi	MSc B.Ed	Associate Professor	Statistics	34	19	Nil
Sri. D Salimkumar	MSc	Associate Professor	Functional Analysis	30	19	
Sri. P Rishikumar	MSc	Associate Professor	Operation Research	31	19	
Sri. Ranjan Abraham	MSc	Associate Professor	Topology	33	19	
Dr. K KThampi	MSc,Ph.D	Associate Professor	Stochastic Analysis	31	19	7
Smt.Asha M S	MSc BEd	Associate Professor	Complex Analysis	21	19	Nil
Sri. Ajan K A	MSc BEd	Assistant Professor	Real Analysis	4	4	
Smt. Neelima C A	MSc BEd, MPhil	Assistant Professor	Fuzzy Mathematics	4	4	

Smt.	MSc BEd	Assistant	Algebra,	4	4
Sreejamol P		Professor	Graph		
R			Theory		
Smt. Ninu S	MSc	Assistant	Topology	2	2
Lal		Professor			
Smt.	MSc	Assistant	Commutative	2	2
RejeeIttiyera		Professor	Algebra		

- 11. List of senior visiting faculty : Prof.C.S.Narayanan
- 12. Percentage of lectures delivered and practical classes handled (programme wise) By temporary faculty : 11.7%
- 13. Student-Teacher Ratio(programme wise)

Teachers with Ph. D

B.Sc 10:4 M.Sc 2:7

- 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:

Teachers with PG : 5

Teachers with M. Phil : 1

16. Number of faculty with ongoing projects from National / International funding agencies and grants received:

1

Sl.	Name of	Topic of	Funding	Date	Project	Status
No	the Faculty	Research	Agency		outlay	
1	Neelima C	Applications of	UGC	2014	1,70,000	Ongoing
	A	Rough Set				
		Theory in				
		Algebra				

17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received:

S1.	Name of	Topic of	Funding	Date	Project	Status
No	the Faculty	Research	Agency		outlay	
1	Dr. K	Stochastic	UGC	2011	1,50,000	Completed
	KThampi	Analysis				
		Insurance				
		Risk Models				
2	Neelima C	Applications	UGC	2014	1,70,000	Ongoing
	A	of Rough Set				
		Theory in				
		Algebra				
	Total grants received:					

- 18. Research Centre/facility recognized by the University : **No**
- 19. Publications:

a) Publication per faculty

Name of		No. of Publications						
the Faculty	Single	authored	Co-authore	Total				
	National	International	National					
K KThampi	2	2			4			
Neelima C			2	5	7			
A								

Name of	Sl	Title of the	Name of	Date	Journal Type
Faculty	No	Paper	Journal		
K K Thampi	1	On the Renewal Risk Model with Constant Interest Force	Journal of Risk Analysis and Crisis Response	Vol. 3 (2), 2013	International/ peer reviewed
K K Thampi	2	Mathematical Modeling: Concepts and Application	Journal of Current Studies	Vol.1,2014	National
K K Thampi	3	Finite time Ruin Probability of the Compound Renewal Model with Constant Interest rate and Weakly Negatively Dependent Claims with Heavy Tails"	International Game Theory Review	Appear	International/ peer reviewed
K KThampi	4	The modelling of	Journal of Current	Appear	National
		insurance risks	Sciences		

Neelima C A Co author: Paul Isaac	1	Rough subring and their properties	Int. J. of Mathematical Science	Vol12, No:3-4, 2013	International
Neelima C A	2	Rough Ideals and their properties	J. of Global Research in Mathematical archives	Vol.1, No.6, 2013	International
Neelima C A	3	Anti- homomorphism on rough prime fuzzy ideals and rough primary fuzzy ideals	Annals of fuzzy Mathematics and Informatics	Vol8, No.4, 2014	International/ peer reviewed
Neelima C A	4	Rough fuzzy bi- ideals and their properties	Bulletin of Kerala Mathematical Association		National
Neelima C A	5	Rough Semi- prime Ideals and Rough bi-ideals in rings	Int. J. of Mathematical Science and Applications	2014	International
Neelima C A	6	Anti- homomorphism on rough prime ideals and rough primary ideals	Advances in Theoretical and Applied Mathematics	Vol 9 No.1, 2014	International
Neelima C A	7	Rough anti homomorphism on a rough group	Global J. of Mathematical Science Theory and Practical	Vol6 No.2, 2014	International

 Number of papers published in peer reviewed journals (national/international) by faculty and students
 3

• Number of publications listed in International Database

* 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

20. Areas of consultancy and income generated : Nil

21. Facultyasmembersin

a) National committees : 1
 b) International Committees : 4
 c) Editorial Boards : 0

K KThampi has

• Membership in International Bodies

Member, Asia Pacific Risk and Insurance Association, Singapore

Member, International Indian Statistical Association (IISA)

Member, International Actuarial Association (IIA)

Member, International Statistical Institute (ISI)

• Membership in National Bodies

Life Member, Kerala Statistical Association, INDIA

22. Studentprojects

Percentageof students who haveone in-houseprojects including interdepartmental/programme : 100%

As a part of Curriculum each student of Semester IV of PG and Semester VI of UG has to submit a project report (one copy is kept in the Dept. library.)

Percentage of studentsplaced forprojectsinorganizations outsidethe institution inResearchlaboratories/Industry/ otheragencies : Nil

23. Awards/Recognitions received by faculty and students

• Dr.K.K.Thampi has awarded Ph.D from Calicut University in 2007.

24.List of eminent academicians and scientists/visitorstothe department:

Sl.	Name	Designatio	Address	Dat	Purpose/Tit
No		n		e	le of the
•					Talk given
1	Dr.	Head	Department of	201	Invited
	SourierSebastin		Mathematics, St.	1	Speaker:
			Albert's College,		Fuzzy
			Ernakulam		Mathematics
2	Dr. Manju K	Associate	Department of	201	Invited
	Menon	Professor	Mathematics, St.	1	Speaker:
			Paul's College,		Domination
			Kalamassery		in Graphs
3	Prof. Edwin	Associate	Department of	201	Invited
	Thomas	Professor	Mathematics, St.	2	Speaker:
			Albert's College,		Rigor in
			Ernakulam		Calculus
4	Dr. Davis	Associate	Christ College	201	Invited
	Antony	Professor	Iringalakuda	2	Speaker:
	Mundessery				Introduction
					to MathCad
5	Prof. T S	Retired	NSS College	201	Invited
	Balasubramaniu	Professor	Vadakanchery	2	Speaker:
	m				Mathematics
					made fun
6	Dr. Paul Isaac	Associate	BMC,	201	Invited
		Professor	Thrikkakara	3	Speaker:
					Combinatori
					cs
7	Dr. Madhu		ChaithanyaHospit	201	Invited
			al, N. Paravur	3	Speaker:
					Adolescence
					Problems
					and solutions
8	M V Jose	Director	Lakshmi College,	201	Invited
			N. Paravur	3	Speaker:
					Positive
					Mental
					Attitude

9	Prof. A	Formerly,	Department of	April	National
	Krishnamoorthy	Head	Mathematics,	2013	Seminar
			Cochin		
			University of		
			Science and		
			Technology		
10	Prof. M J Jacob	Professor	Dept. of	April	National
	,		Mathematics,	2013	Seminar
			NITC		
11	Dr. M A Shalu	Associate	Dept. of	April	National
		Professor	Mathematics,	2013	Seminar
			IIIT DJM		
			Chennai		
12	Dr. Sunny	Retired	BPC College	April	National
	Kuriakose,	Principal	Piravom	2013	Seminar
13	Dr. Sunil	Professor	Mathew, Dept.	April	National
	Mathew		of Mathematics,	2013	Seminar
			NITC		
14	Dr. Satyanada	Professor	Mathew, Dept.	April	National
	Panda		of Mathematics,	2013	Seminar
			NITC		
15	Dr. Aparna	Assistant	St. Xavier's	2014	Invited
	Lakshmanan	Professor	College, Aluva		Speaker:
					Introduction
					to Graph
					Theory

25.Seminars/Conferences/Workshopsorganized&thesourceof funding

a) National:

Nature	No. of Seminars	Name of the Conference	Name of funding Agency	Dates & Year
National	1	National Seminar on Modelling Optimization and Computational Techniques (in association with KMA)	UGC	April 05-06, 2013

b) Intrnational: Nil

26. Studentprofileprogramme/coursewise:

Year of Admissi	Nameofthe Course/programme(r	Applicatio ns	Select	Enroll ed		Pass
on	efer question no. 4)	received	ed	*	*	percenta
				M	F	ge
2010- 2011	B.Sc	202	28	13	15	84%
2011	M.Sc	48	12	0	12	82%
2011- 2012	B.Sc	CAP	29	13	16	100%
2012	M.Sc	45	12	0	12	72%
2012- 2013	B.Sc		37	14	23	79%
2013	M.Sc	CAP	13	0	13	58%
2013-	B.Sc		42	20	22	55%
2014	M.Sc	САР	12	1	11	R.A

^{*}M=Male *F=Female

27. Diversity of Students

Year of Admission	Nameofthe Course	%of students fromthe samestate	%ofstudents fromother States	%of students from abroad
2010-2011	B.Sc	100	Nil	Nil
	M.Sc	100	Nil	Nil
2011-2012	B.Sc	100	Nil	Nil
	M.Sc	92	8%	Nil
2012-2013	B.Sc	100	Nil	Nil
	M.Sc	100	Nil	Nil
2013-2014	B.Sc	100	Nil	Nil
	M.Sc	100	Nil	Nil

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28. How many students have cleared national and state competitive examinations such

asNET,SLET,GATE,Civilservices,Defenseservices,etc.?

NET: 4 SET: 5 OTHERS: Nil

29. Student progression

Student progression	Against%enrolled
UG to PG	6%
PG to M.Phil.	1%
PG to Ph.D.	1%
Ph.D. to Post-Doctoral	Nil
Employed •Campus selection •Other than campus recruitment	2% 22%
Entrepreneurship/Self-employment	20%

- 30. Details of Infrastructural facilities
 - a) Library

:Nil

- b) Internet facilities for Staff &Students: Yes
- c) Classrooms with ICTfacility: 2 Nos.
- d) Laboratories: 1 computer lab
- 31. Number of students receiving financial assistance from college, university, Government or other agencies:

SC - 7, OEC- 8, SEBC- 2

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts

***************************************	ops, semmar, wi	tii externai experts		
S1. No.	Topic	Name of Expert	Address	Date
1	Fuzzy Mathematics	Dr. Sourier Sebastin	Department of Mathematics, St. Albert's College, Ernakulam	2011
2	Domination in Graphs	Dr. Manju K Menon	Department of Mathematics, St. Paul's College, Kalamassery	2011
3	Rigor in Calculus	Prof. Edwin Thomas	Department of Mathematics, St. Albert's College, Ernakulam	2012
4	Introduction to MathCad	Dr. Davis Antony Mundessery	Christ College Iringalakuda	2012
5	Mathematics made fun	Prof. T S Balasubramanium	NSS College Vadakanchery	2012
6	Combinatorics	Dr. Paul Isaac	BMC , Thrikkakara	2013
7	Adolescence Problems and solutions	Dr. Madhu	ChaithanyaHospital, N. Paravur	2013
8	Positive Mental Attitude	M V Jose	Lakshmi College, N. Paravur	2013
9	National Seminar	Prof. A Krishnamoorthy	Department of Mathematics, Cochin University of Science and Technology	April 2013
10	National Seminar	Prof. M J Jacob ,	Dept. of Mathematics, NITC	April 2013
11	National Seminar	Dr. M A Shalu	Dept. of Mathematics, IIIT DJM Chennai	April 2013
12	National Seminar	Dr. Sunny Kuriakose,	BPC College Piravom	April 2013
13	National Seminar	Dr. Sunil Mathew	Mathew, Dept. of Mathematics , NITC	April 2013
14	National Seminar	Dr. Satyanada Panda	Mathew, Dept. of Mathematics, NITC	April 2013
15	Introduction to Graph Theory	Dr. Aparna Lakshmanan	St. Xavier's College, Aluva	2014

- 33. Teaching methods adopted to improve student learning
 - Besides conventional lecture method, the following methodologies are also practiced:
 - Giving assignments on a regular basis.
 - Assigning seminar topics to all students according to syllabus.
 - Asking questions about previous classes every day.
 - Conducting Regular Internal Examinations
 - Remedial Teaching to weak students
 - Group discussions.
- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities
 - The department supports all ISR and extension activities conducted by the college. Apart from this
 - A charity box and medicine box were introduced.
 - The department staff and students regularly visit nearby old age homes and school for Mentally Retarded children give gifts to the inmates during festivals.
 - The teachers of department gives NET Coaching Classes to M.Sc students every year.
 - Organized a workshop on basic computer lesson for Kudumbasree members.
 - Conducting Craft Exhibition every year.
 - Organized an Abacus training programme for students in PrathyasaBhavanKodungalloor.
 - Personality development training is given to First year Degree students.
 - Conducting Quiz Competition and gives cash prize to the winners every year.
 - As a part of Golden Jubilee Celebrations, Department conducted
 Fibonacchi Sequence Theme show and gave lecture on Golden Ratio.
 - Department released a manuscript magazine last year.

- K A Kumaran and Cheramma Kumaran Memorial Award awards for final year UG students with more than 90% mark in the University Exam instituted by Dr.K.K.Thampi
- 35. SWOC analysis is of the department and Future plans
- Strength:
- Committed Faculty
- Good teacher-student relationship
- Excellent value orientation
- Team spirit
- Ex- faculty support for Staff and students
- Teaching enhancement by continuous evaluation
- Feedback based coaching
- The discipline maintained in the department, excellent teaching

Weakness:

- Poor standard of students joining the programme
- Inadequate communication skill of students.

Opportunities:

- Giving NET coaching to PG students.
- Provide intimation about job opportunities through campus placement and from other agencies.
- Provide Special coaching to prepare for competitive examinations PSC
 , Bank test etc.
- Provide Computer lab with internet facility to prepare projects for UG and PG students.
- Future Plan:
- * Conduct National Seminar in recent research areas.
- * Conduct workshops in Mathematics for teachers & PG students.

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- * Convert all class rooms into ICT enabled class rooms.
- * Use the resource of teachers as resource person to other institution.
- * One day refresher course for Higher Secondary school teachers on LATEX.

Evaluative Report of the Department of PHYSICS

The Self-evaluation of every department may be provided separately in about 3-4 pages, avoiding the repetition of the data.

1. Nameofthedepartment : PHYSICS

2. YearofEstablishment: 1964

3. Names of Programmes/Courses offered: UG and PG courses

4. NamesofInterdisciplinarycoursesandthedepartments/units involved

Dept. of Mathematics : Complementary Statistics for B. Sc Physics

Dept. of Mathematics: Complementary Mathematics for B. Sc Physics

Open course:Renewable Energy Technology

5. Annual/semester/choicebasedcreditsystem(programmewise)

B. Sc – CBCSS, M. Sc– Credit & Semester System.

- 6. Participation of the department in the courses of fered by other departments
 - Complementary Course in Physics is offered to the students of the department of Mathematics and Chemistry.
 - The students of physics department attend open courses conducted by the department of English, Economics, Zoology, Botany, Chemistry, Malayalam, Physical Education and Commerce.
- 7. Courses in collaboration with other universities, industries, foreigninstitutions, etc.:Nil
- 8. Detailsofcourses/programmes discontinued(ifany)withreasons:Nil
- 9. Number of Teachingposts As on June 2014

	Sanctioned	Filled
Professors	Nil	
AssociateProfessors	2	2
Asst.Professors	6	3

10. Facultyprofilewithname,qualification,designation,specialization,(D.Sc./D.Litt./Ph.D./M.Phil.etc.,)

Name	Qualification	Designation	Speciali- zation	No.of Years of Experi ence	No.o fPh. D. S
T.P.Kairali	Principal	M.SC M.Phil		31	
K KChandrika	Associate Professor	M.SC		30	
Dr.K K Radha	Principal	M.Sc ,Ph.D		33	
T H Haripriya	Principal	M.Sc		32	
P A Ushadevi	Associate Professor	M.Sc		32	
C V Babu	Associate Professor	M.Sc, PGDCA		30	
P.V.Athma	Associate Professor	M.Sc ,M.Ed		26	
Dr.Jeeju P.P	Associate Professor	M.Sc,B.Ed,M. Phil,Ph.D	Condensed Matter	24	
Dr.Neena P.P	Assistant Professor			2	
PriyaS.Nair	Assistant Professor	M.Sc ,M.Tech		2	
Sunil Kumar C.P	Assistant Professor	M.Sc ,B.Ed		2	

11. Listofseniorvisitingfaculty

Former Heads of the department Prof. K.M.Chandrahasan

12. Percentageoflecturesdeliveredandpracticalclasseshandled(programmewi

bytemporaryfaculty:

se)

2010-2011 :12.5% 2011-2012 : 25%

2012-2013 :Nil 2013-2014 :12.5%

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Criterion VII Innovations and Best Practices

13. Student-TeacherRatio(programmewise)

B.Sc- 9:1 M.Sc-3:1

14.

Numberofacademicsupportstaff(technical)andadministrativestaff;sancti oned andfilled

	Sanctioned	Filled
Lab Assistant	3	3
Mechanic	1	1

15. QualificationsofteachingfacultywithDSc/D.Litt/Ph.D/MPhil/PG.

No. of Teachers with M Phil – 3

No. of Teachers with Ph D - 3

16.

Numberoffacultywithongoingprojectsfroma)Nationalb)Internationalfun ding agencies andgrantsreceived

- Minor research project was sanctioned for Dr.Jeeju P.P., associate Professor on the topic "Investigations on the synthesis and characterisation of Polyaniline and Polypyrrole nanostructures" (Amount- Rs2,00,000/-)
- Minor research project was sanctioned for Dr.Neena P ,assistant Professor on the topic "Measurement of permeability of water vapour and gas through polymers" (amount Rs95,000/-)
- 17. Departmentalprojectsfundedby DST-FIST;UGC, DBT, ICSSR,etc.andtotal grantsreceived

Sl.No.	Principal	Title	Dura	Funded	Amount	Status
	Investigator		tion	Agency	in Rs	
1	Dr.Jeeju P.P	Investigations on	2Yea	UGC	2,00,000/	On
		the synthesis and	rs		-	going
		characterisation of				
		Polyaniline and				
		Polypyrrole				
		nanostructures				
2	Dr.Neena P.	Measurement of	2Yea	UGC	92,000/-	On
		permeability of	rs			going
		water vapour and				
		gas through				
		polymers				

- 18. ResearchCentre/facilityrecognizedbytheUniversity:Nil
- 19. Publications:
 - * a) Publicationperfaculty
 - * Numberofpaperspublishedinpeerreviewedjournals(national/

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international) by faculty and students

Name of the faculty	No.of publications	National	International
Dr.Radha K.K	1	1	
DrJeeju P.P	17	7	10
Dr.Neena P.	4	2	2
PriyaS.Nair	2		2

Publications-

Dr.Radha K.K

Increased sensitivity for petroleum gas due to additions of lanthanum on SnO_2 thin films

Radha K.K and BobenThomas,Journal of current studies ,vol 2,issue no.01 december 2012

Jeeju P.P.

International journals

- 8 On the interesting optical properties of highly transparent, thermally stable, spin coated Polystyrene (PS)/Zinc Oxide (ZnO) nanocomposite films,
 - **Jeeju.P.P**, S.Jayalekshmi, Journal of Applied Polymer Science, Vol 120, 1361-1365 (2011) **Impact factor-1.60**
- 9 Size dependent optical properties of transparent, spin coated Polystyrene/Zinc Oxide nanocomposite films,
 - **Jeeju, P, P,** Sajimol. A.M, Sreevalsa. V.G, S.J.Varma, S. JayalekshmiPolym Int.**60**: 1263–1268 (2011)**Impact factor-2.247**
- 10 Size dependentnonlinear optical properties of spin coated Zinc Oxide-Polystyrene nanocomposite films
 - PullarkatP. Jeeju, S. Jayalekshmi, K. Chandrasekharan, P. Sudheesh, Optics Communications 285 (2012) 5433–5439Impact factor-1.542
- 11 NovelPolypyrrole films with excellent crystallinity and good thermal stability,

- P.P. Jeeju, S. J. Varma, P. A. Francis Xavier, A.M. Sajimol, S.Jayalekshmi, "Materials Chemistry and Physics 134 (2012) 803-808 Impact factor-2.234
- 12 Enhanced linear and nonlinear optical properties of thermally stable ZnO/PS-PMMA nanocomposite films,
 - PullarkatP. Jeeju, S. Jayalekshmi, K. Chandrasekharan, P. Sudheesh, Thin solid films,531 (March 2013) 378–384. Impact factor-2.038
- 13 Quantum confinement effects in highly conducting, ultrathin Polyaniline films pursued through spectroscopic investigations,
 - S. J. Varma, Jerin George, **P. P. Jeeju**, S. Jayalekshmi, Journal of Luminescence *132* (2012) 801–805**Impact factor-2.144**
- 14 L-Histidine Modified Biocompatible Zinc Oxide Nanocrystals,
 - V.G. Sreevalsa; **P.P. Jeeju**; M. Sajimol Augustine; K M. Anilkumar; S. Jayalekshmi; Journal of Experimental NanoscienceVol. 8, Issue 7-8, (2013)pages 937-946**DOI:**10.1080/17458080.2011.624553**Impact factor-1.043**
- 13. Excellent UV absorption in spin coated thin films of oleic acid modified ZnOnanorodsembedded in poly vinyl alcohol,
 - M. Sajimol Augustine; **P. P. Jeeju**; V.G. Sreevalsa, S. Jayalekshmi, Journal of Physics and Chemistry of solids 73 (2012) 396–401 **Impact factor-1.632**
- 14. "Enhanced photoluminescence in transparent thin films of polyanilinezinc oxide nanocomposite prepared from oleic acid modified zinc oxide nanoparticles"
 - M. Sajimol Augustine, **P.P Jeeju**, S.J Varma, P.A Francis Xavier, S. Jayalekshmi, , *Thin solid Films*, volume 562, issue, year 2014, pp. 84 89. **Impact factor-2.038**
- 15. "Nonlinear optical properties of ZnO/poly (vinyl alcohol) nanocomposite films"
 - **P. P. Jeeju**, S. Jayalekshmi, and K. ChandrasekharanAIP Conference Proceedings **1576**, 163-166 (2014); doi: 10.1063/1.4862010**ISBN:** 978-0-7354-1206-4

H index-29

This journal is indexed in the following databases, amongst others

Academic Search Premier, Scitation, Scopus, Web of Knowledge

National journals

- 1. Micelle-assisted synthesis of polypyrrole nanoparticles and their characterization,
 - **P.P. Jeeju,** P.A. Francis Xavier, A.M. Sajimol, V.G. Sreevalsa, S.Jayalekshmi, Science & Society (ISSN 0973-0206) .9 (2), 113-120 (2011)
- 2. Studies on L-citrulline Capped Zinc Oxide Nanocrystals,
 - V.G Sreevalsa, **P.P Jeeju**, M. Sajimol Augustine and S. Jayalekshmi, Science & Society (ISSN 0973-0206) .9 (2), 183-188 (2011)
- 3. Solvent Dependent Optical Properties of Highly Luminescent Nanocrystals of ZnS Doped with Manganese,
 - M. Sajimol Augustine, P. Indu, V.G Sreevalsa, **P. P. Jeeju** and S. Jayalekshmi, Science & Society (ISSN 0973-0206) .9 (2), 109-112 (2011)
- 4. Growth and Characterisation of L- lysine doped Potassium Dihydrogen Phosphate
- Single Crystals for Nonlinear Optical Applications
 - Sreevalsa.V.G, **JeejuP.P**&S.Jayalekshmi, Journal of Current Studies (ISSN: 2277-2707) 2(1), 33-36 (2012)
 - 5. Linear and Nonlinear Optical Properties of ZnO/Poly(styrene)
 Nanocomposite Films
 - **Jeeju.P.P.** and S.Jayalekshmi, Journal of Current Studies (ISSN: 2277-2707) 2(1), 21-26 (2012)
 - Synthesis and Characterization of highly luminescent ZnS:Mn/PMMA nanocomposite films
 - M.Sajimol Augustine, V.G Sreevalsa, **P.P Jeeju**, S.Jayalekshmi, Journal of Current Studies (ISSN: 2277-2707) 2(1), 27-32 (2012)
 - 6. Nonlinear Optical Properties of ZnO/PolyvinylpyrrolidoneNanocomposite Films,

JeejuP. P., Sreevalsa V. G., M. Sajimol Augustine, S. Jayalekshmi, Journal of Current Studies (ISSN: 2277-2707) (2013)

International/National conferences - Publications

- 1. Jeeju P P, Sreekanth J Varma, Amirtesh M, S Jayalekshmi "PolypyrroleNanorods with appreciable Crystallinity and good Optical Absorption Characteristics" Proceedings of the International conference on frontiers in Nano Science and Technology. Cochin Nano -2009, January 3-6, Cochin, Kerala, India
- . **2.Jeeju P P**, S Jayalekshmi , "On the interesting optical properties of ZnOnano crystals embedded in polystyrene matrix" Proceedings of the National seminar on Quantum chemistry and Nano techniques;19-20 Nov 2009 SNM College Maliankara, Ernakulum, Kerala.
- **3. Jeeju P P**, Asha K, S Jayalekshmi, "Synthesis and study of size dependent optical properties of ZnOnano particles" Proceedings of the National seminar on Nano structured materials and Nano photonics; 4-5 Jan 2010, St.Teresa's college, Ernakulam, Kerala.
- **4. Jeeju P P**, S Jayalekshmi, "*Transparent PS-ZnO/ Nano composite films with good UV shielding properties*" Proceedings of the International conference on Advancements in Polymeric Materials APM-2010, Trends and Technology, 20-22 Feb 2010, CIPET, Bhuvaneswar.
- **5.Jeeju P. P**, S J. Varma, Francis Xavier P.A, S.Jayalekshmi, *Polypyrrole films with excellent crystallinity and good thermal stability*, Proceedings of the International conference on Recent Trends in Materials Science and Technology ICMST-2010, October 29-31, 2010 IIST, Trivandrum.
- 6.**Jeeju P P**, Asha K, S Jayalekshmi, *Investigations on the size dependent optical properties of PS/ZnOnanocomposite films*, Proceedings of the International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering ISRS-2010, December 20-22, 2010, Dept. of Metallurgical and Materials Engineering, IIT Madras
- **7.Jeeju.P.P,**Sreevalsa.V.G, Sajimol.A.M and S.Jayalekshmi, *Enhanced UV-shielding properties of ZnO/PS-PMMA nanocomposite films*, Proceedings of the Third International conference on frontiers in Nano Science and Technology. Cochin Nano 2011,August 14-17, Cochin, Kerala.

- **8. P.P. Jeeju**, P.A. Francis Xavier, A.M. Sajimol, V.G. Sreevalsa, S.Jayalekshmi, *Micelle-assisted synthesis of polypyrrole nanoparticles and their characterization*, Proceedings of the National symposium on Nano Science and Technology Nanostech 2011, 1-2 September, Nirmala CollegeMuvattupuzha, Kerala.
- **9.** Francis Xavier.P.A, Amrithesh M, S J Varma, **Jeeju P P,** S Jayalekshmi, *Studies on Polyaniline-Functionalised Carbon Nanotube Composite Films with Exceptionally High DC Electrical Conductivity*, Proceedings of the International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering ISRS-2010, December 20-22, 2010, Dept. of Metallurgical and Materials Engineering, IIT Madras
- **10.**S.J.Varma, Jerin George, Francis Xavier.P.A, **Jeeju.P.P,**S.Jayalekshmi, *A quest for quantum confinement in conducting Polyaniline through spectroscopic investigations*,

 Proceedings of the International conference on Recent Trends in Materials and Technology ICMST, October 29-31, 2010 IIST,

 Trivandrum
- **11.**Francis Xavier.P.A, Bobins Augustine, S J Varma, **Jeeju P P**, Amrithesh M and S Jayalekshmi*Functionalization of multiwalled carbon nanotube as a route to synthesize highly conducting polymernanocomposites*, Proceedings of the International conference on Recent Trends .in Materials Science and Technology ICMST-2010, October 29-31, 2010 IIST, Trivandrum.
- **12**.. Sajimol Augustine, **P.P Jeeju**, V.G Sreevalsa, S.Jayalekshmi, *Highly luminescent PANI/ZnONanocomposite Films Prepared from Oleic Acid Capped ZnO Nanoparticles*, Proceedings of the Third International conference on frontiers in Nano Science and Technology. Cochin Nano 2011, August 14-17, Cochin, Kerala.
- 13. Sreevalsa. V.G., **Jeeju.P.P.**, Sajimol Augustine. M., Jayalekshmi. S., *Effect of various capping agents on the optical properties of Zinc oxide nanocrystals*, Proceedings of the Third International conference on frontiers in Nano Science and Technology. Cochin Nano 2011, August 14-17, Cochin, Kerala.
- **14**. V.G Sreevalsa, **P.P Jeeju**, M. Sajimol Augustine and S. Jayalekshmi, *Studies on L-citrulline Capped Zinc Oxide Nanocrystals*, Proceedings of the National symposium on Nano Science and Technology Nanostech 2011, 1-2 September, Nirmala CollegeMuvattupuzha, Kerala.

- **15**. M. Sajimol Augustine, P. Indu, V.G Sreevalsa, **P.P Jeeju**and S. Jayalekshmi, *Solvent Dependent Optical Properties of Highly Luminescent Nanocrystals of ZnS Doped with Manganes*, Proceedings of the National symposium on Nano Science and Technology Nanostech 2011, 1-2 September, Nirmala CollegeMuvattupuzha, Kerala
- **16**. **P. P. Jeeju,** V. G. Sreevalsa, *Synthesis and Characterization of Camphor Sulfonic Acid Doped Polypyrrole Nanoparticles*, Proceedings of the National conference on Emerging Trends in Theoretical and Experimental Physics, September 26-27, 2012 Farook College, Calicut, Kerala.
- **17.** V. G. Sreevalsa, **P. P. Jeeju**, S. Jayalekshmi, *Effect of Lithiumd doping on the optical properties of L-citrulline oxalate monohydrate nonlinear optical crystals*, Proceedings of the National conference on Emerging Trends in Theoretical and Experimental Physics, September 26-27, 2012 Farook College, Calicut, Kerala.
- **18. Jeeju P. P.,** Sajimol A. M., Sreevalsa V. G., *Linear and nonlinear optical properties of transparent*, *spin coated ZnO/poly vinyl alciholnanocomposite films*, Proceedings of the National seminar on Current trends in the fields of Nanoscience and Nanotechnology, December 13-14, 2012 KKTM Govt College, Pullut, Kerala
- **19.** M. Sajimol Augustine, Sreevalsa V. G., **Jeeju P. P.,** S. Jayalekshmi*Highly luminescent, transparent and flexible nanocomposite films of ZnS:Mn in PVA-PVP matrix*, Proceedings of the National seminar on Current trends in the fields of Nanoscience and Nanotechnology, December 13-14, 2012 KKTM Govt College, Pullut, Kerala.
- **20.** Sreevalsa V. G., **Jeeju P. P.,** Sajimol A. M., *Third order nonlinearity and biocompatibility studies of L-histidine capped ZnOnanocrystals*, Proceedings of the National seminar on Current trends in the fields of Nanoscience and Nanotechnology, December 13-14, 2012 KKTM Govt College, Pullut, Kerala
- **21. Jeeju P P**, S Jayalekshmi, *Nonlinear optical properties of ZnO/PVA nanocomposite films, Second International conference on Optoelectronic Materials and Thin films for Advanced nology,* 2-5 January 2013, Department of Physics, CUSAT Kochi-22, Kerala
- **22.JeejuP. P.**, Sreevalsa V. G., M. Sajimol Augustine, S. Jayalekshmi, *Nonlinear Optical Properties of ZnO/PolyvinylpyrrolidoneNanocomposite Films*, Proceedings of the National seminar on Recent trends in the development of Nanomaterials and Nanodevices (RTNN 2013) Sept.5-6 2013, Dept. of Physics, S N M College, Maliankara Kerala.

Dr.Neena P

Patents

- 1. "Conducting Polymer Nanoparticles from Elastomers", Dr.P.Predeep, Ms.Najidha.S, **Ms.Neena.P** and Ms.Anisha Mary Mathew, The Patent Official Journal 14/01/2011, Isssue No.02/2011,569.
- 2. "Humidity and Gas Sensor from Conducting Polymer Nanoparticle-Plastic Composites", Dr.P.Predeep, **Ms.Neena.P** and Ms.Anisha Mary Mathew, The Patent Official Journal 14/01/2011, Isssue No.02/2011, 567.

Publications

International Journals

- 1. Toward "Rubbery" Nanoparticles P Predeep, Najidha S, Neena P. Journal of. Appl. Polymer .science. 2013, DOI: 10.1002/APP.39172 1 impact factor ---- 1.8
- 2. "Synthesis of highly translucent conducting thin films from elastomer Nanoparticles", Neena.P, Anisha Mary Mathew and P. Predeep. Journal of Optoelectronics and Advanced Materials –Rapid communications, Vol. 5, No. 9, September 2011, p. 985 987impact factor ---1.6

International conference proceedings

- 1. "Optical Characterisation of Semiconducting Natural Rubber nanoparticles and its Composites", **P. Neena** and Anisha Mary Mathew, Optics '11, International Conference on Light, AIP Conf. Proc. 1391, 131 (2011)
- 2. "Effect of Applied potential on the Electrochemical Deposition of Styrene-Butadiene Copolymer Based Conducting Polymer Composite", **P. Neena** and Anisha Mary Mathew, Optics '11, International Conference on Light, AIP Conf. Proc. 1391, 799 (2011)
- 3. "Styrene-Butadiene Copolymer Based Highly Conducting and Flexible Polymer Composite Film with Low Percolation Threshold", Neena.Pand Anisha Mary Mathew, Optics '11, International Conference on Light, AIP Conf. Proc. 1391, 793 (2011)
- 4. "Synthesis and Characterisation of Polypyrrole Coated SBR Composites", **Neena.P**, Anisha Mary Mathew, , Prasanth.S, N.S.Panwar and P.Predeep, Thermophysical Properties of Materials and Devices, American Institute of Physics, CP 1004(2008) 264
- 5. "Evaluation of AC Conductivity Behaviour of Conducting Rubber based Composites", Neena.P, Anisha Mary Mathew, Prasanth.S, N.S.Panwar and

P.Predeep, Thermophysical Properties of Materials and Devices, American Institute of Physics, CP 1004(2008) 269

National Journals

- 1. Differential Scanning Calorimetric analysis of Conducting Natural Rubber Nanoparticles Reinforced Natural Rubber Composites.Neena.P^{a,b}, P. Predeep^{a,*} Journal of Current Studies (ISSN: 2277-2707) 2(1), 11-16 (2012)
- 2. Thermogravimetric Analysis of LDPE Modified by Conducting Natural Rubber Nanoparticles. Neena. P^{a,b}, P. Predeep^{a,*} Journal of Current Studies (ISSN: 2277-2707) 2(1), 10-13(2013)

Papers Presented in International/National Conferences

- 1. "Synthetic Elastomer/Conducting Polymer Composites by Plasma Polymerisation for Microelectronic Applications", Neena P, Anisha Mary Mathew and P.Predeep, International Symposium for Research Scholars on Metallurgy (ISRS 2010), Material Science and Engineering, IIT Madras, Chennai, 20-22 December, 2010.
- 2. "Thin Film Deposition of SBR Copolymer Based Conducting Polymer Composites by Electrochemical Method", Neena.P, Anisha Mary Mathew, and P.Predeep, Second International Conference on Materials for the Future (ICMF 2011), Government Engineering College Thrichur, Thrissur, Kerala, 23-25 February, 2011.
- 3. "Synthesis and Electrical Characterisation of Polypyrrole Based cis 1,4 Polyisoprene Composites", Neena.P, Anisha Mary Mathew, Prasanth.S, N.S.Panwar and P.Predeep, National Symposium for Material Research Scholars (MR 08), IIT Bombay, Mumbai, 17-18 May, 2008.
- 4. "Low Cost Humidity Sensor from Styrene Butadiene Copolymer", Neena.P, Anisha Mary Mathew, Prasanth.S, N.S. Panwar and P. Predeep, National Symposium for Material Research Scholars (MR 08), IIT Bombay, Mumbai, 17-18 May, 2008.
- 5. "Humidity Sensors from cis 1,4 polyisoprene", Neena.P, Prasanth.S, G.R.C.Reddy, N.S.Panwar, Anisha Mary Mathew and P.Predeep, National Conference on Advances I Sensors for Aerospace Applications (SENSORS 2007), Research Centre Imarat, Defence R&D Organisation, Hyderabad, Andra Pradesh, 14-15 December, 2007.

PriyaS.Nair

 "Thin Film Rechargeable Electrodes Based on Conductive Blends of Nanostructured Olivine LiFePO4 and Sucrose Derived Nanocarbons for Lithium Ion Batteries", P. Praveen, U. Jyothsna, Priya Nair, Soumya Ravi, A. Balakrishnan, K. R. V. Subramanian, A. Sreekumaran Nair, V. Shantikumar Nair, and N. Sivakumar, Journal of Nanoscience and Nanotechnology, Vol. 13, 1–6, 2013

Impact factor-1.15

- "Synthesis and Characterization of Electrophoretically Deposited Nanostructured LiCoPO4 for Rechargeable Lithium Ion Batteries", S. Priya Nair, U. Jyothsna, P. Praveen, A. Balakrishnan, K. R. V. Subramanian, Shantikumar V. Nair, and N. Sivakumar,ISRN Nanotechnology, Volume 2013
- 20. Areasofconsultancyandincomegenerated:Nil
- 21. Facultyasmembersin
- a) Nationalcommitteesb)InternationalCommitteesc)Editorial Boards....Nil
- 22. Studentprojects
- a) Percentageofstudentswhohavedonein-houseprojects includinginterdepartmental/programme

B.Sc

2010-2011-100%

2011-2012-100%

2012-2013-100%

2013-2014-100%

M.Sc

2010-2011-Nil

2011-2012-Nil

2012-2013-33%

2013-2014-66%

- b) Percentageofstudentsplacedforprojectsinorganizations outsidetheinstitutioni.e.inResearchlaboratories/Industry/ otheragencies Nil
- 23. Awards/Recognitionsreceivedbyfacultyandstudents
 Nil

24. Listofeminentacademiciansandscientists/visitorstothe department

Prof.V.P.NNampoori-CUSAT

Dr.Sankara Narayanan Potty-C-MET

Dr.N.V.Unnikrishnan-M G University

Dr.DeepthyMenon-ACNSMM,AIMS

Dr.S.Jayalekshmi-CUSAT

Dr.Reji Philip-RRI

25.

Seminars/Conferences/Workshopsorganized&thesourceoffunding a) National: National seminar on Recent trends in the development of Nanomaterials and Nanodevices (RTNN 2013) Sept.5-6 2013.

b)International:Nil

26. Studentprofileprogramme/coursewise:

Year of	Name of the	Applicatio	Selected		Enro	olled
Admission	Course/ programme (refer question no. 4)	ns received	Selected	*M		Pass percentage
2010-2011	B.Sc	248	30			
2010-2011	M.Sc	47	14			79
2011-2012	B.Sc	CAP	23			56
2011-2012	M.Sc	52	9	1	8	68
2012-2013	B.Sc	CAP	27			55
2012-2013	M.Sc	CAP	15	0	15	-
2013-2014	B.Sc	CAP	32	17	15	-
2013-2014	M.Sc	CAP	15	2	13	-
						-

^{*}M=Male *F=Female

27. Diversity of Students

Year of Admission	Nameofthe Course	% of students fromthe samestate	% of students from other States	% of students from abroad
2010-2011	B.Sc	100%	0%	0%
	M.Sc	100%	0%	0%
2011-2012	B.Sc	100%	0%	0%
	M.Sc	100%	0%	0%
2012-2013	B.Sc	100%	0%	0%
	M.Sc	100%	0%	0%
2013-2014	B.Sc	100%	0%	0%
	M.Sc	100%	0%	0%

28.

Howmanystudentshaveclearednationalandstatecompetitive examinations such as NET, SLET, GATE, Civilservices, Defenses ervices, etc.? 4

29. Studentprogression

Studentprogression	Against%enrolled
UGtoPG	25%
PGtoM.Phil.	1%
PGtoPh.D.	1%
Ph.D.toPost-Doctoral	Nil
Employed Campusselection Other than campus recruitment	12.5% 30%
Entrepreneurship/Self-employment	10%

30. Details of Infrastructural facilities

- a) Library: The department has a well stocked library with around 200 books which meets the needs of the UG & PG students and teaching staff of the department.
- b) Internet facilities for Staff & Students: The computer lab is well equipped with 12 computers with internet connection, including one laptop, two printers, two photocopy machine, two scanner and an LCD Projector.
- c) Class rooms with ICT facility :One classroom is facilitated with wall mount LCD projector and Interactive Board
- d) Laboratories: Computer Lab with 8 computers
- 31. Number of students receiving financial assistance from college, university, government or other agencies

E grantz scholarship-40

Single Girl child scholarship-6

Scholarship for Dheevara student-10

- 32. Detailsonstudentenrichmentprogrammes(speciallectures/workshops/seminar)withexternalexperts
 - Seminars conducted by the following Expert'

Prof.V.P.N Nampoori-CUSAT

Dr.Sankara Narayanan Potty-C-MET

Dr.N.V.Unnikrishnan-M G University

Dr.DeepthyMenon-ACNSMM,AIMS

Dr.S.Jayalekshmi-CUSAT

Dr.Reji Philip-RRI

Dr. Shaji N.-Maharajas College, Ernakulam

- 33. Teachingmethodsadoptedtoimprovestudentlearning
 - Feedbacks are collected every year and improvements are made based on the feedbacks.
 - Weak students are given remedial coaching.
 - In addition to the traditional teaching techniques, use of ICT is promoted.
 - Seminars are conducted by experts in the field.
 - Quiz programmes ,Research paper presentations ,poster competitions are done on the topic to improve the academic standards of students
 - Various workshop and exhibitions are conducted to improve the knowledge of students in the subject.
 - Students are encouraged to attend national and international seminars.

34.Participation in Institutional Social Responsibility (ISR) and Extension activities

- The department has conducted "Save energy campaign programme" inorder to make people aware of the importance of energy conservation
- Training was given to house wives in the locality for maintaining and repairing household appliances
- With a vision to make people aware of the adverse effect of plastic on environment and to minimiseit,s use ,an awareness programme was conducted by the department.
- The students are made to visit Old age homes every year to invoke social commitments and responsibilities

- They are also given an opportunity to interact with Differentallialy abled children
- Prof.K.Mchandrahasan has conducted classes and demonstration of electronic experiments to higher secondary teachers of nearby higher secondary schools.
- Department is conducting yearly classes and demonstration of experiments to Higher secondary students
- Department is a center for development of physics in the local schools.
 Every year the same batch of students are invited to the college and classes and demonstration of experiments were done based on their syllabus to create interest in physics and to motivate them for higher education
- Training was given to Degree and PG students in jewellery making and glass painting which will help them to earn money for their education
- Exhibition of handicraft items was conducted by the degree and PG students
- A class on "Photography" was conducted by the department and a photography competition was held for the students.
- The degree students had made a short film and a film show was conducetd.
- Quiz competition and seminar was conducted on National science day every year
- Various seminars are conducted every year on different topics for the students

35. SWOCanalysisofthedepartmentandFutureplans -Strengths

- Unity of the faculty members
- Team spirit
- Committed faculty
- Friendly relationship between teachers and students
- Teaching enhancement by continuous evaluation
- Feedback based coaching
- Good lab and library facility
- Internet facility for students

Weakness

- Poor quality of rural students.
- Financially backward students
- Illiterate Parents

Opportunities

- Job opportunities through campus recruitment organized in the neighbouring engineering colleges
- Various scholarships are given to students belonging to Backward communities
- Special coaching given to the students for competitive examinations

Threats

- Hectic schedules of present semester system
- High percentage of drop outs.

Future Plan for the coming five years

In addition to the routine activities, the department is planning to do the following

- Establishment of Research lab in the department
- Inoder to enhance research, steps will be taken for getting major and minor projects
- Starting different add on courses.
- Arrangement of solar panels for lab.
- Arranging campus recruitments in the campus itself.

Evaluation report of Department of Zoology

1. Name of the department: **DEPARTMENT OF ZOOLOGY**

2. Year of Establishment : 1981

3. Names of Programmes / Courses

Offered (UG, PG, M.Phil., Ph.D.,

Integrated Masters; Integrated Ph.D., etc.)

B Sc Zoology and M Sc Zoology(SF)

4. Names of Interdisciplinary courses and

the departments/units involved : For B Sc Zoology Programme – Open course offered by Department of Maths, Physics, Chemistry, Botany, Economics, Commerce, English, Malayalam and Physical Education.

5. Annual/ semester/choice based credit

system (programme wise)

B Sc Zoology - Choice based credit semester system (CBCSS) and

M SC Zoology – Credit semester system (CSS)

6. Participation of the department in the Open course offered by the Dept of courses offered by other departments

Zoology for the UG programmes of Department of Maths, Physics, Chemistry, Botany, Economics, Commerce, English, and Malayalam.

7. Courses in collaboration with other

universities, industries, foreign

institutions, etc. : Nil

8. Details of courses/programmes

discontinued (if any) with reasons

9. Number of Teaching posts

	Sanctione	Fille
Professors	Nil	
Associate Professors	1	1
Asst. Professors	3	Nil

: Nil

10. Faculty profile with name, qualification, designation, specialization,

(D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Qualification	Designatio n	Speciali- zation	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. T K Mukundan	M Sc, M Phil, Ph D	Associate Professor	Fisheries & Cytology	32 years	Nil
Dr M G Ramesh Babu (Retired on 30 th April 2014)	M Sc, M Phil, Ph D, B Ed	Associate Professor	Entomology	31 years	Nil
P S Sunilkumar (Retired on 31 st May 2014)	M Sc, M Phil, Ph D	Associate Professor	Fisheries	30 years	Nil
Dr. Lijy Louis V (Demised on 27 th November 2014)	M Sc, Ph D	Assistant Professor	Fisheries	5 years	Nil
Archana K S	M Sc, B Ed, SET, NET	Assistant Professor (Temporary)	Entomology	7 months	Nil
Renju Mohan M	M Sc, B Ed, SET	Assistant Professor (Temporary)	Entomology	7 months	Nil
Geeshma G	M Sc	Assistant Professor (Temporary	Environment al Science	5 months	Nil

11. List of senior visiting faculty

wise) by temporary faculty

: Nil

12. Percentage of lectures delivered and

practical classes handled (programme

: B Sc Zoology 75%,

M Sc Zoology 100%

13. Student - Teacher Ratio (programme wise) : B Sc Zoology 1:29

14. Number of academic support staff

(technical) and administrative staff;

sanctioned and filled : 2 Lab Assistants

15. Qualifications of teaching faculty with

DSc/ D.Litt/ Ph.D/ MPhil / PG. : 1 with PhD &

3 with M Sc

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: * a) Publication per faculty : 1.5 * Number of papers published in 6 Nos (4 by Dr. M G peer reviewed journals (national/ Ramesh Babu international) by faculty and students : & 2 by Dr. Lijy Louis V) * Number of publications listed in International Database (For Eg: : Nil Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) * Monographs : Nil * Chapter in Books : In 5 Books By Dr. T K Mukundan 1. Biochemistry, Physiology and **Developmental Biology** 2. Ecophysiology By Dr. M G Ramesh Babu 1. Cell Biology, Genetics and Biostatistics By P S Sunilkumar

- 1. Developmental Biology
- 2. Applied Zoology

* Books Edited : Nil

* 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: B Sc Zoology- 100% inter departmental/programme b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ : B Sc Zoology - Nil other agencies 23. Awards / Recognitions received by faculty and students 1. University of Kerala awarded Ph.D degree to T K Mukundan. 2. Krishibhavan, Vadakkekara Gramapanchayath awarded the "Best Farmer Award" for vegetable cultivation to Dr. T K Mukundan. 24. List of eminent academicians and scientists / visitors to the department: 1. Dr. P R Varghese St. Alosius College, Edathuva. 2. Dr. Prof. Jaipaul Azariah Former Dir., Prof. and Head, Dept. of Zoology, Madras University, Chennai. 3. Dr. V.R. Prakasam Prof. & Head, Dept. of Environmental Science, University of Kerala, Thiruvanathapuram 4. Mr. Georgekutty Kariyanapally, Founder Chairman & Managing Director,

Life Way Solar Devices Pvt., Kochi. 5. Mr. G. Sivaramakrishnan Managing Director, Konark Systems, Kochi 6. Mr. C. Sebastian Regional Programme Officer, ANERT, Kerala 7. Dr. V. B. Manilal Scientist, National Institute for **Interdisciplinary Science** and Technology, CSIR, Govt. of India, **TVM** 8. Dr. P. N. Joshi Principal Scientist & Joint Director, Central Institute of Fisheries Technology, Kochi. 9. Dr. Mohammed Hatta Associate Prof., Marine biology Dept., CUSAT, Cochin 10. Dr Lakshmikumari Director, Vivekananda Kendra, Vedic Vision Foundation, Ananda Dham, Kodungallur, Trichur district SNGIST, N. Parur 11. Dr. Geo Baby 12. Sri Amal Krishna Project Officer, KIDS, Kottappuram 13. Sri Adarshkumar G Nair JRTO, N. Parur 14. Sri. S P Ravi Director, River Research Centre, Chalakkudy. Associate Professor, 15. Dr. S. Sheeba

Dept of Zoology, S N College, Kollam.

16. Dr. S Sreekumar Associate Professor, Dept of Geology,

Christ College, Irinjalakuda.

17. Prof. Dr. P. Nammalwar Project Advisor/Guest Faculty,

Science & Technology

Communication Division, Dept of Media Sciences,

Faculty of Science and Humanities, Anna

University, Chennai.

18. Dr. Shaju Thomas HoD of Environmental Education and Conservation,

Tropical Institute of Ecological Sciences, Kottayam

25. Seminars/ Conferences/Workshops

organized & the source of funding

a) National : 2 - UGC

b) International : Nil

26. Student profile programme/course wise:

Name of the	Applications	Selected	Enrolled		Pass	
Course/programme (refer question no. 4)	received	ved Selected	*M	*F	percentage	
BSc Zoology 2014-2017		39	9	30		
BSc Zoology 2013-2016		42	8	34		
BSc Zoology 2012-2015		42	9	27		
BSc Zoology 2011-2014		39	9	26	97.14	
BSc Zoology 2010-2013		29	3	26	89.66	
BSc Zoology 2009-2012		39	7	32	87.50	

*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 Zoology	100 %	Nil	Nil
M Sc Zoology	100 %	Nil	Nil

28. How many students have cleared national: NET - 1 and state competitive examinations such as NET, SLET, GATE, Civil services,

Defense services, etc.?

29. Student progression

Student progression	Against % enrolled
UG to PG 10 out of 35	28.57
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	

EmployedCampus selectionOther than campus recruitment	5.71
Entrepreneurship/Self-employment	

- 30. Details of Infrastructural facilities
 - a) Library : Department Library with 236 volumes

(110 books, 118 projects & 8 journals): General Library with volumes

- 1. Journal of Advanced Biotechnology
- 2. Journal of Nature, Environment and

Pollution Technology

- 3. Journal of Science and Technology and management
- 4. Indian Journal of Biochemistry
- 5. Indian Journal of Experimental Biology
- 6. Indian Journal of Fisheries
- 7. Journal of Biosciences
- 8. Journal of Genetics
- 9. Journal of Environmental Biology
- 10. Resonance.
- b) Internet facilities for Staff : 1 Computer with Internet connection &

Students : 5 Computers with Internet

connection

c) Class rooms with ICT facility : One Lab with DLP

d) Laboratories : 3

31. Number of students receiving : BSc- 20(2013-2014)

financial assistance from college, :

university, government or other agencies

- 32. Details on student enrichment : 12 programmes after the last programmes (special lectures /NAAC visit (in 6½ years) workshops /seminar) with external experts
- 1. One day seminar on "Chemicals in daily life"
- 2. UGC sponsored two day National Seminar on "Green Technologies for future energy security"
- 3. One day seminar on "Dermatoglyphics".
- 4. One day seminar on "Biodiversity Conservation in Kerala".
- 5. One day seminar on "Pelagic fisheries"
- 6. One day seminar on "Artic Expedition 2009- an Overview"
- 7. One day seminar on "Human excellence"
- 8. One day seminar on "Media and Youth".
- 9. Dept. of Zoology and Dept. of Malayalam together organized a one day seminar on "Puthukavithakalude Reethisasthram".
- UGC sponsored two days National Seminar on" Impact of Soil. Sand and Quarry Mining on Biodiversity".
- 11. One day seminar on "A Framework for the Sustainable Development of Multipronged Community Through Proper Utilization of Natural Resources"
- 12. Organised Dr. Lijy Louis V memorial one day seminar on "Safety on is our responsibility"
- 33. Teaching methods adopted to improve : Lecture classes

student learning Power point presentations

Flash programmes

Assignments

Computer Assisted Instructions

Debates

Demonstrations Project Work Seminar Field Trips

Institutions Visit Group Discussions Peer Teaching

E-learning through ICT oriented

instructions etc

34. Participation in Institutional Social

Responsibility (ISR) and Extension

Activities: The faculty member Dr. Lijy Louis V served as program officers in NSS and during their tenure several social activities were taken up in the neighbouring villages and implemented for the benefit of the local people.

35. SWOC analysis of the department and :

Strength : Student admission exceeds the sanctioned strength.

Well equipped laboratory.

Weaknesses : Shortage of class rooms and space for extension of

laboratory for starting new U.G. and PG courses and research centre.

Opportunities: Participation of faculty and students in research, survey

and environment protection.

Challenges : □Mahatma Gandhi University should modify the syllabus more interdisciplinary so that the students cope with the challenges in the higher studies regarding the subject. We are trying to run all the courses with in limited area.

Future plans :

- One of the emerging fields of Zoology is Drug Designing and considering
 the scope of it, the Department recommends to start M Sc Medical
 Biochemistry with Drug Designing as the special paper. The present
 facilities can be used for the course.
- 2. We are planning to introduce certain "add on" courses in Applied Zoology for UG & PG students, so that they can acquire a certificate and get a training in the respective field.
- 3. Conduct a free medical camp for the local community.
- 4. Intend to organize a training programme in Poultry Farming for the local community.

Evaluation report of Department of Commerce (SF)

The Self-evaluation of every department may be provided separately in about 3-4 pages, avoiding the repetition of the data.

- 1. Name of the department : Commerce(Self Finance)
- 2. Year of Establishment: 2002
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., IntegratedMasters; Integrated Ph.D., etc.) : UG 4, PG 1
- 4. Names of Interdisciplinary courses and the departments/units involved
- 5. Annual/ semester/choice based credit system (programme wise) : choice based credit system
- 6. Participation of the department in the courses offered by other departments: Nil
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil
- 8. Details of courses/programmes discontinued (if any) with reasons: Nil
- 9. Number of teaching posts

	Sanctioned	Filled	
Professors			
Associate Professors			
Asst. Professors			

 $10. \quad Faculty \ profile \ with \ name, \ qualification, \ designation, \ specialization, \ (D.Sc./D.Litt./Ph.D.\ /\ M.\ Phil.\ etc.,)$

Name	Qualifi- cation	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
K A Sudhishkumar	MA, B.Ed	Co-ordinator	English	Retired	
C S Seaju	MCA	Guest Lecturer		10 Years	
V D Resmi	MA, B.Ed,SET	Guest Lecturer	English	8 Years	
T S Sajitha	MA, M.Phil	Guest Lecturer	Hindi	8 Years	
C S Aparna	MCA	Guest Lecturer		5 years	
Raghi Ravi	M.Com,B.Ed, NET	Guest Lecturer	Finance	5 years	
S SujaPriya	M.Com,B.Ed, NET	Guest Lecturer	Finance	5 years	
Divya K Mani	M.Com,B.Ed, SET,NET	Guest Lecturer	Finance	5 years	
V B Remya	MA, B.Ed	Guest Lecturer	Malayala m	4 years	
P J Jinny	M.Com	Guest Lecturer	Finance	4 years	
K G Shary	M.Com,B.Ed, SET	Guest Lecturer	Finance	4 years	
S Athira	M.Com, NET	Guest Lecturer	Finance	1 years	
K K Raghi	MBA,LLB	Guest Lecturer		1 years	
Ajeesh Bose	M.Com, NET	Guest Lecturer	Finance	1 years	
A B Nikhil	MBA	Guest Lecturer		1 years	
N S Athira	MA, B.Ed, SET,NET	Guest Lecturer	English	1 years	
K R Komal	M.Com,B.Ed	Guest Lecturer	Finance	8 months	
K S Nija	M.Com,B.Ed, SET	Guest Lecturer	Finance	8 months	
T P Sruthy	M.Com,B.Ed	Guest Lecturer	Finance	6 months	
T X Nisha	M.Com,B.Ed, M.Ed	Guest Lecturer	Finance	4 months	

D F Deepa	M.Com,B.Ed	Guest Lecturer	Finance	4 months	
Neethu Murali	M.Com	Guest Lecturer	Finance	4 months	
Theertha Joy	M.Com, NET	Guest Lecturer	Finance	4 months	
K S Sreedevi	M.Sc ,B.Ed	Guest Lecturer	Maths	2 months	

- 11. List of senior visiting faculty
- 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty
- 13. Student -Teacher Ratio (programme wise): UG 24:500 PG 8:60
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled
- 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. : M.Phil / PG
- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received
- 17. Departmental projects funded by DST FIST; UGC, DBT, ICSSR, etc. and total grants received
- 18. Research Centre /facility recognized by the University
- 19. Publications:
 - * a) Publication per faculty
 - * 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
- 21. Faculty as members in
- a) National committees b) International Committees c) Editorial Boards....
- 22. Student projects
 - a) Percentage of students who have done in-house projects including inter departmental/programme
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies
- 23. Awards / Recognitions received by faculty and students
- 24. List of eminent academicians and scientists / visitors to the department
- 25. Seminars/ Conferences/Workshops organized & the source
 - of funding
- a) National
- b) International
- 26. Student profile programme/course wise:

Name of the	Application	Selected	En	rolle	Pass
Course/programme (refer question no. 4)	s received	Sciected	*M	*F	percentage

*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 CA	100%		
BBA	100%		

B.Com Taxation	100%	
B.Com OM&SP	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.?: NET – 3, SET - 2

29. Student progression

Student progression	Against % enrolled
UG to PG	35%
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed	40%
Campus selectionOther than campus recruitment	0 40%
Entrepreneurship/Self-employment	20%

30. Details of

Infrastructural

facilities

- a) Library
- b) Internet facilities for Staff & Students
- c) Class rooms with ICT facility: Share with other department
- d) Laboratories:

Computer Lab- 1

- 31. Number of students receiving financial assistance from college, university, government or other agencies
- 32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts
- 33. Teaching methods adopted to improve student learning: Group

Discussion, Demonstration, Debates & Seminars

- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Nil
- 35. SWOC analysis of the department and Future plans: Nil

Evaluation report of Department of Zoology (SF)

The Self-evaluation of every department may be provided separately in about

3-4 pages, avoiding the repetition of the data.

- 1. Name of the department: Department of zoology (SELF)
- 2. Year of Establishment: 2005
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.): PG
- 4. Names of Interdisciplinary courses and the departments/units involved
- 5. Annual/ semester/choice based credit system (programme wise) : semester (CSS)
- 6. Participation of the department in the courses offered by other departments
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.
- 8. Details of courses/programmes discontinued (if any) with reasons
- 9. Number of Teaching posts

	Sanctioned	Filled
Professors		
Associate Professors		
Asst. Professors		

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. Stud ents guided for
DIGNA	MSc, B.Ed,	Guest lecturer		7.5 years	.1
DAVIS	SET.				
LIJI C.B	MSc, B.Ed,	Guest lecturer		6 years	
	SET				
SOUMYA	MSc, B.Ed,	Guest lecturer		7month	
C.B	SET				
JISHMA M.S	MSc, B.Ed	Guest lecturer		2month	

- 11. List of senior visiting faculty
- 12. Percentage of lectures delivered and practical classes handled(programme wise)by temporary faculty
- 13. Student Teacher Ratio (programme wise): 4:23
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled
- 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. : PG
- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received
- 17. Departmental projects funded by DST FIST; UGC, DBT, ICSSR, etc. and total grants received
- 18. Research Centre /facility recognized by the University
- 19. Publications:
 - * a) Publication per faculty
 - * 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
- 21. Faculty as members in
- a) National committees b) International Committees c) Editorial Boards....
- 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
- 23. Awards / Recognitions received by faculty and students
- 24. List of eminent academicians and scientists / visitors to the department
- 25. Seminars/ Conferences/Workshops organized & the source of funding a) National
 - b) International

26. Student profile programme/course wise:

Name of the	Year	Applications	Selected	Enrol		Pass
Course/programme (refer question no. 4)		received	Beleeted	*M	*F	percentage
MSc zoology (SELF)	2011-12	120	19		19	56.25%
MSc zoology (SELF)	2012-13	139	18		18	61.1%
MSc zoology (SELF)	2013-14	152	23	2	21	Result Awaiting

*M = Male *F = Female

27. Diversity of Students

Name of the Cour	% of students from the same state	% of students from other States	% of students from abroad
MSc Zoology	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	Against % enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed	
 Campus selection 	
Other than campus recruitment	
Entrepreneurship/Self-employment	

30. Details of Infrastructural facilities a) Library: nil

b) Internet facilities for Staff & Students: nil

c) Classrooms with ICT facility: nil

- d) Laboratories: yes
- 31. Number of students receiving financial assistance from college, university, government or other agencies: 4
- 32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts
- 33. Teaching methods adopted to improve student learning
- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities
- 35. SWOC analysis of the department and Future plans

5. Post-accreditation Initiatives

If the college has already undergone the accreditation process by NAAC, please highlight the significant quality sustenance and enhancement measures undertaken during the last four years. The narrative may not exceed ten pages. (Refer section IX of Guidelines for Assessment and Accreditation)

SNM College got accredited by the NAAC in 2008 with grade "B" and with a CGPA of 2.77. It was the first cycle of accreditation of the college and as an institution working in a perfectly rural setting almost cut off from the global competition outside found it as an inspiring and eye opening experience. The NAAC peer team consisted of Pro. Tharabai L and Dr. Y M Jayaraj found the preparations made by the college satisfactory. However the team has made some suggestions for further improvement.

The per team recommended that the college should introduce new UG and P G programmes in disciplines like management, Computer applications etc. and new job oriented add on programmes. Linkages with other leading institutions was another point that was stressed by the team. Further, the college was advised to start consultancy services to generate revenue. The peer team also pointed out the need for developing a research culture. And fourthly, they recommended administrative and academic audit to strengthen the governance. They also commented that the classrooms and furniture also needed modernization, the college had something to do urgently to promote the communication skill of the students in English. Finally, they observed that the college did not think of any supporting academic measure like bridge courses or remediation.

Taking these recommendations as guiding principles the college chalked out a development plan for the coming five years. According to the plan remarkable improvement was to be achieved in the following areas;

- > Diversification of courses
- ➤ Infrastructural development including buildings and classroom facilities
- A comprehensive instructional strategy to take learners to 21st century
- > Developing a research culture in the institution.
- > Socially useful productive extension work

Since 2008 a considerable expansion of the spectrum of courses offered by the college was achieved by the concerted efforts of the management and college administration. Now the college offers 13 undergraduate courses, 7 postgraduate courses and 2 PhD programmes out of which 5 courses are in self financing stream bringing in considerable revenue for the college. New classroom are constructed to accommodate the excess inflow of the students. Laboratories are modernized with new equipments and new labs were constructed to meet the new instructional demands.

Leading the student community with a socially and economically backward identity to the heights of 21st century skills and competencies is indeed a challenging task. The Planning board and the IQAC of the college jointly designed an instructional design peculiarly suited the kind of learners we have giving stress to elements like motivation, classroom interaction, continuing monitoring, evaluation and corrective feedback.

The two departments of the college, the department of Botany and the department of Chemistry are recognized as research departments by Mahatma Gandhi University. The departments of Economics and Physics are on the way of attaining this status. The science departments of the college are granted a financial assistance of 91 lakhs by the Department of Science and Technology, India under its programme 'Fund for Improvement of Science and Technology' (FIST). The departments of Botany and Chemistry are extending their expertise as consultancy agencies though not in a highly professional way. The other departments are encouraged to do the same.

An institution of higher education can evolve its true meaning only if it becomes socially useful to the community around it. There is a healthy spirit of competition among the departments to plan and implement socially useful extension work to the community. The productive knowledge the students gain during such activities is the most valuable educational experience they get for free.

The college presents this self study report before the NAAC with a feeling of incompletion. What we have done could be much less than what we ought to do and we are haunted by the feeling that "miles to ride before we sleep."

Declaration by the Head of the Institution

I certify that the data included in this Self-study Report (SSR) are true to the best ofmy knowledge.

This SSR is prepared by the institution after internal discussions, and no partthereof has been outsourced.

I am aware that the Peer team will validate the information provided in thisSSRduring the peer team visit.

Signature of the Head of the Institution with seal:

Place:

Date: