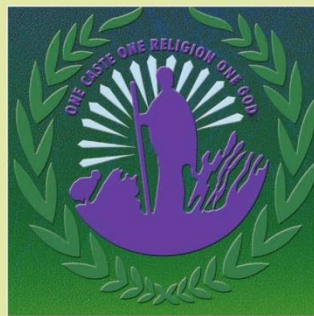


# **SREE NARAYANA COLLEGE**

**CHENGANNUR, ALLEPPEY DISTRICT, KERALA -689508**

**Affiliated to the University of Kerala**

Email: [sncchengannur@gmail.com](mailto:sncchengannur@gmail.com)  
[www.sncollegechengannur.org](http://www.sncollegechengannur.org)



## **SELF STUDY REPORT**

**SUBMITTED TO,  
NATIONAL ASSESSMENT AND  
ACCREDITATION COUNCIL,  
BENGALURU - 560 072**

**JUNE- 2015**

**SREE NARAYANA COLLEGE**  
**CHENGANNUR, ALLEPPEY DISTRICT,**  
**KERALA -689508**

**Affiliated to the University of Kerala**  
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# NAAC - STEERING COMMITTEE

**Chairman:** - Dr. R. Raveendran, (Principal)

**Convenor:** - Smt. Sheela S. Fernandez

## Members

1. Smt. Geetha. K
2. Dr V. L. Pushpa
3. Dr. M. S. Latha
4. Smt. Mini.K
5. Dr. K. Sreelatha
6. Sri. S. R. Rajeev
7. Dr. Reshmi. R
8. Dr. Anju.K. S
9. Smt.Aarcha. S. S
10. Sri. Arun Prasad
11. Smt. Amrutha Sasidharan
12. Smt. Shereen K
13. Smt. M. Sujatha

# INTERNAL QUALITY ASSURANCE CELL (IQAC)

## Committee

**Chairman** - Dr. R. Raveendran, (Principal)

Convenor - Dr. V. L. Pushpa

## Members

- |                              |                                       |
|------------------------------|---------------------------------------|
| 1. Smt. Sujatha              | Head Accountant                       |
| 2. Smt. K. Mini              | Dept. of Mathematics                  |
| 3. Dr. K. Sreelatha          | Dept. of Physics                      |
| 4. Sri. Anu Senan            | RDC - Convenor                        |
| 5. Miss. Suchithra Surendran | Alumini                               |
| 6. Miss. Deepthy Balan       | Student                               |
| 7. Smt. Ambily Sathish       | Principal, S.N. Trust HSS, Chengannur |

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# PREFACE

The College was established in the year 1981, as a junior college offering Pre-degree courses. The college is established in keeping with the vision of the Patron saint of the institution, Sree Narayana Guru. For the past 32 years the college has reaffirmed its commitment to the principles of Sree Narayana Guru, “*Empowerment through education.*” Guided by the teachings of the great religious leader and social reformer, Sree Narayana Guru, we strive for excellence despite all odds. The college is situated in the Cheriyanadu village-one of the most under developed part of Alappuzha district. The college has always taken special care in nurturing the educational ambitions of the predominantly backward sections of the society inhabiting in and around Cheriyanadu village of Chengannur. The college is run by an educational agency of socially and educationally marginalized community, Sree Narayana Trusts, Kollam. The inherent backwardness of the village hampers our development prospects. Most of the students hail from socio-economically weaker sections of the society. Hence our prime responsibility lies in shaping their destiny and providing them with a better future. To put up in a nutshell, nearly 80% of our students hail from SC, OBC (non-creamy layer) & minority categories and we would like to add the fact that nearly 80% of our students are girls. This calls for a greater attention and encouragement from our part to create a sustainable and friendly learning environment, so as to provide opportunities to explore, experiment, feel experiences, discover new facets of life, and internalize and accomplish tasks specific to our students. Sree Narayana College, Chengannur, has in fact become a blessing to our students aspiring for academic excellence from this area, hence the growth and development of the institution and the improvement of the faculty have become imperative.

## **The vision and mission**

The vision and mission of the college had been moulded by the saint Sree Narayana Guru who envisioned a society which was devoid of any kind of stratification, and a society equal in all respects. Education according to Sree Narayana Guru is the sole path through which the downtrodden society could emancipate itself out of the binding grip of the shackles which had been imposed upon them for centuries. It is this great and universal vision of the Guru, which ignited the thoughts of the college founder, Sri. R. Sankar. The

college had kept up these inspiring thoughts, right from the year of its inception in 1981. Considering the fact that the college is situated in an educationally backward region in Alappuzha district, the college had kept up this sharp vision through out its mission for the past 33 years, striving its utmost in enlightening and remoulding the lives of the downtrodden rural masses. Today the college serves the educational needs of students hailing from rural backgrounds, setting them ready to meet the challenges of the big world, apart from instilling them with vital vigour and inspiration to climb up the ladders of life. A large section of student community of our college is constituted of girls who hail from rural and economically backward families, who find it difficult to push on to meet the rising expenditure with regard to education. Our college is the sanctuary for such girls , letting open an avenue for higher education, close to their homes, thus letting their future bloom out. The college will continue to sustain and live up to the hopes and aspirations to the rural poor, and to see to this purpose the college plans to extend the educational facilities by the addition of more innovative and undergraduate and postgraduate programmes, and a side by side improvement of infrastructure facilities along with the improvement in innovative practices in teaching and extra curricular activities thus bringing an even more vital boost to the college and the surrounding areas.

# SWOC ANALYSIS OF THE COLLEGE

## STRENGTHS

1. Meritorious PG students are selected through common entrance exam of University of Kerala.
2. A group of qualified and competent faculty, interested in research activities; who mutually understand and work united with commitment for the progress of students hailing from rural backwardness.
3. The college is situated within an idyllic environment with vast space for development.
4. The only college in the state of Kerala, offering a Post graduate course in Medicinal Chemistry- an innovative program with significance relating to human healthcare.
5. A rare capacity to transform the students from rural backwardness, into highly competent young men and women striding the world with confidence to the brim.
6. The institution has succeeded in bringing education to the girl students in and around the vicinity.
7. An active unit of NSS to serve the society inculcating ecological awareness and social values.

## WEAKNESS

1. The college suffers from rather lopsided infrastructural development.
2. Paucity of transportation facilities.
3. No PG courses in the disciplines of Commerce and Economics.
4. The college has no Research Centre.
5. Lack of a solar unit to meet frequent power failure.
6. No staff quarters.
7. No indoor stadium and sufficient play grounds.



## OPPORTUNITIES

1. Situated in a rural area where the majority of the population belongs to the weaker sections of the society, the college has an opportunity in educating the marginalized sections of the society and thus bringing them to the main stream line.
2. The college takes opportunity to avail all the government and public sector financial assistances (scholarships) to the students belonging to SC, OBC, minority communities and non-creamy layer.
3. 80% of our students being girls, there is an opportunity to introduce handicraft training.
4. Interactive learning with the nearby colleges and also through video conferencing.
5. An Introduction of Integrated PG programmes, might help in sustaining the educational dreams of our students

## CHALLENGES

1. The Introduction of self-financing colleges poses a threat to the student strength of our college.
2. Our college belongs to a corporate management and so there is always a possibility of transfer to our staff members.
3. Another threat which needs immediate attention is severe drought in the area that leads to water scarcity.
4. There is no compound wall and so interference from outside is yet another problem.
5. Lack of health care services is also a difficulty faced by us.

The strategic plan identified on the basis of SWOC analysis is summarized as follows. The strengths, weaknesses, opportunities and threats mentioned above are marked in the strategic plan as S1-S7, W1-W14, O1-O6 and T1-T6 respectively.

***On the the basis of the strength, weakness, opportunities and challenges found the following strategies were drawn.***

1. Strengthen interaction with the industry. (S1, S5 and O4, W6)
2. Enhance activities of Entrepreneurship Club. (S1, S5 and O4, W6)
3. Initiate health care services. (S4, S7 and O4)

4. Infrastructural development. (W1,W8, W12 and S3)
5. Improve commuting facility to the college. (S1, S4, S6 and W2, O1, O2)
6. Strengthen library. (S1, S2, S4, S5 and W13)
7. Introduce PG courses in the disciplines of Commerce, Economics, Analytical Chemistry and Polymer Chemistry. (O1, O2 and W4)
8. Regularise PG in Medicinal Chemistry (S1,S2,O4,W6)
9. Upgrade the college to a Research Centre. ( S1, S2, S4, S5 and W5)
10. Introduce Integrated PG (S1,S2 and O6)
11. Establish solar power unit. (W7)
12. Equip labs with sufficient equipment. (W11)
13. Undertake training program to cater the local needs. (O1, O2, O3 and O4)
14. Conduct certificate course in film making, Computer aided drug designing, Computerised accounting (Tally), Entrepreneurship development program, PG diploma course in translation (S1,S2,S3,S5,O3,O4 and W6).
15. Non-teaching staff training
16. Invite experts to engage classes in research and training programs.

# **EXECUTIVE SUMMARY**

## **CRITERION I**

### **CURRICULAR ASPECTS**

- The college endeavors for the transformation of rural youth by empowering them through education. The college has a well-defined vision, mission, objective and educational policy communicated to the stakeholders through the college calendar and website.
- The institution runs five under graduate and three post graduate programmes. Being an affiliated institution under the University of Kerala, we follow the curriculum designed by the university. Effective curriculum implementation is achieved through activities such as internal assessments, assignments and seminars, scholar support programmes (SSP) and advanced coaching through Walk With the Scholar (WWS) programmes, peer learning and tutorial work.
- Our faculty make use of the opportunities for attending refresher courses, orientation courses, board meetings, curriculum revision committees, seminars and workshops organized by the university and Higher Education Department to familiarize with the curriculum as well as any changes introduced to the existing curriculum and for improving teaching techniques/practices.
- Besides, different enrichment programmes were conducted to supplement and energize the knowledge and skill levels of our students which ensure that the students race ahead the track of the employable market and towards self-reliance. A coaching program for entry in service has also been provided by the college as skill development program.
- Feedbacks from students, parents, alumni and the other stakeholders and the support from the community add to modify and equip the college with value based education.

## CRITERION II

### TEACHING - LEARNING AND EVALUATION

Teaching- learning and the evaluation is integral to the educative process conducted by any institution. Realizing the huge importance accorded to this field, our college too has done its level best to secure the internal system and mechanism of administration to create a free and fair means of conducting the teaching- learning and evaluation process. A very simple and coordinated team work and efforts from the college principal, the council members, the college IQAC, the faculty members and the non teaching staff of our college, create a frame work sufficient to support and facilitate the various integral parts during the run of our institution like a transparent and methodically conducted student enrolment process, the assessment of the knowledge and skill levels of the enrolled students, the charting out and implementation of teaching- learning activities, team efforts to improve the student outputs through student centric approaches, strategies to recharge the faculty members, effective implementation of new and reformed evaluative techniques, etc.

The student's enrolment to our college is controlled by the University of Kerala through a centralized allotment process. The college and admission committee ensures that the admission procedures are conducted smoothly in a time bound manner. Once the admission process is over adequate steps are taken to review the process to patch up the issues confronted in the preceding admission procedure. The profiles of the enrolled students are collected and analyzed to be classified, with the aid of a tutorial system. Such an analysis and classification of students helps our faculty in terms with the knowledge and skill requirements of our students. It is a remarkable point to note that the college had reaped its benefits through the conduct of *Walk with the Scholar* and *Scholar Support Programmes*, two of the new initiatives of the Higher Education Department of the Government of Kerala, facilitating the learning needs of the advanced and slow learners, respectively. The college had realized the shift to a student centred learning atmosphere, and steps like computer assisted teaching, slide shows, invited lectures, group project works, etc., had boosted up our students' learning experiences. Maintaining the teacher quality and competency too receives utmost priority. To this extend, the IQAC of the college and the research committee promotes the faculty with research endeavours. Apart from attending the orientation and refresher courses organized by the Academic staff colleges under the various universities, a few of our

faculty members had the valuable opportunity to attend and undergo short term faculty development programmes, workshops and programmes like FLAIR (Fostering Linkages in Academic Innovation and Research, a programme of Department of Higher Education, Government of Kerala). Keeping pace with the latest evaluative process and reforms stipulated by the University of Kerala, the college too had adopted them, with a strict monitoring being done by the college level monitoring committee and the department level monitoring committee. With the advent of all the above mentioned measures the college has been able to mend up its issues, and has succeeded in bringing out the best of our student performance.

### **CRITERION III**

#### **RESEARCH, CONSULTANCY AND EXTENSION**

The role of research is very important in the age of globalisation. A considerable number of teachers of our College are actively engaged in various avenues of academic research programme, such as PhD research under FIP, Minor Research Projects and Part-Time PhD research. All most all guest lecturers are NET qualified. A Research committee has been constituted and an appeal has been made to University of Kerala to recognize the college as the research center. Some teachers have presented research papers in Inter National, National and State level seminars. Commerce and economics teachers keep on giving field survey projects to students as a part of academic activity. Four of our faculty members are research guides, and are actively involved in research activities. Two of our faculty has been awarded with post doctoral fellowship. The faculty of the institute has also participated in seminars as a resource person/delegate. Our faculty is completely involved in inculcating the research culture in students by promoting them to attend national seminars and workshops periodically and also invites experts on various subjects to deliver lectures. Each department has relevant infrastructure and instruments for basic research work. Internet connectivity has also been provided in departments to help them review their academic as well as research programs. We has a placement cell in our college which communicates from time to time with the companies and fulfill their requirements. The institute keeps in touch with the passed out students of the college who are

presently working in the companies. These students are also very helpful in arranging the visits of the companies for placements. The major strength of this college is its ability to ensure holistic development of students to make them enlightened citizens. It aims to maintain modern outlook with contemporary developments without compromising moral values. The institute is conscious of its role in campus-community connection, wellbeing of its neighborhood and has initiated a number of community development activities. The college organizes a number of outreach activities which relate to academic, social, cultural, community service, adventure etc and all culminating in building a healthy society contributing to nation building. The college undertakes wide spread cross-curricular enrichment activities through NSS, Bhoomitra Club, Nature Club & Science Club and other forms of community development activities. NSS is organizing so many extension activities. The NSS units of the college maintain a rapport with the people around the institution by getting involved in their daily life in various ways. Their active involvement has succeeded in building ecological awareness among them. Science Club regularly celebrates National Science day by conducting various programmes such as exhibition, water analysis, various competitions for school and college students to explore their talents and curiosity and familiarize common people in the locality to the development of science and technology.

### **Enhancement of research and consultancy activities**

1. The institution encourages and supports teachers to register as research guides.
2. The institution has a fully functioning research and consultancy cell headed by Dr.R.Resmi, Assistant Professor, Department of Chemistry.
3. The teachers of the institution take up various major and minor projects funded by UGC and other Govt. funding agencies.
4. The BSc and MSc students are provided opportunities to do their project work in the college itself guided by the concerned teachers.
5. At the PG level capable students are assigned with minor research projects to inculcate in them a sense of scholastic achievement.
6. Students are also given the opportunities to visit various reputed research institutions
7. We arrange regular lectures by various eminent scientists from different research institutions
8. The institution is frequently organises various national seminars and workshops.

9. The institution makes national and international journals available to the students and teachers.
10. Our alumni, doing research in reputed institutions are invited to share their research findings with the institution. This could serve as a platform for the students to know more about the current research activities taking place in various institutes.
11. Evening classes are conducted to facilitate the students to get National scholarships.

## **CRITERION IV**

### **INFRA STRUCTURE & LEARNING RESOURCES**

1. Our College have well ventilated, well lighted class rooms with proper seating arrangements and well equipped labs.
2. We have a central library comprising of 6674 books, 13 journals, 11 periodicals, 5 news papers.
3. We have an auditorium with capacity of 400 seats, for conducting meetings, seminars, and various cultural and academic programmes.
4. We have a computer lab with Wi-Fi facility. Two Lap tops are also made available for various academic purposes.
5. We have a 12 station Multi gym with modern equipments.
6. We have two play grounds which is used for playing badminton, volley ball, cricket, and football and also used for regular practices. The play ground is also used for conducting Annual Athletic Meets.
7. Continuous electricity supply is guaranteed by the generator.
8. Among our important resources are common staff room, separate department staff rooms, vehicle parking facility, women hostel.
9. We have rain water harvesting facility with a capacity of 7000 liters of water, sanitational facilities, waste disposal, and bio gas plant, have also been established.
10. We ensure optimum utilization of our available facilities and it is maintained with the help of management and PTA.

## **CRITERION V**

### **STUDENT SUPPORT AND PROGRESSION**

Our institution provides necessary assistance to students to acquire meaningful experiences for learning at the campus and facilitate their holistic developments and progression. We also look into student's performances and alumni profile and the progression of students to higher education and gainful employments.

The majority of the students of our college hail from rural areas with a low socio-economic background. The college offers various scholarships, endowments and free ships. Students are supported to avail the State / Central scholarships in time. Students in need are supported by various mentoring and assistance schemes like remedial classes, SSP, WWS , modification in teaching methodology, medical assistance, etc. Our college has mechanisms like carrier guidance cell, placement cell, grievance redressal cell and various welfare measures to support students. Our institution has a well organised and well structured counselling system. The clubs like Bhoomithrasena club, Science club, Entrepreneurship club etc. of the college could produce fruitful results in student placement, facilitating entrepreneurship skills, excellence in curricular and extracurricular activities, etc. A great lot of achievements have been made by our students in sports and games.

The institution promotes active participation of students in social, cultural and leisure activities like NSS, Music club, Sree Narayana Study Forum etc. Encouraging student's participation in such activities develops various skills and competencies and foster holistic mental developments.



## **CRITERION VI**

### **GOVERNANCE, LEADERSHIP AND MANAGEMENT**

1. Sree Narayana College, Chengannur is run by Sree Narayana Trust, Kollam and an educational agency of socially and educationally marginalized community.
2. The aim of this college is to provide education to poor rural students. The college is a center for giving higher education in the rural village.
3. Grievances redressal cell, antiraging committee, NSS etc is effectively functioning in this college.
4. The teaching faculty of this college comprises of Ph.D holders and research guides.
5. The college utilizes faculty improvement programmes for the teachers.
6. The students are opened to a number of academic improvement schemes, scholarships and cash awards.
7. The college not only gives quality education to poor students of this rural locality but also teaches high values of life to them in tune with the rich culture of India.
8. Leadership training is given to the students through various clubs, coaching programmes and study tour programmes.
9. Tutorial system, remedial coaching, special classes etc are arranged for the benefits of academically backward students.
10. Coaching in various sports and games activities are given to the students and allowed them to participate in university level competition.
11. The administrative staff of the college is regularly send for training in accounting, administration and auditing programmes.
12. Academicians in various fields of knowledge are invited to the college for giving lecturers on various subjects for the benefits of the students.
13. Every year annual meeting of the college is convened in which the representatives of management, principal, teaching staff, students representatives participate and formulate academic and extracurricular plans for the better functioning of the college.

## **CRITERION VII**

### **INNOVATIONS AND BEST PRACTICES**

The enrichment of the environmental consciousness requires utmost stress in the field of education. Following this path our college too has taken sufficient steps so as to spread the message of protecting our fragile environment and conserve it in a sustainable way, for the use of future generations. The various clubs functioning in the college like BhumitraSena Club and the Nature club conducts programmes initiating our students into this growing concern for the necessity of protecting and conserving our environment. The NSS unit of our college, which continues to strive its utmost with this regard, tries to spread the word of environmental protection. The NSS unit boasts of a rich past, where in our volunteers and teachers were involved in bringing back to life the Varattar, a tributary of the holy river, Pamba, back from scavenged sandy beds and depleted water flow. Within the confines of the campus, the college has taken adequate steps to conserve renewable energy, employ water harvesting techniques, maintain carbon neutrality and manage hazardous waste through the construction of a bio-gas plant, installation of water harvesting structures, planting saplings and conduct of awareness programmes respectively. Besides bringing in environmental awareness the college also tries its level best to bring in elements of innovation into the teaching learning process. The starting of a B.Com degree programme supplemented with a computer application course and the introduction of a UGC sponsored Post graduate programme in Medicinal Chemistry, were all remarkable achievements, bringing in a touch of novelty and innovation. Among the best practices to be highlighted include the rejuvenation of Pamba-Varattar river campaign, spear headed by the N.S.S volunteers of the college and the faculty members. The M.Sc out-reach programmes enabling the students to undertake extended research activities in the leading laboratories and national institutions, has broadened the research aptitude and exposure.

## PROFILE OF THE COLLEGE

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

Name:	SREE NARAYANA COLLEGE	
Address:	Neduvarancode P.O, Chengannur, Alappuzha Dist.	
City:Chengannur	Pin:689508	State:Kerala
Website:	www.sncollegechengannur.org	

### 2. For communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr.R. Raveendran	O:0479-2360140 R:0468-2311592	9496847108	Nil	sncchenganur@gmail.com
VicePrincipal	NA				
Steering Committee Co-ordinator	Smt.Sheela Fernandez	S.R:0479-2348309	9947734345	Nil	sheelafernandez62@gmail.com

### 3. Status of the institution:

1. Affiliated College	√
2. Conctituent College	
3. Any Other, Specify	

### 4. Type of Institution

#### a. By Gender

1.For Men	
2.For Women	
3.Co-education	√

**b. By Shift**

1.Regular	√
2.Day	
3.Evening	

**5. It is a recognized minority institution?**

Yes	
No	√

If yes specify the minority status (Religious / linguistic / any other) and provide documentary evidence. NA

**6. Sources of funding:**

1.Government	
2.Grant in Aid	√
3.Self financing	
4.Any Other	

**7a. Date of establishment of the college: 31-08-1981**

**b. University to which the college is affiliated / or which governs the college (If it is a constituent college)**

University of Kerala

**c. Details of UGC recognition:**

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)
i. 2 (f)	25-04-2000	Copy enclosed
ii. 12 (B)	25-04-2000	Copy enclosed

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

NA

**7. 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	√
-----	--	----	---

**8. Is the college recognized**

**a. By UGC as a College with Potential for Excellence (CPE)?**

Yes		No	√
-----	--	----	---

**b. For its performance by any other governmental agency?**

Yes		No	√
-----	--	----	---

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

Location	Rural
Campus area in sq. mts	15 acres 64 cents
Built up area in sq. mts.	1820 sq.mts.

**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	X
Gymnasium	√

- Hostel

Boy's Hostel	X
--------------	---

Girls's Hostel	√
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Number of hostels: One

Number of inmates: 25

- Facilities (mention available facilities): Mess hall, Reading room and pure drinking water facilities.

Working Women's Hostel	Nil
Residential facilities for teaching and non-teaching staff	Nil
Cafeteria	Nil
Health centre	Nil

- **Facilities like banking, post office, book shops - Nil**
- **Transport facilities to cater to the needs of students and staff - Nil**  
Most of the staff members are using their own vehicles for reaching college. For the transport facilities of students and other staff members, private buses are available on the college time. KSRTC bus is running in front of our college to cater the needs of students on college time
- **Animal house - Nil**
- **Biological waste disposal - Yes, bio gas plant.**
- **Generator or other facility for management / regulation of electricity and voltage-**  
Generator facility is there in the Science block for regulating electricity during practical examinations.
- **Solid waste management facility-Yes**
- **Waste water management- No**
- **Water harvesting –Yes, Storage tank is available for carrying rain water.**

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

<b>Programme Level</b>	<b>Name of the Programme/ Course</b>	<b>Duration</b>	<b>Entry Qualification</b>	<b>Medium of instruction</b>	<b>Sanctioned/ approved Student strength</b>	<b>No.of students admitted</b>
Under graduate	BSc Chemistry	Six semesters	Plus two or Equivalent	English	38	27
	BSc Physics	Six semesters	Plus two or Equivalent	English	29	17
	BSc Mathematics	Six semesters	Plus two or Equivalent	English	32	18
	B Com	Six semesters	Plus two or Equivalent	English	32	30
	BA Economics	Six semesters	Plus two or Equivalent	English	60	58
Post-graduate	MSc Chemistry	Four semesters	Degree	English	13	13
	MSc Medicinal Chemistry	Four semesters	Degree	English	10	10
	MSc Physics	Four semesters	Degree	English	12	12
Integrated Programmes PG	Nil					
Ph.D.	Nil					
M.Phil.	Nil					

Certificate courses	Nil					
UG Diploma	Nil					
PG Diploma	Nil					
Any Other (specify and provide details)	Nil					

**13. Does the college offer self-financed Programmes?**

Yes		No	√
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**14. New programmes introduced in the college during the last five years if any?**

Yes	√	No		Number	3
-----	---	----	--	--------	---

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

Faculty	Departments (eg. Physics, Botany, History etc.)	UG	PG	Research
Science	Physics Chemistry Mathematics	Yes Yes Yes	Yes Yes & M.Sc. Medicinal Chemistry.	Department of Chemistry submitted proposal for research centre
Arts	Economics	Yes		
Commerce	B.Com	Yes		
AnyOther (Specify)				



**16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, MCom...)**

a.	Annual system	Nil
b.	Semester system	8
c.	Trimester system	Nil

**17. Number of Programmes with**

a.	Choice Based Credit System	<b>5</b>
d.	Inter/Multidisciplinary Approach	<b>6</b>
e.	Any other ( PG)	<b>Nil</b>

**18. Does the college offer UG and/or PG programmes in Teacher Education**

Yes		No	√
-----	--	----	---

**b. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?**

Yes		No	√
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**19. Does the college offer UG or PG programme in Physical Education?**

Yes		No	√
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**20. Number of teaching and non-teaching positions in the Institution**

Positions	Teaching faculty						Non teaching staff	Technical staff		
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F				*M
Sanctioned by the UGC/University/ State Government Recruited	1	0	1	6	2	13	3	3	4	0
Yet to recruit	-	-	-	-	-	-	-	-	-	-
Sanctioned by the Management/ society or other authorized bodies Recruited	-	-	-	-	-	-	-	-	-	-
Yet to recruit	-	-	-	-	-	-	-	-	-	-

\*M-Male\*F-Female

**21. Qualifications of the teaching staff:**

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	0	0	0	0	0	0	0
Ph.D.	1	0	0	2	0	6	9
M.Phil.	0	0	0	3	1	2	6
PG	0	0	1	1	1	5	8
Temporary teachers							
Ph.D.	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	1	1
PG	0	0	0	0	1	11	12
Part-time teachers							
Ph.D.	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0

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

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

Categories	Year 1 (2014-15)		Year 2 (2013-14)		Year 3 (2012-13)		Year 4 (2011-12)		Year 5 (2010-11)	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
SC	15	12	13	7	8	7	10	7	3	4
ST	0	0	0	0	0	0	0	0	0	0
OBC	46	81	31	76	46	68	34	70	30	68
General	16	21	10	29	5	14	32	20	17	23
Others	0	0	0	0	0	0	0	0	0	0

**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	152	39	Nil	Nil	191
Students from other states of India	0	0			NIL
NRI students	0	0			
Foreign students	0	0			
Total	152	39			

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

<b>UG</b>	<b>2.8%</b>	<b>PG</b>	<b>2%</b>
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**26. Unit Cost of Education**

(a) Including the salary component

Rs.35000/-

(b) Excluding the salary component

Rs.3300/-

**27. Does the college offer any programme/s in distance education mode (DEP)?**

Yes		No	√
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**28. Provide Teacher-student ratio for each of the programme/course offered**

PROGRAMMS	TEACHER-STUDENT RATIO
B.Sc	1:16
BA	1:30
B.COM	1:27
M.Sc	1:7

**29. Is the college applying for**

Accreditation: Cycle1  Cycle2  Cycle3  Cycle4   
Re-Assessment:

**30. Date of accreditation: Not Applicable**

**31. Number of working days during the last academic year**

195

**32. Number of teaching days during the last academic year**

193

**33. Date of establishment of Internal Quality Assurance cell (IQAC)**

**IQAC 01/04/2014**

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

**35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)** NIL

# **CRITERIAWISE INPUTS**

# **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 stakeholders.**

Our college, named after the great social reformer Sree Narayana Guru, is a major centre for higher education to the rural community in the vicinity. Gurudev's concept that education is the most potential instrument of socio-economic progress, political development, moral and intellectual awakening inspired the establishment of this institution. Guru's call to seek "Liberation through education" and "Enlightenment through education" is our vision.

The mission of our college is to mould a community of students committed to the pursuit of truth and moral excellence upholding the high ideals of Sree Narayana Guru, our patron. We aim at building up humane and socially committed young men and women through education. The basic objective of the institution is to provide education to the marginalized sections of the society. The college stands for academic excellence as well as development of the skill and character of students based on the Holy Guru's perspectives on humanism, secularism and universal brotherhood. The vision, mission and objectives of the college are clearly stated in the college hand book.

#### **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 Level Monitoring Committee (CLMC) headed by the Principal, assisted and advised by the Heads of the departments in association with the Department Level Monitoring Committee (DLMC) takes utmost care to implement the curriculum laid down by the university.
- An academic calendar is prepared by the college council at the beginning of the academic year in tune with the academic calendar issued by the University of

Kerala. Before implementation, the academic plan is approved in the departmental meetings and council meetings.

- DLMC of each department consisting of the Head of the department, DLMC convenor, class tutors and other faculty members implements all curricular activities including internal assessments, assignments, seminars, tutorial work, entry level tests, remedial and advanced coaching, add-on courses etc. DLMC frames the departmental timetable and ensures uniform distribution of the syllabus and assignments among the faculty members. The faculty members prepare a teaching plan for each semester approved by the DLMC which helps in the effective execution of the curriculum.
- A Teacher's Diary is maintained by each teacher which is a personal record of individual time tables, class charge details, tutorial works undertaken, remedial and advanced coaching given, test papers, seminars and assignments conducted, invigilation, evaluation and practical duties undertaken etc. The heads of departments periodically verify the records.
- The coverage of syllabus is reviewed by the HOD at the end of every month. The principal convenes meetings with HODs and reviews the completion of syllabus at the end of every semester. If any backlog of syllabus is there, that will be covered by arranging special classes.

### **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 university conducts meetings of Board of Studies and Academic Council where the restructuring and upgrading of the present syllabus is carried out by getting feedback from the faculty.
- The university provides the entire course syllabus, reference books, question pattern, list of practical experiments/titles/programs, an academic calendar etc., which enables the teacher to follow the curriculum for each semester.

- Our faculty make use of the opportunities for attending refresher courses, orientation courses and workshops organized by the Academic Staff College of the University for improving teaching techniques/practices.
- Adequate guidance is given by the University in the use of information technology and ICT in teaching and learning aspects of the newly introduced curriculum through seminars and workshops.
- Teachers at the college level are always consulted whenever the university takes a decision on academic matters. The college management always support teachers in attending such programmes.
- The college organizes a number of state and national level seminars and conferences under the auspices of various departments to provide adequate academic exposure to teachers and students. The institution also encourages its teachers to attend similar programmes organized by other Institutions.
- Solicited talk sessions by senior professors and other experts are arranged by the college for the effective translation of the curriculum and to improve teaching practice. The college support teachers in updating and improving teaching by providing adequate infrastructure in the form of computers, multi media room, broad band connectivity and library.

**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.**

- The Choice Based Credit and Semester System (CBCSS) coordinator assists the departments for the effective delivery of the curriculum in accordance with the university academic calendar. Accordingly an action plan and teaching plan is prepared by the departments.
- Resource materials related to the topics in the curriculum are purchased periodically.
- Two internal assessment tests and a model examination are conducted in each semester for the students which help the students in assessing their performance level in the examinations.



- Assignments are given to the students based on their syllabi which motivate the students to utilize the library and reference materials effectively.
- Students are encouraged to take part in project work, field survey, industrial visits and study tour.
- The faculty is encouraged to attend workshops and orientation programs on curriculum design and restructuring.
- To acquire up-to-date knowledge relating to recent developments in their respective subjects faculty members are encouraged to attend refresher/orientation courses regularly.
- The faculty members are encouraged to present papers in National/International seminars and to attend workshops in their respective specialization.
- Invited talks by senior professors and other experts are arranged by the college for effective curriculum delivery.
- ICT enabled teaching is encouraged. The college provides infrastructural facilities like, smart class rooms with interactive board and LCD projectors, PCs, Internet, lab equipment, chemicals, books, models and charts.

### **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?**

- The institution has an interactive network with several organizations for the effective implementation of the curriculum.
- The Higher Education Department of Government of Kerala stimulate teacher caliber through rigorous training program me like FLAIR (Fostering Linkages in Academic Innovations and Research). Two of our faculty members, Dr.Tntu.R. Assistant Professor from Department of Physics and Dr.Reshmi. R, Assistant Professor from Department of Chemistry is undergoing FLAIR programme.
- Departments of Commerce and Economics have linkage with nearby industries local bodies, government departments etc. to facilitate student projects in the VI semester UG program.
- Post graduate students from Physics and Chemistry departments, in their final semester undergo projects in national institutes and industries. Some of them pursue project in the college itself with the financial aid from Science and Technology Department.

- Department of chemistry conducts training programs for M.Sc. Medicinal chemistry in collaboration with Indian Institute of Science, Bangalore. Our college is the only institute in the State of Kerala offering M.Sc. Medicinal chemistry, a PG programme in Applied chemistry.
- For the improvisation of the teaching-learning process our faculty members attend the training programmes offered by the University.
- Further our teachers undertake projects granted by UGC and other related organizations.

**1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (Number of staff members/ departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.**

- a) Staff members/ Departments represented on the Board of Studies**– Two of our staff members Dr.V.L.Pushpa, Associate Professor, and Ms.Induja.P, Assistant professor, Department of chemistry are members of Board of Studies for M.Sc. Medicinal Chemistry. Dr.V.L.Pushpa is also a member of Board of studies for B.Sc. Chemistry. Dr. Jitha S R is a member of Board of studies in Political science and Chairman, Board of exams (Valuation), M.A Public administration and M.A Political science, University of Kerala, IDE, 2011. Our faculty also attend workshops on syllabus modification and revision.
- b) Students**-Student feedback is obtained through informal curriculum discussions with the students. Last academic year onwards formal feedback in feedback form has been gathered from the students on course and teaching.
- c) Alumni**-The Alumni provide positive insights during the annual get together.
- d) Parents**- Detailed discussions with the parents in the PTA meetings and Open house create the ambience of amiability. The details are then discussed by teachers in the department. Heads of departments discuss the matter in the college council. After detailed deliberations, the council prepare a report under the guidance of the principal and forward it to the university through the Board of studies, Academic council and Senate members for necessary changes.

- e) **Community-** The feedback from the community is received during extension activities taken up by students and teachers.

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

Yes, the curriculum of M.Sc. Medicinal Chemistry is developed by the Department of Chemistry. In addition, the college has developed the curriculum for three add-on courses like E-banking, Visual Communication and Computerized Accounting. The programmes were of one year duration organized by the Department of Commerce during the period 2007-2011. Sri. Peter Varghese, former head of the Department of Commerce served as the programme co-ordinator. The programmes aimed to equip students for placement.

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

- The institution analyzes the achievement of the stated objectives of curriculum by monitoring the academic activities of each department. The academic activities of each department are monitored by the respective heads of the departments. Principal periodically reviews the work diary of teachers.
- Details of instruction hours engaged, seminars and assignments given, test papers conducted, lab hours engaged are examined from the work register and from the reports of the heads of the departments. After proper analysis necessary improvements are suggested.
- Periodic test papers are conducted for students for assessing the achievement of the objectives of curriculum.
- The institution ensures that the stated objectives of the curriculum are achieved by analyzing the feedback from parents, students and stakeholders and adopting corrective measures based on it.

## **1.2 ACADEMIC FLEXIBILITY**

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

Skill development courses are conducted to ensure an additional edge for our students. The institution offered add-on courses in computerized accounting, e-banking and in visual communication courses with the support of UGC during the years 2007-2011. A coaching program for entry in service has also been provided by the college as skill development program with the aid of UGC.

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

No

### **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. Issues may cover the following and beyond (Range of Core / Elective options offered by the University and those opted by the college).**

The college has opted for five core courses and four elective courses in each programme at undergraduate level and three courses at postgraduate level under semester system. The first degree program (undergraduate level) components include Language Course, Foundation Course, and Core Course in the major subject, Complementary Course in allied subjects. There are Open/Elective course, Project/Dissertation in the VI semester and Social Service/Extension Activity in the IV semester for not less than 40 hours. Students are free to choose the open course in the V semester offered by other departments and elective course in the VI semester from the parent department.

#### **A. Core programmes offered at the Under Graduate Level**

- a. B.Sc. Chemistry
- b. BA Economics
- c. B.Com with Computer Application
- d. B.Sc. Physics
- e. B.Sc. Mathematics

**B. Core programmes offered at the Post Graduate Level**

- a. M.Sc. Chemistry
- b. M.Sc. Medicinal Chemistry
- c. M.Sc. Physics

**C. Elective Courses offered at the Under Graduate Level**

- a. Computerized Accounting offered by Dept. of Commerce
- b. Computational, Combinatorial and Physical Organic offered by Dept. of Chemistry
- c. Agricultural Economics offered by Dept. of Economics
- d. Computer Hardware and Networking offered by the Dept. of Physics

**D. Choice Based Credit System and range of subject options**

All the programmes offered in the institution are under CBCSS. As per the system, the college has the provision for offering open courses (non-major elective) to all the students at undergraduate level during V semester.

**Open Courses offered at the Under Graduate Level**

- |   |                             |
|---|-----------------------------|
| i. Essentials of Chemistry                | Dept. of Chemistry          |
| ii. Human Resource Management             | Dept. of Economics          |
| iii. Fundamentals of Financial Accounting | Dept. of Commerce           |
| iv. Energy Physics                        | Dept. of Physics            |
| v. Health and Fitness Education           | Dept. of Physical Education |

**Courses offered in modular form**

The institution at present offers no course in modular form. The institution offered add-on courses in computerized accounting, e-banking and in visual communication as add on courses with the support of UGC during the year 2007-2011. A coaching program for entry in service has also been provided by the college as skill development program with the aid of UGC. The programmes aim placement for students.

### **Credit transfer and accumulation facility**

As per the University of Kerala Regulations for the First Degree Programmes under the Choice Based Credit and Semester System (CBCS) in affiliated colleges, 2009, credit transfer and accumulation system is finally done by the university.

### **Lateral and vertical mobility within and across programmes and courses**

Lateral mobility across the programmes is accomplished through open courses.

### **Enrichment courses**

Remedial coaching, invited lectures, seminars, quiz programmes, open discussions on topics of moral and ethical importance are conducted as part of the enrichment programmes.

**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.**

No.

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

Yes. The college provides facility to conduct Additional Skill Acquisition Program (ASAP), to enable the students to acquire additional skills to enter the regional and global employment markets.

Open course in V semester is a skill enrichment program based on the aptitude of different groups of students. Students are encouraged to choose an option outside their parent department to empower them by imparting knowledge on their chosen areas.

With the aid of the Higher Education Department, Government of Kerala, our college has introduced two novel programmes – Walk With the Scholar (WWS) and Scholar Support Programme (SSP) for the first year graduate students. WWS programme focusses advanced learners. Its aims for the integrated development of the scholar on completion of the degree course. Mr.Arun S Prasad, Head and Assistant Professor, Department of English is the coordinator of WWS. SSP is for slow learners. It supports them with study materials and

specials classes for the subjects which they find difficult to follow. Ms.Amrutha Sasidharan, Assistant Professor in Physics is the coordinator.

**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?**

No.

### **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 Institution’s goals and objectives are integrated?**

- To supplement the university curriculum an action plan is prepared by the institution every year.
- The college library is supplemented periodically with additional books and resource materials related to the topics in the curriculum.
- The faculty is encouraged to attend workshops and orientation on curriculum design and restructuring.
- To possess up-to-date knowledge with the recent developments in their concerned subjects faculty members are encouraged to attend refresher/orientation courses regularly.
- The faculty members are inspired to present papers in National/International seminars and to attend workshops in their specialization.
- Invited talks by senior professors and other experts, seminars, quiz programmes are arranged by the college for effective curriculum delivery.
- ICT enabled teaching is encouraged.
- Remedial coaching is offered to the needy.
- Peer teaching is made compulsory in UG and PG classes.
- The advanced learners are encouraged to participate in intercollegiate competitions, seminars and workshops conducted by neighbouring colleges, University or other agencies.
- Student attendance is also graded.

- Results of the internal exams are published promptly, valued and corrected answer sheets are circulated among the students for perusal, doubts are cleared, and deficiencies are pointed out. Records of all these activities are retained in respective teaching departments.
- Various learning techniques such as preparation of assignments, presentation of seminar/viva voce, project report, group discussions, brain storming are employed. Along with the lecture method, discussions, and debates are conducted.
- Students are trained to acquire necessary skills like communicative skills, social and technical soft skills, moral values, discipline, and personality development and interactive teaching learning process is followed.
- Various subject based associations, forums, N.S.S. etc. are the platforms which enable the students to conduct various programs at their own initiatives and thus acquire necessary skills.
- Open discussions on topics of moral and ethical importance are also conducted as part of the enrichment programmes.

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

Various steps have been taken up by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market.

- The college has a very dynamic NSS unit readying students for community service.
- The tutorial system functioning in the college gives proper career guidance to enable students to choose a suitable career from among the available opportunities. Teachers play a pivotal role in preventing students from succumbing to the dehumanizing effects of drug abuse, communalism and other social evils.
- The college provides coaching classes for NET, Civil Services Examinations, Bank Clerical and PO Examinations, PSC and other competitive examinations for entry into service and the placement cell strives to enhance employability.
- There are various clubs and forums in the college to enrich the curriculum and equip the students to the demand of employment market. These clubs function and organize



activities, and hold various competitions to nurture the creative and critical talents of students.

- The college arranges annual science fairs and exhibitions, where students through multifarious displays, exhibit their creative talents. The seminars and workshops conducted by the departments' nurture critical thinking, creativity and scientific temper among the students.
- Projects are assigned to students to develop creative thinking and scientific temper. The students are motivated to use e-learning facilities.

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

- Our institution is a major centre for higher education offering educational opportunities to the rural community. The majority of the students of our college belong to the backward classes with 80% girls.
- The college has an active women study unit supplementing the activities of the college and motivating women students to achieve the goal of equal access and equal opportunity, in all walks of life. The unit organized a two days national seminar on 'Women and Cyber World-Imminent Threats and Innovation' in 2015.
- The Department of Political science and Human Rights Forum of the college has organized UGC sponsored National seminar on topics like *Gender Issues and Women Empowerment in 2012* and *Sustainable Development-Challenges and Opportunities in 2013* to create awareness on the issues of women empowerment and social security. The Department of Political science and Human Rights Forum of our college, under the sponsorship of the National Human Rights Commission also organized a one day training programme on *Rights of the Children: Introspection in 2014*.
- The college has many clubs like Science Forum, Nature & Bhumitra Sena Club, Human Right's Forum, Sree Narayana Studies Forum, Grievance Redressal Cell, Legal Literacy Cell etc. to enlighten students on issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., supplementing the curriculum.

- Bhumitra Sena club and the NSS unit of the college encourage students to participate in the activities relating to environmental hygiene, eco-friendly practices like waste recycling and rain water harvesting to tackle the existing water scarcity.
- Field visits are arranged to inculcate the love for nature among students.

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

- a. moral and ethical values
  - b. employment and life skills
  - c. better career options
  - d. community orientation
- The college organizes seminars and talks by experts to inculcate moral and ethical values among students. Sree Narayana Studies Forum organises lectures and study classes to develop moral and ethical values in students. The Club help the students to recognise and develop their hidden talents, support them sharpen their skills and encourage their participation in various intercollegiate cultural meets. Yoga classes were also conducted for mental health.
  - The Career Guidance and Placement Cell of the college organizes training programmes, workshops and seminars to improve the employability and life skills of the students.
  - The college provides NET coaching classes and coaching classes for aspirants to PSC, bank, civil services etc. for entry into service.
  - Our NSS unit ensures excellent community orientation to our students. National Social Service Scheme (NSS) renders service to the nearby villages with our NSS volunteers both boys and girls camping in the villages, cleaning the villages, and creating and conducting awareness programmes on adult literacy.

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

Feedback collected from alumni, current students after each semester, teachers, parents and experts is utilized for enriching and effectively implementing the curriculum. The

feedback obtained is communicated to University bodies through the members of Board of Studies.

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

A course evaluation feedback is collected from the students after the completion of the enrichment program me. By assessing the judgement of the students the quality of its enrichment programme is evaluated.

## **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?**

The curriculum is designed and developed by University bodies like BOS, Academic council etc. A course evaluation feedback is collected from the students, alumni and teachers after the completion of the course. The feedback obtained is communicated to the Board of Studies and other university bodies to implement constructive changes in the curriculum.

### **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 changes/new programmes?**

The college has a mechanism for analyzing student feedback on the curriculum. Each year students are given an opportunity to provide confidential feedback on various aspects of the curriculum such as the course, and special resources such as labs, library, and other facilities using a questionnaire. Alumni during their annual get together share their view on the existing curriculum. Feedback from parents is collected during PTA meetings and their suggestions are discussed in the departmental meetings. Constructive ideas are communicated to the university through BOS members and use internally for curriculum enrichment and introducing new programmes.

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

Three new courses are introduced in the college during the last four year.

1. M.Sc. Medicinal chemistry a UGC sponsored programme was introduced from 2012 onwards.
2. M.Sc. Physics was introduced in 2013.
3. B.Sc. Mathematics was started in the current academic year 2014-15.

After verifying the proposal submitted by the college, the University of Kerala has sanctioned the following courses from the next academic year onwards.

1. B.A. Malayalam
2. M.Sc. Mathematics
3. M.Sc. Medicinal chemistry

# **CRITERION II**

## **TEACHING – LEARNING AND EVALUATION**

### **2.1 STUDENT ENROLMENT AND PROFILE**

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

The college follows the rules and regulations of University of Kerala in the admission process. An online admission system is followed by the university. Students upload their particulars in the university website and the university allots the seats to students to the colleges of their preference based on merit. Reservation (SC/ST/OBC/OEC/Others) and general merit is followed as per rules. The percentage of seats allotted to merit, community and management quota are decided by the university. Since the admission process in the college is controlled based on a centralized allotment conducted by the university, the power to ensure publicity and transparency in the admission process is largely vested in the university. However the college does take initiatives in publishing and announcing the starting dates of the admission process in the college, through the leading Malayalam dailies. The date of admission and the college, to which the admission is given, can be viewed by the applicant in the university website.

#### **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.**

Merit is the criteria of admission. The process of admission is conducted online through the online web site of Kerala University. Candidates opt the choice of their preference of courses and colleges, where they would like to pursue their studies. It is the university, who allots the students to various colleges based on their merit status. The

students then undergo the admission procedures in their allotted colleges. Once the students are admitted they can opt for their higher option colleges. A re allotment process which ensues provides ample opportunities for students to take admission in their convenient college. Since the college is under Sree Narayana Trusts, 20% of the sanctioned seats are allotted to the students of Ezhava Community (OBC) by the university.

**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.**

Programmes	% of minimum marks	% of maximum marks
BA Economics	40	82
B.Sc Chemistry	40	84
B.Sc Physics	53	88
B.Com	55	85
M.Sc Chemistry	55	82
M.Sc Medicinal Chemistry	55	84
M.Sc Physics	66	87

**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?**

Yes. The institution does have a mechanism to review the admission process and the student profiles. The review process of the admissions and the student profiles are done by the college council and the heads of the departments, respectively. The council meetings conducted once the admission process is over becomes hot spots of discussion with regard to the admission procedures conducted recently. Such meetings usually begin with appreciation

with regard to the completion of the admission procedures stipulated by the University. The meeting then goes on to discuss and review the inadequacies and drawbacks experienced during the admission procedure, from various quarters, which includes the information and feedbacks collected from the students, the parents and the admission committee members. The feedback so received is subjected to a thorough discussion, which often results in an agreeable solution. Besides this, the issues faced during the admission procedure, are carefully noted so as to avoid such circumstances during the admission process next year. Recently, the university had taken up the conduct of the admission process and is largely conducted in a centralized manner. This has paved the way for a smooth turf for the conduct of this regard.

Similarly the profiles of the students getting admitted to the college too are reviewed at the departmental levels by the Head of the department. The recently introduced centrally controlled admission process, allows the students to opt the programmes and the college of preference. The candidates are then allotted their respective programmes and colleges of preference based on merit. A quick glance at the student profiles reveal that most of the students getting admitted here are girls. It has been noted that there is a considerable increase in the number of students opting to get admissions here. This is largely due to the committed work by the teaching and non-teaching staff of the college and an excellent teacher-student relationship. The college had stepped up its initiatives to cater to the educational needs of the students hailing from the varied strata's of the society.

**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
- Women
- Differently abled
- Economically weaker sections
- Minority community
- Any other

There is an open access for candidates in the admission process. It is done by the strict rules and regulations of the university through an online system. Open merit and reservations are largely decided by the university. An adequate percentage of seats are allotted to each and every section as per the policy of the government. The vacant seats for various categories are informed through newspapers and students are thus assisted to gain admissions.

**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.**

Programmes 2009-2013	Number of applications	Number of students admitted	Demand Ratio
UG	Admission is through online		
1. BA Economics		$45+49+48+56=198$	
2. B.Sc Chemistry		$16+22+38+31=107$	
3. B.Sc Physics		$28+20+28+11=87$	
4. B.Com		$39+37+35+30=141$	
5. B.Sc Mathematics		18	
PG			
1.M.Sc Chemistry		$12+12+17+14=55$	
2.M.Sc.Med.Chemistry		$10+10=20$	
3. M.Sc. Physics		$12+16=28$	

The five U.G programmes and the three P.G programmes offered by the college have experienced considerable rush for gaining admissions. None of the programmes offered by the college had ever experienced a dearth in the number of students; this is largely due to the individual attention and care that students receive here. The UG programme in Economics



has been an all time favourite for humanities students. The UG programme in commerce specialized with computer application, witnesses a heavy rush each academic year, for it seems the college is the only one in the neighbourhood offering the course. In spite of the fact that the college is situated in a rural setup, the physics and chemistry programmes witnesses a heavy interest among students. Moreover the huge demand for science stream at present, led to the commencement of a UG programme in Mathematics. The college council, the IQAC and the management has stepped up its initiatives to start a few more UG programmes in Language and Literature, and new age streams, taking into consideration the affinity of the students. The PG programmes forever had witnessed heavy demand, especially with the presence of sophisticated and specialized courses as M.Sc Medicinal Chemistry.

## **2.2 CATERING TO STUDENT DIVERSITY**

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

The needs of the differently abled students are taken care of by the college. The students are classified into advanced, average and slow learners. Such a classification is largely done by the class tutors in charge of the class, assisted by the other teachers who handle the class. Such a categorization is largely done through a continuous evaluative system which includes highly formulated and planned techniques like test papers, participation in extension activities, etc., and such simple techniques as close observation, casual talks, performance and participation in class room learning activities etc. The class tutors and the other faculty members who handle their classes are given special instruction to cater to the needs of the students belonging to the three categories. The advanced learners are boosted further to enlarge upon their knowledge horizons and societal skills, by sending them for seminars, workshops and camping activities and by ensuring their participation in such activities. Being fast learners they are channelized to the various activities of the college like the club activities. The participation of these students in the creative and extension activities conducted by the N.S.S units, the Literary and Debating club, Nature and Bhumiika club and the Music club are worth taking a note of. The recently introduced programme of the Higher Education Council of the Government of Kerala, Walk With Scholar, has been a boon for our brilliant learners. The class tutors often employ the excellent students to undertake peer group

teaching, thus enabling them to support and boost up the peer groups too. The average students are taken care of, and are promoted to excel further with regard to the acquisition of knowledge, societal skills and values. The slow learners are given top priority by the institution. Under the supervision of the tutorial system, they are given extra care, nurture and confidence so as to enable them to excel both in academic as well as in all walks of life. Slow and poor learners are given extra remedial coaching, if necessary; besides they are promoted to take part in the initiatives under the various club activities and cultural programmes and festivals conducted in the college. The Scholar Support Programme, yet another initiative by the Government of Kerala too has facilitated the learning of poor learners. Mentally challenged students are given extra time during examinations. Physically challenged students are provided with equipments, and students with such classes are conducted on ground floor of the college building.

**2.2.2 Does the institution assess the student's needs in terms of knowledge and skills before the commencement of the programme? If 'Yes' give details on the process.**

Yes. The college does assess the students needs in terms of knowledge and skills before the commencement of the programme. This is largely done class wise, by the class tutors. The assessment techniques employed range from casual talks, interviewing, question answer sessions, knowledge/skill tests, etc. Once the students are enrolled into a programme, the class tutor conducts talk sessions with the students elaborating upon the programme and the efforts needed from the part of the students in order to successfully complete it. Similarly the outcomes of the programme are also elaborated. Such sessions are then followed by short interactive sessions where the students are required to elaborate on why they selected the programme. The class tutors keenly analyses such feedback reports, so as to boost up their confidence and re-channelize them to programmes which suits them best. The class tutors further conducts short aptitude tests, and interviews to check upon the knowledge and skills of the students. The knowledge level analyses often help the class tutors to categorize the students into excellent, average and slow learners. This classification helps the class tutors to assist the other faculty members, with regard to the design of the teaching learning process. The skill level analysis of the students helps the class tutors to channelize them to club activities, and other extension activities. An assessment of the students' knowledge level and skill level enables the institution to mould the life of our students.

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

The institution conducts add on and remedial coaching classes with the assistance of the U.G.C, so as to bridge the knowledge gap of the enrolled students, thereby enabling them to cope up with the programme of their choice. Once the students are enrolled, the class tutors employ suitable techniques to classify them based on their knowledge level and skills. The slow learners are given top priority, and are encouraged to ask queries and doubts. The students who need special attention are called forth and special scaffolding is provided individually during the recess time and as well as during the available time, before and after the usual college hours. The remedial coaching classes are often conducted after the conduct of the internal examinations. The students who are found to be weak and struggling to cope up with the learning experience offered by the programme are often sent for the remedial coaching classes. Through re-teaching, explanations, revisions and even through peer group teaching the remedial coaching class becomes a boon for students. Students who have fared well in the internal examinations are also welcomed to attend such classes. This facilitates a better avenue for sharing of knowledge, and often the excellent students are deployed to organize peer group teaching sessions and open discussions, thereby facilitating the learning process. The remedial coaching classes conducted after the internal examinations are usually arranged class wise by the class tutors/heads of the departments, taking into consideration the need and necessity of the students. At times, such coaching classes are conducted after the announcement of University examination results too. These classes are meant to provide maximum support and instil confidence into students who have failed, and are re-appearing for the University Examinations. In such classes, the gaps and fissures in the teaching-learning experience which might have happened earlier are carefully filled and re-structured, to provide a concrete platform for our students. Often the previous University questions and the possible questions likely to arise in the coming examination are thoroughly revised, so as to enable such students to pass out with best results.

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

The college strives its utmost to sensitize its staff and students on issues such as gender inclusion, environmental issues, etc. The college had stood for the cause of environmental protection, right from the beginning. In order to inculcate environmental awareness, the college had opened up the Nature and Bhumika Club. An environmental action plan named Pamba-Varattar River Project has been initiated by the college. Both the N.S.S unit of the college and the Nature and Bhumika club often ties up to conduct programmes like the conduct of World Environment Day. Similarly the Nature club and as well as the N.S.S Unit, continues to give awareness to the students with regard to the use of plastics and its harmful effects. To this extend, they have tried to keep the campus plastic and litter free. The N.S.S unit of our college and the Nature Club has taken the ideas of the necessity of cleanliness and hygiene, the harmful impacts of pollution and the necessity to use eco-friendly products, and strives to bring upon these ideas to the grass root levels. The NSS volunteers, the nature club members, the general student community of our college, and the staff are continuously made aware of the necessity of hygiene and are promoted to use eco-friendly products and items like eco bags, fountain pens, cycles etc.

Similarly gender issues too are given top priority by our college. The Women's Studies Unit, the Human Rights Forum, the Legal Literacy Cell etc; function in the college to this extend. Women's Studies Unit conducts meetings, casual chats and discussions with regard to the issues faced by the girl students of our college. The unit tries to bring awareness to girls with regard to the issues that they might face later on in life. In order to solve issues and complaints that have been registered, from the part of the girl students the Grievance Redressal Cell, the Women's Studies Unit, Harassment Prevention Committee and the counselling centre of the college work united to a common goal. The Department of Political Science and Human Rights Forum of the college has organized UGC sponsored National seminars on topics like *Gender Issues and Women Empowerment in 2012* and *Sustainable Development-Challenges and Opportunities in 2013* to create awareness on the issues of women empowerment and social security. The Department of Political Science and Human Rights Forum of our college, under the sponsorship of the National Human Rights Commission also organized a one day training programme on *Rights of the Children: An Introspection in 2014*. The two day UGC sponsored national seminar conducted by the women's studies unit entitled, '*Women and Cyber World-Imminent Threats and Innovation*'

conducted on February 9 and 10, 2015 threw ample light into the age of new media and its pitfalls lurking behind an unseen camouflage. Being a college with a large majority of female students, an utmost priority is given to females, and therefore our college tries to spread the necessity of female education in order to construct a healthy society.

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

The special educational needs of the advanced learners are given due attention by the college. Once the class tutors identify the advanced learners, steps are taken to facilitate and nurture their special learning needs. The vibrant energy of the advanced learners is kept in close observation by the class tutors, and is channelized to let them bloom out in vigour. The needs and aspirations of the advanced learners are carefully noted by the class tutors, and are intimated to the faculty members handling them in class. New and challenging topics for assignments are given to them to be tackled. This has helped them to extend their knowledge horizons, through their interaction with college library resources and as well as from the internet. The communication skills of the advanced learners are honed once they are asked to share their knowledge in class level seminars. They are also initiated into peer-group teaching, thus providing an opportunity for them to excel and gain more confidence and societal interaction. Besides this they are brought into leading roles in extracurricular activities, thus instilling into them leadership qualities. They are sent for quiz competitions, debates and seminars conducted in other institutions, making their learning experience rich and vivid. The new initiative of the Higher Education Council of the Government of Kerala, namely the Walk with a Scholar programme had a great impact on our advanced learners. Since the admissions to the programme were restricted to the skilled learners, it provided an apt platform for them to interact with resource persons from varied walks of life.

### **2.2.6 How does the institute collect, analyse and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students).**

Our college does have an intricate system to collect, analyse and use data and information on academic performance. The information with regard to academic performance

is usually collected by the class tutors. Once the internal examinations are over, the class tutors collect the grade/mark sheets from the concerned faculty members handling the respective papers. The collected grade/mark sheets are immediately filed. The department level meetings conducted after the evaluation process of internal examinations, also become hot spots for discussion on the academic performance of students. The head of the departments and the concerned class tutors then go on to analyse the performance of the students. The weak students are then identified based on their performance and are channelized for the remedial coaching classes. Such students are also marked out, and are given top priority and attention while the class is being taken. Similarly the performance of the students is also compared with performance in the previous semester, and students who are showing a tendency of 'dip in performance' are identified.

The students who are noted to have 'a poor performance' and 'a dip in performance', are individually called by class tutors for chat sessions, in order to locate the reasons which may range from lack of attention to other issues ranging from social to psychological. The issues faced by the students in class rooms, which hamper their performance, are often immediately remedied by the timely interference of the class tutors themselves. Most of our students hail from poor and disadvantaged sections of the society and do have many social and economic issues, which need serious attention.

The situation becomes even tenser in the case of our girl students. It is here that the class tutor can offer any means of help. The class tutor, the Head's of the departments and the counselling cell of college, work united in tackling such issues. The team work of the faculty members of our college has greatly boosted the confidence level of our students and had given great hope to our students, thus reducing the extent of dropouts. Vital emotional strength and at times supply of financial aids had boosted the quality of our students who pass out of the programmes at the end of the final semester. The process of collecting, analysing and using data on academic performance of students are also done in the case of the results of university examinations. Such analysis of data has proved that the college has been successful in bringing out students with better results in the past academic years.

## **2.3 TEACHING-LEARNING PROCESS**

### **2.3.1 How does the college plan and organise the teaching, learning and evaluation schedules? (Academic calendar, Teaching plan, Evaluation blue print etc...)**

The institution functions as per the academic calendar prepared by the University of Kerala. Teaching plan and Teacher's Diary are prepared by the teachers. Internal exams are conducted as per the calendar of the University, and are usually conducted at the department level. Answer scripts are corrected and given to the students. Internal Evaluation marks are kept with the departments. Finally Continuous Evaluation Reports are sent to the University for preparing final mark lists.

### **2.3.2 How does IQAC contribute to improve the teaching-learning process?**

The IQAC of the college contributes a lot to the improvement of the teaching – learning process. The IQAC stands as a watch guard of the entire activities undergone by our college. It stands separate and creates a path for the free flow of ideas and its implementation between the various bodies governing the college and its stake holders. The IQAC maintains a close watch of the tutorial system, the department level meetings, the student teacher interactions, the conduct of the internal examinations, the club activities, the P.T.A meetings, etc. At the onset of each academic year, the IQAC of our college ensures that the academic calendar brought out by the University is strictly implemented in the college. To this extend, sufficient copies of the academic calendar are taken and supplied by the college principal and IQAC, to the Head of the Departments during the college council meetings. The H.O.D's are then instructed to seep this information down the ladder, by conducting department level meetings. In order to make the teaching-learning process more effective in a time bound manner, the IQAC and the college principal, makes it a point to instruct the departments, in the necessity of the preparation of a month wise teaching plan. The IQAC assists the college council in the fixation of the internal examination dates, and helps in the creation of the examination committee. Similarly the IQAC ensures that the students are given timely feedback with regard to the results of the internal examinations. The IQAC also maintains a close contact with the class tutors, giving instructions with regard to the remedial measures to be taken, in the case of students whose performance is poor. Moreover, it acts as a pivot,

creating a communication link between the college principal, the college council, the faculty members, the non-teaching staff and the students.

### **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.**

Our college has made learning more students centric in order to keep pace with the changing standards of teaching-learning process. To this extend group discussions, group works, assignments, seminar presentations etc., has been made part of the learning inside class rooms. The faculty members are made aware of the student-centric learning through general staff meetings. The introduction of the student-centric learning has made class room teaching in our college more interactive and innovative. Most of the degree programmes offered by our college, demands the students to involve in a project work, at the end semester. The class tutors have been instructed to involve the students in joint ventures of doing a project work, thus facilitating collaborative learning techniques. In the similar manner assignments topics are assigned to be done as a group work, enabling our students to generate knowledge through collaborative techniques. In order to make classes more interactive, slide shows and Microsoft power points too are incorporated into usual lectures.

Short films, films, interviews and documentaries are also showcased with the aid of projectors and movable screens, thus making learning more students centric. The sense of individual learning too is promoted by initiating our students to make use of the college library and the resources available through internet connectivity in the computer lab of the college. Study tours, field visits, societal interactions, invited lectures etc., has added colours to learning, and has made it more student-centric and student-friendly.

### **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?**

Science exhibitions are conducted for innovative thinking. Scientific thinking is nurtured through science exhibitions in our college. We also send students to science exhibitions conducted in other institutions. As a part of increasing basic awareness, quiz programmes are conducted in the college. An add-on course on Visual Communication conducted by the college with the assistance of UGC is an evidence of a venture to create



creativity among our talented students. Besides these seminars, invited talks, debates, exhibitions etc., are conducted both department wise and as well as an initiative from the part of the clubs so as to nurture the varied skills of our students. *Argentum: the Chemistry Fest, Waves; the Physics Fest, the National Science Day celebrations, Tattwa Artha K-15: Social Science day celebrations and Samskriti: a Day of Literary Feast*, organised by the Departments of Chemistry, Physics, Economics and Languages, respectively, stands ample proof to the activities and initiatives organised by the college to enable our students think divergently and creatively. The Literacy and Debating club had taken it a mission to spread the word of creativity. *Sahithy: The wall Magazine* and *The Rainbow: The Hand Written Magazine*, are all perfect examples of innovative and creative initiatives of our students.

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

The use of technology as a teaching aid has become a vital component of the teaching-learning process. The college computer lab is provided with sufficient equipment for technology assisted teaching and learning. To these extent computers, projectors and screens are being provided to support learning. Steps are being initiated to provide projectors to all the departments. All the departments are provided with monitors, printers and a broad band internet connectivity to help teachers bring in more knowledge from World Wide Web into the class rooms. Students are also given access to the department computers, after taking permission from the head of the departments. The college computer lab too provides free internet access to the faculty and students, besides this most of the departments provide Wi-fi zones. Similarly the college library too facilitates e-learning. Here a few consoles with computer and internet access, acts as a supplement to the knowledge available in books kept in the library.

The faculty members of our college are often asked to update their knowledge on computers and computer assisted teaching. To this extend workshops and invited lecturers on computers lead by experts, are arranged to throw much light into these avenues. Faculty members are often motivated to attend IT oriented orientation programmes so as to develop

better insight into technology assisted teaching. The college principal, the IQAC and the Head of the Departments often motivate teachers to locate knowledge resources available in the internet, well in advance so as to bring them out effectively to the class rooms. The faculty members are also asked to keep files/records/pen drives which are useful to compile the resources available in the internet, based on the module/chapter wise divisions, as prescribed by the syllabus. Such materials often act as supplementary/additional information other than the text books and library books available to our students. The teachers are also promoted to bring laptops, tablets etc into classrooms, so as to make the class more illustrative. The post-graduate departments of our college have been provided a laptop computer to this regard. The faculty members of our college, is aware of the advantages of social media sites and e-mails. The social media sites have proved a boon for our faculty members, since they provide apt platforms to meet-resource persons in their respective fields worldwide, colleagues, students, and former students, at one go. Recently, e-mails and social media messages have been used by faculty to send PDF files containing syllabus related knowledge. Assisting students with regard to project works too have become easier, through the platform of e-mails and social media.

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

The students and faculty are exposed to advanced levels of knowledge and skills by conducting seminars, invited talks, workshops etc. Our college has conducted nearly ten seminars. While seminars are organised, the students of the concerned department too are channelized into its conduct. They are trained to be a part of it, rather than being a mere witness to the programme. Faculty members too are keen in attending seminars conducted in other institutions. This enables our faculty members to know about newer areas of knowledge in their concerned domains, and helps them to share and collaborate with faculty members from other institutions in the creation of newer knowledge. Similarly experts in concerned fields too are invited to add to as supplementary knowledge to the usual college lecturers. Such invited talks, though short and brief, has enabled both our faculty members and students to think in a divergent manner with regard to the topic.

### **2.3.7 Detail (process and the number of students/benefited) on the academic, personal and psychological support and guidance services (professional counseling / mentoring / academic advise) provided to students?**

The academic, personal and psycho-social support and guidance to students in our college is largely worked out primarily through a firm tutorial system. Here the class tutor acts as an observer, mentor and a guide. Our class tutors take up the job to probe into the psycho-social backgrounds of our students. This is largely done by observation, small chats, collecting bio-data sheets, etc. The knowledge of the psycho-social backgrounds helps the tutors in tackling the students' with respect to their academic issues. Most of our students are hailing from backward regions, often from poor and low income families. Most of them are pestered with a multitude of issues, which are capable of extinguishing their hopes for education with a wet blanket. Hence seen in this regard, the duty of a class tutor becomes indeed challenging. The class tutor then goes on to conduct counselling sessions and mentoring sessions usually conducted for students individually, after the usual college hours. Such counseling / mentoring sessions are largely done to boost up the confidence and meet the challenges that our students meet in life and academic situations with vigour.

Academic guidance is also provided by the Career Guidance and Counselling Cell functioning in the college. Furthermore a placement cell helps the job seekers to find the right job at the right time.

### **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 practises on student learning?**

Our faculty members adopt a student-centric teaching approach. Seminar presentations and assignments have become an integral part of the teaching-learning process, owing to the semesterisation pattern adopted by the University. For the past years, faculty members have been instructed in college staff meetings both by the management and the college principal to bring in innovation into teaching techniques. However there has been a growing realisation, that innovation in teaching techniques can only be effective, by understanding the needs of the students. Hence the priority has been to understand the

students, i.e., their psycho-socio-economical backgrounds. To this extent, the faculty members collaborate with the class tutors and the Heads of the department to act as a team to understand the student community. It is this remarkable shift in understanding the student community, which has enabled our faculty members to mould the teaching, based on the requirements. To this extend the traditional lecturers are being supplemented with ample explanations and visuals. The scientific classification made by the class tutors dividing the students into advanced, average and slow learners, helps the faculty in planning the classes. Besides bringing in the new teaching aids like the computers, projectors and films into teaching-learning process, the priority has been given to understanding and imbibing of values. The faculty members also employ a variety of ways, in order to collect and disseminate information based on the syllabi. All the faculty members suggest sufficient reading materials to the students. The reading materials are made available to students either by print outs, e-mails, and through electronic media. The reading materials so send are usually of a kind not available to our students, in an ordinary internet browsing. For this our faculty members do take membership in leading e-libraries. Similarly friendships and tie-ups through social media by our faculty members with faculty members in other institutions both in India and as well as abroad, help our faculty to collect and distribute materials and valuable texts. All these innovative teaching practices and methods had considerably increased the learning skills of our students. A variety of teaching materials and methods had boosted the knowledge levels of our students and had even motivated them to find, collect and generate knowledge.

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

The college has a general library, located in a building at the tip of the college playground. Being housed in a quiet part of the college, the library offers a reading area and an array of stack of books on various subjects, languages and literature. There is a reference section which enables visitors to get access to rare books, encyclopaedias, dictionaries etc. A few consoles with computers, printers and a high speed internet facility throw open an easy access to knowledge. The college library is a nerve centre as far as the teaching-learning process is concerned. It serves to nurture and extend the existing teaching learning process, owing to the fact that the students primarily meet their requirements of knowledge, so as to complete their assignments through the resources in the library. Besides magazines and

journals in the library helps the students in gaining knowledge to overcome the tests conducted by KPSC and UPSC.

**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 institution at present does not face any challenge in completing the curriculum within the planned time frame and calendar. However occasional hartals and strikes do at times obstruct the smooth run of the teaching-learning process. In order to overcome such unavoidable circumstances we do patch up such gaps by conducting special classes in the evening and on Saturdays.

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

The quality of teaching-learning in our college is monitored and evaluated constantly by a team which includes the college principal, the college council and the IQAC. The Principal often instructs the heads of the departments with regard to the preparation of a month wise teaching plan at the onset of each semester. In order to plan the teaching in a systematic manner, the Principal also instructs the H.O.D’s in conducting department level meetings in discussing the syllabus prescribed and a close look of the texts prescribed, so as to divide and allot portions to each faculty members. Such a meeting ensures in the timely division of the syllabi, in a timely format. The H.O.D’s then record the data with regard to syllabus division. During the process of the run of the semester the teaching work of the faculty members are observed both by the class tutors and the H.O.D’s. Often by the mid-semester, teacher-evaluative forms are distributed to the students, so as to analyse the work quality of the faculty members. Such evaluation reports are close read by the council members, and effective remedial measures are given through feedbacks and instructions.

The quality of learning is evaluated by the faculty members and by the class tutors. The students are provided with necessary scaffolding at the right time. The evaluative reports of the students, class wise in the form of mark sheets of internal examinations, assignment evaluations and the results of university examinations are filed. The class tutors and the other

faculty members collaborate in instilling the weak students with confidence. P.T.A meetings are often summoned to open up a better channel of interaction between the students, their parents and teachers to evaluate the teaching-learning process.

## **2.4 TEACHER QUALITY**

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

Our college is one among the colleges managed by the corporate management of Sree Narayana Trusts, Kollam. The recruitment of the staff is largely decided by the management. Being a college under a leading corporate management, and staffed with a number of colleges under its headship, our faculty members are susceptible to transfers to other Sree Narayana Colleges across Kerala or within university limits. However, our college does have planned strategies to manage and channelize our available human resources so as to meet the changing needs of the curriculum and in order to bring out our best results for the use of the student community who depend upon us. Our faculty members are both qualified and competent in their respective fields of specialization. In the new arena of higher education, where the knowledge updating has become a necessity, our college too had stepped up its initiatives with this regard. When knowledge updating is given the top priority, honing the teaching skills to suit the new knowledge requirements too had become a necessity of the new post modern technology driven age. College council meetings and General staff meetings conducted in our college, often becomes hot spots to plan, discuss and propagate the level of quality and values that are needed to be maintained by our staff. Similarly table talks and discussions between Head of the departments and individual faculty members, provides apt platforms for giving and receiving valuable suggestions. Many of the faculty members of our college have proved their excellence, by going up the rungs of higher education and had bagged Ph.D's. Some are undergoing the process of doing research, while others are on a level of preparation to set out on the venture of doing research. Programmes of Higher Education Department, Government of Kerala like FLAIR (*Fostering Linkages in Academic Innovation and Research*) too boost up the excellence of our faculty members.

Short duration Faculty Development Programmes (FDP) and workshops conducted by UGC, Universities and Higher Education Department of Government of Kerala are attended by teachers to meet the changing requirements of curriculum. Orientation and Refresher courses are regularly undergone by our faculty members to meet the changing needs and challenges of the new teaching learning process. Similarly our competent faculty who had retired from service is called back for visits during special occasions, functions and during the conduct of the seminars. The valuable feedbacks, opinions and advices of retired faculty members are also taken into consideration while in situations of crisis or in situations that mark a shifting change.

Highest qualification	Professor		Associate Professor		Assistant professor		Total
	Male	Female	Male	Female	Male	Female	
Permenant Teachers							
D.Sc/D.Litt							
Ph.D	1			2		6	9
M.Phil				4	1	2	7
PG	1		1	6	2	13	23
Temperory teachers							
D.Sc/D.Litt							
Ph.D							
M.Phil							
PG					2	11	13
Part time teachers							
D.Sc/D.Litt							
Ph.D							
M.Phil							

**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 (Bio-technology, IT, Bio-informatics etc)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.**

The institution as such do not at present face a scarcity of qualified senior faculty to teach newer areas like Bio-technology, IT & Bio-informatics. The existing faculty are trained and asked to gain knowledge on these areas through study and research. Informatics has become the part and parcel of degree programmes prescribed by the University of Kerala. Faculty members had attended the training programmes offered by the University to meet this situation. IT oriented Orientation programmes and short term computer courses too had helped our faculty to tackle the syllabus for Informatics. At times resource persons too are invited to add a finishing touch to the lecture classes on informatics conducted by our faculty members. Similarly the new emerging areas in science like Bio-technology, Bio-informatics etc., too are studied and taught with expertise by our faculty. Invited talks and lectures are also conducted, if needed, with this regard.

**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.**

**(a) Nomination to staff development programmes**

Academic staff development programmes (2014-15)	Number of faculty nominated
Refresher Courses	<b>3</b>
HRD Programmes	<b>0</b>
Orientation Programmes	<b>2</b>
Staff training conducted by the University	<b>0</b>
Staff training conducted by other institutions	<b>2 (FLAIR Training)</b>
Summer/Winter schools, Workshops	<b>1</b>



**(b) Faculty training programmes organised by the institution to empower and enable the use of various tools and technology for improved teaching learning-**

- \* Teaching learning methods/ approaches.**
- \* Handling new curriculum**
- \* Content / Knowledge management**
- \* Selection, development and use of enrichment materials**
- \* Assessment**
- \* Cross cutting issues**
- \* Audio visual aids/ multimedia**
- \* OER's**
- \* Teaching learning material development, selection and use.**

Faculty training programmes and discussion sessions were conducted by our institution to empower and enable the use of various tools and technology for improved teaching-learning process. Such programmes and discussion sessions have proved to be vital in improving the teaching-learning process in our college.

The training programmes on teaching learning methods/approaches in our college had come as an after effect of the training programmes conducted by the University of Kerala, immediately after the introduction of the semester system for the under Graduate programmes. The systematic approach of continuous internal evaluation and the time bound teaching-learning process requires special attention and emphasis. There was a growing realisation among the faculty members who attended the training programme to disseminate the knowledge of student – centric teaching-learning process to a set of fresh recruit of teachers who had recently joined into the field. Such training programmes and discussion sessions were conducted department wise, throwing light into the new student- centric teaching activities. Moreover the discussion rounds became platforms to discuss upon the techniques to tackle the immense wealth of knowledge embedded in the prescribed syllabus, within the time gap of each semester.

The faculty meetings and the department meetings too acted as platforms for training programmes, where both the Head of the departments and the senior faculty acted as resource persons in sharing their knowledge with regard to areas as content management, selection and

creation of enrichment materials, and assessment techniques, etc; Since the newly introduced semester system demanded the faculty to go beyond the realm of books and the library in search of learning materials the college principal and the Heads of the department had asked the faculty members in the meticulous preparation of teaching-learning aids. The faculty members were also instructed to prepare and distribute additional information useful for the extension of the learning experience of the students.

Audio Visual aids and multimedia too had entered into the realm of teaching-learning process. Taking into this fact, the college had upgraded its computer lab facility to incorporate projectors and other visual aids. A training programme had been conducted with this regard during the time of its installation.

In order to patch up and cross cut issues that may arise during the on go of the complex process of the contemporary teaching-learning process special guidance and training were provided at department level. The issues that the faculty members may come across like the time constraints, the stumbles and blocks within the classroom atmosphere, issues related to assessment, the inability of students to adjust with the new scenario of learning, etc require timely remedy and patch up by faculty members. Both the training programmes and timely discussions help our faculty to overcome such issues.

**(c) Percentage of faculty**

- Invited as resource persons in workshops/seminars/conferences organized by external professional agencies - 10%
- Participated in external workshops/seminars/conferences recognized by national/international professional bodies – 75%
- Presented papers in workshops/seminars/conferences conducted or recognized by professional agencies. – 30%

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

Our institution does its level best to promote our teachers and enable them to be fully charged critically, aesthetically and creatively. The primary thrust of our institution is upon

the fields of research. To enable research oriented works to get a kick start and to provide adequate motivation to our faculty, we have constituted a research committee. The college principal along with the research committee provides the full support to faculty members so as to avail Faculty Development Programmes (F.D.P). In order to boost up the avenues of teaching experience, faculty members who require orientation courses and refresher courses are identified and send for attending such courses. Some of our faculty members also act as research guides under the various universities in Kerala. Science faculty of our college has always been keen in applying their research into industry. Besides focusing on research, our faculty has also been publishing their finding which they have accumulated through research activities like major and minor UGC research projects, in leading journals and research publications. Our faculty had never forgotten, its touch with general public, and hence they often do write for popular publications too. When Scholarly research is given importance, creativity and creative endeavours in science, as well as in arts like creative writing among our faculty members are provided maximum support. In order to take teaching activities even farther out of our college campus, into the wide open public, our faculty members acts as resource persons, visiting teachers and teachers in other institutions, Distance Education Centres and open universities like IGNOU.

**2.4.5 Give the number of the 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.**

Nil.

**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?**

Yes, the institution has introduced the evaluation of the teachers. The evaluation of our teachers is done by our students themselves. At the end of every academic year evaluation sheets are supplied to students in classrooms, to analyse the classroom teaching and quality of each individual teachers. Such feed backs are then collected and sorted to be

analysed. The analysis is done straight away by the faculty members and also by the Head of the departments. Such analysis and feed backs enable our faculty members to rethink on their activities and reshape, mould, and patch up their own deficiencies. Such evaluative reports are carried on further up the ladder by the Head of the department, to be brought in front of the Principal and the council members. Here issues and complaints from the part of the students made available through feed backs are discussed and necessary steps are taken to patch and mend them up. Often such evaluative reports are also send to the management, as and when requested. At times the management, the college principal and the council members unite to patch up issues and lay a smooth turf for the teaching – learning process to attain its ultimate goal.

## **2.5 EVALUATION PROCESS AND REFORMS**

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

The students and faculty members are made aware of the evaluation process by a well laid out administrative system interlinked by a smooth communication channel. The faculty members are made aware of the evaluation processes and the changes in it, through circulars send from the University. The details in such circulars are reinforced to the faculty members through the regular conduct of staff meetings and especially through department level meetings.

The evaluation procedures and processes are let known to the students largely by the class tutors and by the faculty members handling the concerned papers. Besides this, the college calendar supplied to the students at the onset of each academic year, throws light on the prescribed syllabus for each programme, and the *nature* of internal evaluation.

### **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?**

We have fully adopted the evaluation reforms put forth by University of Kerala. According to the CBCS system introduced by the University, the Internal Evaluation has become an integral part of the teaching-learning process. In order to ensure that the Internal

Evaluation process and procedures are conducted in a systematic manner, an academic monitoring committee has been constituted. At the grass-root level the HOD's and the class tutors keep vigilant, with regard to the conduct of the Internal Evaluation, recording and tabulating them, and the timely uploading of the data to the University website.

### **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?**

College Level Monitoring and Department Level Monitoring Committees (CLMC & DLMC) has been constituted for supervising the new CBCSS programme. The CLMC monitors the programme and makes corrections if needed.

### **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.**

The formative and summative assessment approaches adopted to measure the student achievement, include the test papers, the internal examinations, and the semester end model examinations etc. Our college employs various formative techniques. The formative techniques, employed by our faculty members include objective type tests, questioning sessions, short test papers etc. The formative techniques employed by our faculty members reinforces the class room knowledge and keeps the students focused. Faculty members have been specially instructed in staff meetings, with regard to devoting the last ten minutes of every class room activity for questioning, and clarifying queries and doubts. Such an enriched teaching-learning experience has helped our students in gaining knowledge in a faster pace. The formative evaluation process helps the students leap over the summative assessments conducted towards the end of semester. The summative evaluation is usually conducted in the form of an internal examination conducted in a centralised manner. In order to conduct the internal examination in a systematic manner an examination committee is constituted. The examination committee declares the dates of conduct of examination, with the approval of the college council. The examinations conducted by the college, tries to imitate the formalities and seriousness of the University examination. The answer scripts are collected by invigilators class wise to be brought into the examination committee's room, where it is duly

sorted and despatched to the departments. The results are duly announced in the stipulated date. The timely feedback has boosted the performance of our students in the University Examinations too.

### **2.5.6 What is the graduate attributes specified by the college/affiliating University? How does the college ensure the attainment of these by the students?**

The graduate attributes specified by our college, include the creation of a socially conscious generation of young men and women, who contributes creatively to the nations progress. However the college does not forget itself with the critical thinking skills and intellectual development of its students. Being a college situated in the interiors, far away from the comforts of the town, the college primarily satisfies the needs of the students hailing from socially and economically weaker sections of the society. Sree Narayana College, Chengannur had for ever stood for the justice of the downtrodden masses, and their enlightenment through education. Our college strives to ensure these attributes through a hearty committed work, student centred learning activities, innovative teaching techniques and vibrant extra curricular activities. These steps ensured by the college helps in attaining the set graduate attributes.

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

The grievances from the part of the students with reference to evaluation both at the college and university level are met with utmost attention and compassion. Both the teaching and non-teaching of our college are instructed to rectify the mistakes, if any, from our part. The Internal Evaluation in our college has been made in a systematic and methodical way, taking into consideration the skills in built in to the student. Besides this drawbacks and positives of the students are highlighted at the right moment. This has been helpful in reducing the grievances to a considerable extent in our college. Grievances, if any, are settled within the Department itself. Outside the confines of the Department, a Grievance and Redressal Cell functions in the college to solve the issues reported by the students. Complaints with regard to evaluation from the part of the University are also registered, and students are guided with details with regard to how to solve them.

## **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, Our College does have clearly stated learning outcomes. Our college is named after the renowned saint and philosopher, Sree Narayana Guru, who based his educational philosophy upon the universal values of brotherhood and equality. As a social reformer, he laid primary stress upon education as a path way for the down trodden masses to uplift itself from the shackles, which the upper strata’s of the society had once imposed. When academic and syllabus oriented knowledge is given importance, it is these universal educational principles envisioned by Guru, which drive our motto of learning outcomes. A student graduating from our college is expected to have a vibrant critical thinking capacity, nourished by knowledge, and above these attributes an individual who is a rich soul with a teaming energy brimming with humbleness, patience, humanity and social concern. It is this universal philosophy constructed for the goodness of mankind, as envisioned by Sree Narayana Guru, which propels our institution. This learning outcome is continuously disseminated both to our staff and students, through an intricate system, which is to be traced right from the Principal of our college, through the college council and IQAC, the Head of the departments and the other staff members. At the grass root levels, the tutorial system of our college reinforces these ideas to be ingrained into the thoughts of our students. The council meeting, the general staff meetings, the department level meetings, the tutorial hours, the club activities and functions conducted in our college, becomes apt platforms for the dissemination of the ideas related to the expected learning outcomes.

### **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.**

Our college monitors and communicates the progress and performance of our students during the duration of the programme with the help of a tutorial system and through an effective conduct of P.T.A meetings. The examination committee and its timely and

systematic conduct of internal examinations, quick and efficient valuation, and timely declaration of the results as stipulated by the college examination committee have considerably increased the efficiency of our college in its work culture. Moreover this systematic process has won the students favour and in turn has increased their performance.

The results of the internal examination are immediately tabulated in a mark/ grade sheet by the concerned teachers. The mark/grade sheets are also handed over to the class tutors and the Head of the departments. The teachers then distribute the evaluated answer sheets and inform the class about the general performance. The teachers then identify the students with very poor performance, and goes on to conduct brief yet insightful sessions of counselling to boost up their confidence. The remedial coaching classes are then arranged, especially after the regular college hours to mend up the gaps and fissures of understanding the topics, which might have occurred earlier. The monitoring and the mentoring activity by the class tutors too run parallel to the work of the teachers. Such a unified effort leads to a vibrant success at the end.

The progress and the performance of the students are also communicated on the occasion of P.T.A meetings. Such meetings largely become discussion forums analysing the attendance, the academic performance and the all round development of the students. The P.T.A meetings have a three level structure where the student along with their parents are expected to meet the faculty members handling concerning papers first, then to a meeting with the class tutor to get an overall feedback, and finally to meet the head of the department for valuable piece of talks. Thus, an effective monitoring and communication channel helps in the analysis of the progress and performance of our students.

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

The teaching, learning and assessment strategies of our college are interlinked to create a sturdy framework. In order to make teaching, systematic and learning more time bound, the Head of the departments instruct the faculty members to prepare month wise teaching plans to facilitate a plan which is better planned to cope up with syllabus. Timely conduct of the internal evaluation and result declaration, tutorial meetings, student



counselling sessions, remedial coaching sessions, and vibrant P.T.A meetings create this sturdy frame work of teaching, learning and assessment.

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

The social and the economic relevance of the courses offered by the college are made aware to the students, at the very onset of the programme. The Head of the departments and the class tutors details on the objectives and the far sighted vision of the programme during the beginning itself, there by motivating the belief of the students in the outcomes about undergoing the programme. This process of motivation is continued throughout the duration of the programme. In order to boost the innovative thinking among the students with regard to the programme, experts from the fields are invited to conduct lectures outlining jobs available and the nature of jobs. The placement cell functioning in the college, conducts recruitment drives at the end of academic year to sweep up the talents and pocket them into careers. In order to add flesh and blood into the theory classes offered by the college, the students are taken to visit industrial arenas of their respective fields of study to understand the social and economic relevance, from close quarters. These initiatives and others are also used to promote the students, enabling them to go for higher studies and into areas of research.

**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 to learning?**

Our college collects data on student performance, through the conduct of internal examinations, performance in seminars, and also through vivid observation by the class tutors upon the student participation in club activities and extension activities. The results of the internal examinations are analysed by the faculty handling the papers and also by the class tutors concerned. The students who are identified to have a poor performance are marked out and short chat sessions are conducted between the teacher and the student. During such sessions, the faculty members trace out the reasons for the learning difficulties. Following the same line, the class tutors too close read the bio-data sheets of the student with poor performance and tries to outline the barriers which might have hampered the learning

process. The learning barriers faced by a student, may range from social, economical to psychological. Many of our students hail from families belonging to lower strata's of the society, who are tormented by a number of issues that need immense support. Considering these facts, our faculty members and especially our class tutors are instructed to consider the psycho-socio-economic backgrounds of our students while smoothening up their learning barriers. Regular nurturing, care, focus, a tinge of love and affection helps our teachers to tackle the learning barriers faced by our students.

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

Our college monitors and ensures the achievement of learning outcomes, through a well sequenced effort of tutorial system, monitored by the Head of the departments and the college principal.

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

Yes, the institution as well as our faculty uses the evaluative outcomes as an indicator for evaluating student performance, achievement of learning objectives and for further planning. The results in the internal examinations, the performance of the students in seminars and the writing skills exhibited by students in assignments are all yard sticks to measure student performance. Similarly on an analysis of the student performance based on the above mentioned criteria helps the institution and as well as our faculty members to rethink on the fact that how far the learning objectives set by them has been achieved. Necessary steps are then taken to mend up the deficiencies so as to attain the projected objectives, through remedial coaching classes, individual counselling and other confidence building techniques. One of the projected objectives of our institution is to bring out all the innate energy within the individual, to be channelized for his/her individual and societal upliftment. Once the institution and our faculty members realise that the set objectives were only nearly or partially attained, further planning and reinstatement of objectives are done, so as to create a generation of individuals who are critical thinkers and as well as socially conscious in sensibility.

# **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?**

No. We have an intention to begin a Research centre in Chemistry.

#### **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, there is a research committee at the college level that facilitates and monitors research activities being carried out in the various departments. The research committee consists of a coordinator and six members including four Research guides from various departments. The committee is also in charge of intimating the faculty members on notifications for submission of research proposals, reminders on timeline, assessing the quality of research work being carried out and suggesting measures for improvements, etc. The chemistry department of our college has submitted application to the University of Kerala to recognize the department as an approved research center.

The institution has adopted various strategies to promote a 'research culture' in the campus. As part of this, teachers are encouraged to avail of the Faculty Improvement Programme (FIP) of the UGC for doing Ph.D. To create a research perspective among the teachers and students, seminars and conferences are frequently organized in the college.

Some of the recommendations made by the committee are:

- To encourage the faculty who do not possess research degrees to enroll for research.
- To encourage faculty to take up minor/ major projects from various research funding agencies including UGC.
- To persuade the faculty members to attend seminars and workshops to keep abreast with the latest developments in their respective fields.
- To inspire the faculty to regularly publish articles and research papers in various national and international journals.

- The research committee identified Physics and Chemistry departments as suitable to be upgraded as research centers of University of Kerala, and had advised the faculty members of the respective departments to apply for guidance from Universities.
- To encourage faculty to engage in consultancy and generate funds.
- Subscription of journals in science disciplines to avail the ongoing and recent research throughout the world.

The impact of the recommendations of the research committee:

- ✓ Three teachers are already undergoing UGC projects and one of the minor projects has been sanctioned by UGC.
- ✓ The teachers organize / attend seminars, conferences etc., and present papers and publish articles in national and international journals.

### **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*-All possible support and autonomy is given to the principal investigator. Decision of the topic, the strategies and methods adopted, the allocation of the UGC financial assistance, the decisions regarding the co-investigators in major research projects etc., can be decided by the principal investigator.
- *Timely availability or release of resources*-timely availability or release of resources in the college is ensured by the research committee
- *Adequate infrastructure and human resources*-The College provides adequate infrastructure for research activities which includes a separate research lab for Chemistry. The college library, computer lab with internet facilities etc., are utilized for carrying out research.
- *Time-off, reduced teaching load, special leave etc*-There is no provision for time off and reduced teaching load but the University provides duty leave for teachers to attend seminars/conferences/workshops.
- *Support in terms of technology and information needs*-The institution has adequate supporting system in terms of technology and information such

as computer labs and departments with Wi- fi facility, smart classrooms, LCD projectors, journals etc.

- *Facilitate timely auditing and submission of utilization certificate to the funding authorities*-Timely audit and submission of utilization certificate to the funding authorities is done promptly. Two of the faculty members of our college have currently applied for project schemes and is waiting for reply for the funding for research projects.

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

The efforts of the institution to promote scientific temper/research culture among students through innovative programmes have been summarized below:

- Involvement of PG students in all the processes concerning research activities, including seminar paper presentations.
- Projects undertaken by PG and UG students guided by our faculty are in such a way to create genuine interest for research.
- Our college library subscribes about 12 journals and has around 6700 books which offer a treasure of knowledge for students.
- The college ensures that the presence of teachers having good exposure to research is turned to be beneficial to the aspiring PG students. Teachers with Doctorate have been invested with the additional charge of enlightening the students on various research aspects.
- Students are taken to research institutions to interface with eminent personalities and to familiarize them with research techniques.
- The Science club of our college organizes seminars, group discussions, workshops and exhibitions to promote research culture and impart scientific temper in students.
- Helping students in obtaining and doing projects under scholarships like the INSPIRE scholarship of DST, OSDD fellowship, scholarship of KSCSTE under the head, 'student project' for doing PG Dissertation.

**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 college provides facilities to the teaching faculty to carry out research and project activities.

- **Guiding student research:** Four of our faculty members are actively involved in guiding student research.

**Details of research guides of our college and number of research scholars working under their guidance are presented in the following table:**

SI No	Name of Guide	Subject	No of Scholars Awarded / Working for PhD
1	Dr.R.Raveendran	Physics	5/6
2	Dr.S R Jitha	Political Science	¼
3	Dr.M S Latha	Chemistry	0/10
4	Dr. V L Pushpa	Chemistry	0/7

- **Leading Research Projects:**

**Post Doctoral Project (Under Research Award Scheme) – ongoing**

Sl. No.	Name of the Faculty	Topic of Research	Funding Agency	Period	Project outlay
1	Dr.M.S.Latha	Preparation and Evaluation of Dendrimeric Nanosystem for Drug Delivery Applications	UGC	2013-2015	Salary + Rs. 3 Lakh contingency

### Projects Research – completed

Sl. No	Name of the Faculty	Topic of Research	Funding Agency	Period	Project outlay
1	Dr.R.Raveendran	Protonic conductivity of tetravalent metal-acid, salt in the nano form	UGC	2008-2010	4,87,265/-
2	Dr.R.Raveendran	Polymer-metaloxidenanocomposite for solarcells	KSCSTE	2012-till date	15,25,000/-
3	Dr.Latha M.S	Preparation and Evaluation of Protein Nanoparticles for Drug Delivery Applications	UGC	2 years (2008-2010)	35,000/-
4	Dr.Latha M.S	Use of Radiation for phytosanitation and Quality enhancement of Coir pith”	Board of Research in Nuclear Sciences, Dept. of Atomic Energy, Baba Atomic Research Center, Govt. of India,	2 years (2007-2009)	15,00,000

5	Dr.Latha M.S	E-Beam irradiation of Metal coated Coir Fibres to find out new applications in the field of Electronics.	Board of Research in Nuclear Sciences (BRNS), Govt. of India	2 years, (2007-2010)	10 lakhs
6	Dr.Latha M.S	“Plasma Nitriding for the improved performance of cutting machinery in Tyre Industry” –	Department of Science and Technology (DST), Govt. of India.	2 years, (2008-2010)	45 lakhs
7	Dr.V.L.Pushpa	Study of the drug activity of longifolene derivatives	UGC	2 Years, (2010-2012)	72000/-
8	Dr.K.Sreelatha	Development of Conducting Polymer Blend Complex Films for Optoelectronic Device Applications	UGC	Accepted (2015)	5 lakhs



**Teachers who were awarded/ ongoing Ph.D during the last five academic years.**

SI No.	Name of the Teacher	Department	Year of PhD awarded
1	Dr .K Sreelatha	Physics	2014
2	Dr.Anju K S	Chemistry	2012
3	Smt. Sheela Fernandez	Chemistry	On going
4	Smt.Sherin K	Physical Education	On going
5	Sri. Rajeev S R	Economics	On going
6	Smt.Vani Jayadevan	Economics	On going
7	Smt.Jisha Sreedharan	Chemistry	On going
8	Smt.Lakshmi.S.Dharan	Chemistry	On going

**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.**

**Seminars/Workshops conducted**

Title	Year	Funding Agency	Total outlay
Computer Aided drug designing	2011	UGC and KSCSTE	1,70,000
Gender Issues and Women Empowerment	2012	NHRC	50,000
Sustainable Development- Challenges and Opportunities	2013	UGC	1,30,000
Rights of the Children: An Introspection	2014	NHRC	50,000
Molecular Modelling and Computational Chemistry	2014	UGC	1,40,000

Women and Cyber 'World - Imminent threats and Innovation	2015	UGC	1,35,000
New Frontiers in Nanotechnology and Material Science	2015	KSCSTE	20,000
<b>Title</b>	<b>Year</b>	<b>Funding Agency</b>	<b>Department</b>
Seminar on “Decentralised Governance in India: Evolution And Significance’	2015	PTA	Economics
Talk on ‘Literature and aesthetics’	2015	PTA	Languages
Talk on ‘Literature, its social commitment and value orientation’	2015	PTA	Languages
Seminar on ‘Various aspects of Commerce’	2015	PTA	Commerce
‘Various aspects of entrepreneurship activities’	2015	PTA	Commerce
Seminar on ‘Adult and Continuing Education’	2015	PTA	Commerce

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

**Department of Hindi**

Smt.Geetha K

Novel

**Department of Malayalam**

Smt. K Lekha

Lyrics (Elegy)

**Department of English**

Sri. Arun Prasad. R

Confessional Poetry and Aesthetics

**Department of Chemistry**

Dr M.S Latha

Medicinal Chemistry

Smt.Sheela Fernanadez	Polymers
Dr.V.L. Pushpa	Computational & Medicinal Chemistry
Dr.Anju K.S	Organic Chemistry
Dr.Remadevi.B	Organic Chemistry
Smt.Jisha Sreedharan	Inorganic Chemistry
Dr.Reshmi R	Physical Chemistry
Smt.Induja P	Physical Chemistry
(Transferred on Feb.2015)	
Smt. Lakshmi.S.Dharan	Inorganic Chemistry

### **Department of Physics**

Dr.R.Raveendran	Crystal Growth & Nanoscience
Dr. K Sreelatha	Conducting Polymers
Dr.Tintu.R	Photonics
Smt.Amrutha Sasidharan	Astrophysics

### **Department of Commerce**

Sri. K M Radhakrishna Kurup	Finance
Smt. Thushara.U.S	Finance
Smt. Aarcha S.S	Marketing

### **Department of Economics**

Sri. Rajeev S.R	Development Economics
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### **Department of Political Science**

Dr. Jitha S.R	Public Administration and Kerala Politics
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### **Department of Mathematics**

Smt. K Mini	Real Analysis
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### **Department of Physical Education**

Smt.Shereen.K	Ageing and Physical Fitness
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### **3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students.**

- Seminars and workshops have been conducted with the financial aid of supporting agencies like UGC, KSCSTEC, PTA etc.

- Every department has its own association. As a part of the association activities seminars, lectures etc., are conducted in the respective departments. For this the researchers of eminence are invited to interact with the faculty and students.
- A series of seminars as part of Science club activities were organized with the primary purpose of facilitating an interface between aspiring scholars on the campus and eminent persons in the field of Research and development.
- The industry experts, academicians and researchers from reputed institutions interact with the students during their visit to the campus. Guest lectures are conducted from time to time with prominent experts as resource persons. The faculty members are encouraged to collaborate with eminent professors of reputed institutions for their research activities.

<b>Department</b>	<b>Seminars/Invited talks</b>
Chemistry	'Graphene' by Prof.T.N.Manoharan, S.N.College, Chempazhanthy, Trivandrum on 29-02-2011.
	"CADD" by Dr.U.C.Jaleel, Scientist, CSIR-OSDD, IISC Bangalore on 17-03-2011.
	Dr.S.V. Sudheer, Director, Academic Staff College, University of Kerala on 17-03-2011.
	'Medicinal Chemistry" by Dr.I.G.Shibi, S.N.College, Chempazhanthy on 17-03-2011.
	'Computational Chemistry' by Dr.KesavaMohan, Retd.Vice Principal, MSM College, Kayamkulam on 18-03-2011.
	'Computer Aided Drug Designing' by Mr.Vijay Masand, Assistant Professor, Vidya Bharati College, Amarvati, Maharashtra on 18-03-2015.
	'Green Chemistry,' by .G.M.Nazeruddin, HOD Dept. of Chemistry, Poona College Camp, Poona on 18-03-2015.
	'Molecular Modelling" by .Prasad M Alex, Asso.Professor, Marthoma College, Chunkathara on 19-03-2011

	11 participants from OSDD consortium from different states, 17 to 19 March 2011
	Dr.M.Jayaprakash, Director, CDC, University of Kerala on 19-03-2011.
	‘Chemical emergency response systems’ by Dr.Kesav Mohan, Director of Land & Disaster Management, Thiruvananthapuram on 16-12-11
	‘Beauty of Chemistry’ by Prof.P.K.Reji, Devaswom Board College, Sasthamcottah, Kollam on 27-02-2012.
	‘Quantum statistics’ by Prof. S. Sugunan, Department of Chemistry CUSAT, Kerala on 13-06-2012
	‘Cheminformatics’ by Dr.U.C.Jaleel, OSDDSID, IISc, Bangalore on 25-02-2013
	‘Bioinformatics’ by Dr AchuthSankar S Nair, Head, The Center for Bioinformatics, University of Kerala on 6-09-2013
	‘Combinatorial Chemistry’ by R.Raghu Director, Schrodinger, USA on 10-11-2013
	‘Quantum Mechanics’ by Prof . P.K.Viswanathan, Rtd Professor, S N College, Chempazhanthi, Kerala on 8-12-2013 & 9 -12-2013.
	‘Molecular Dynamics’ by Dr.Jayasree, Dept.Chemistry, Karyavattom Campus, University of Kerala 14-10-2013.
	‘Stereochemistry of Organic compounds’ by Dr.Dessy Koruthu, Associate Prof., Christian College, Chengannur, Kerala on 14-02-2014
	‘Applications of Nanotechnology’ by Dr. S K Ghosh, Scientist, CGCRI, Calcutta, West Bengal on 11-03-2014
	‘Computational Chemistry’ by Dr.Swathy, IISER, Thiruvananthapuram on 7-05-2014
	‘Molecular medicine’ by Dr.I.G.Shibi, S.N.College, Chempazhanthi, Thiruvananthapuram 8-05-2014.
	‘Genetic Algorithm & SVM’ by Mr. Girinath G Pillai, Research

	scholar from Florida University on 29-12-14
	‘Molecular dynamics’ by Dr. Krishna Mohan G.P, NIIST, Kerala on 26-12-14.
	‘Statistical Mechanics’ by Smt. Usha Devi, Retd. Professor, NSS College, Pandalam, Kerala on 27-12-14 and 31-12-14.
Physics	‘Physics and Nature’ by Prof.K.P. Mathew, Former HOD of Physics, Sree Narayana College Chengannur delivered a talk while Inaugurating the Physics Association. ‘Basics of Quantum Physics’ by Dr.Premlet B, Associate Professor, TKM College of Engineering, Kollam.
	‘Light Matter interaction with Lasers’ by Dr. Tony Teddy Fernadus, Senior Post-Doctoral Fellow, Institute of Optics, CSIC, Madrid, Spain.
	‘Evolution of Lasers-53 years of Coherence’ by Dr.(Prof.) N.V.Unnikrishnan, School of Pure and Applied Physics, MG University, Kottayam.
	‘Entanglement between Quantum Physics and Vedic Philosophy’ by Prof.G.K.Sasidharan, Astrophysicist & Former Vice-Chancellor, Calicut University.
	‘Polymer Nanocomposites for Medical and Space Applications’ by Dr.Kuruvilla Joseph, Senior professor and Head, Department of Chemistry, Indian Institute of Space Science and Technology, Thiruvananthapuram.
	‘X-ray Diffraction Analysis of Nanocrystalline Materials’ by Dr.V.Biju, Head-in-Charge & Assistant Professor, Dept of Physics, University of Kerala.
Commerce	‘Various aspects of Commerce’ by Dr.B.Gopakumar, Asso.Prof. of Commerce, NSS College, Pandalam.
	‘Adult and continuing education’ by Sri.Baby, Member of Kerala State Literacy Mission.
	‘Various aspects of entrepreneurship activities’ by Dr.B.Gopakumar, Asso.Prof. of Commerce, NSS college, Pandalam.

Languages (English, Malayalam & Hindi)	‘Literature and aesthetics’ by Smt.Indira Ashok, Contemporary poet & Head, Department of English, TKMM college, Nangiarkulangara
	‘Literature, its social commitment and value orientation’ by Dr.Sudhersana Babu, Formerly of Department of Malayalam, Devaswom Board college, Sasthankotta, Kollam district.
Economics	“Decentralised Governence in India: Evolution And Significance ‘by Dr. M.R. Biju, Associate Professor, Post Graduate Department of Political Science, Sree Narayana College, Kollam.

• During last five years, seminars/invited talks organized by various departments.

Sl. No	Name of the Department	Name of National Seminar	Year	Name of Eminent Scientist / resource person
1	Chemistry	National Seminar on Molecular Modelling and Computational Chemistry	2014	Dr.R.S.Swathy, IISER, Trivandrum, “Computational Chemistry”
				Dr.I.G.Shibi, Associate Professor, S.N.College, Chempazhanthy, “Medicinal Chemistry”
				Dr.U.C.Jaleel, Principal Investigator, Cheminformatics OSDD Research Unit, IISC, Bangalore, “Drug Design”.
				Dr.U.C.Jaleel, Principal Investigator, Cheminformatics OSDD Research Unit, IISC, Bangalore, “Neural Networks”.
				Akshata Gad, OSD Research Unit, IISC, Bangalore, “Hands

				on Training”(Power MV)
				PraygaNaik, OSDD Research Unit, IISC, Bangalore, ‘Hands on Training (Data mining)’
				Lijo John, OSDD Research Unit, IISC, Bangalore, Hand on Training (Similarity searching & Molecular Modelling”
				Dr.U.C.Jaleel, Principal Investigator, Cheminformatics OSDD Research Unit, IISC, Bangalore, Hands on Training, ‘Datamining software WEKA development models using molecular descriptors’.
				Yatrindra Yadav, OSDD, IISC, Bangalore, “Hands on Training (Machine Learning)
				JinuRaj.K, OSDD, IISC, Bangalore, “Hands on Training Classification of data”
				Sajeev.R, OSDD, IISC, Bangalore, “Hands on training (Random Forest)”
2	Physics	New Frontiers in Nanotechnology and Material Science’	2015	Dr.Kuruvilla Joseph, Senior professor and Head, Department of Chemistry, Indian Institute of Space Science and Technology, Thiruvananthapuram, ‘Polymer Nanocomposites for Medical and Space Applications’
				Dr.V.Biju, Head-in-Charge &



				Assistant Professor, Dept of Physics, University of Kerala, 'X-ray Diffraction Analysis of Nanocrystalline Materials.
3	Women Cell	Women and Cyber World-Eminent threats and Innovations	2015	Dr.Omana Gangadharan, Ex-Mayor, Newham City, London.
				Dr.Achuthsankar.S.Nair, Head, Dept of Computational Biology and Bioinformatics, University of Kerala.
				Dr.S.Vimamal, Ass.Prof, Dept of Computer Science, Mother Teresa Women's University, Kodaikkanal,Tamilnadu, 'Women and cyber crime'
				Dr.S.Anilkumar, Ass.Prof, Sree Ayyapa College, Eramallikkara, 'Cybercrime and its Challenges'
				Dr.Sindhu Thulaseedharan, Ass.Prof, Dept of Law, University of Kerala, Kariavattom Campus, 'Cyber Laws for Women safety'
				Sri.Vinayakumaran Nair, Assistant Commandant, Hi-Tech Crime Enquiry cell, Police Headquarters, Trivandrum, 'Women & Cyber threats'.
				Adv.RemaReghunandan, Director, Universal

				Psychotherapy Center, Kunnamkulam, Thrissur, "Email harassment-Issues and solutions".
				Sri.Satheesh.S, 'Hi-Tech Crime Enquiry cell, Police Headquarters, Trivandrum,' Identity theft'.
4	Political Science		2012	Gender Issues and Empowerment of Women, National Human Rights Commission Sponsored One Day National Seminar, Department of Political Science & Human Rights Awareness Forum, S.N College, Chengannur,
			2013	Sustainable Development: Challenges and Opportunities, UGC Sponsored Two Day National Seminar, Department of Political Science, Sree Narayana College, Chengannur in association with Department of Political Science, University of Kerala,.
			2014	Rights of the Children: An Introspection, National Human

				Rights Commission Sponsored One Day Training Programme, Department of Political Science & Human Rights Forum, S.N College, Chengannur,.
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**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?**

One of our faculty members (Smt. Sheela S. Fernandez, Associate Professor, Department of Chemistry) has availed the FIP accorded by UGC, to pursue research on sabbatical leave during 2011-2013. Dr.M.S.Latha, Associate professor, Department of Chemistry has availed the UGC research award scheme during the academic year 2013-2015.

**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 elsewhere to students and community (lab to land).**

The college motivates teachers to undertake research projects and encourage them to publish their research findings. The teachers regularly publish research papers in various international and national journals. The students are given exposure through seminars/conference/workshop. Experts from IISC, Bangalore and from BioInformatics Center, Kerala University, give hands on training on new software related to Bioinformatics for our M.Sc. Medicinal Chemistry students. The PG students have done their project work in association with Open Source Drug Discovery (OSDD) programme, IISC, Bangalore. They are also members of the OSDD junior Research forum. We have been associating with them since 2009. Students also attended a BOOT camp for eight days and four days in April, 2013 and in May, 2014 at IISC, Bangalore respectively.

**Resource Persons:**

1. As Resource Persons: Principal, Dr.R.Raveendran; Dr.M.S.Latha, Assistant Professor in Chemistry, Dr.V.L.Pushpa, Associate Professor in Chemistry, Dr.Jitha.S.R, Associate Professor in Political Science are resource persons.
2. Papers in reputed journals: Refer the evaluative report of the concerned department
3. Presentation of research articles in national and International Seminars. (Refer the evaluative report of the concerned department).

**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.**

The College does not have an exclusive budget for research activities. The college is committed to provide assistance to the teaching faculty as well as postgraduate and graduate students to carry out research and project. But the management of the college encourages research culture. Hence, the role assumed by the institution is that of a facilitator. In addition to this the institution was able to gain funds from UGC for the purchase of equipments and chemicals. Limited assistance from PTA is used for improving research facilities like infrastructural enhancement in the campus.

**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?**

There is no provision in the institution to provide seed money to the faculty for research. Most of the research projects were initiated after the sanctioning of the financial assistance from funding agencies. The departments get financial assistance from the management, UGC and PTA for the annual maintenance and repair of the laboratory equipment and computers. The faculty, researchers and the students are permitted to use the infrastructure and laboratory equipment and computers for their research projects.

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

Students are provided with the facility to make use of the infrastructural facilities of the college to undertake their projects. Financial support for fieldwork, industry visits, survey etc. is provided to deserving students on request. The UG and PG students of the science stream have to complete one compulsory research project in partial fulfilment of their degree and PG programmes. They utilize the equipments, chemicals, glasswares, electricity and the expertise available in the institution without any special payment.

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

The Departments of Physics and Chemistry is actively engaged in interdisciplinary research activities. PG students of these departments undergo interdisciplinary research for their project.

An interdisciplinary initiative of the department can be seen in the commencement of the UGC aided M.Sc Medicinal Chemistry programme. B.Tech. Biotechnology students from College of Engineering had successfully completed their projects work in the department of Chemistry with the help of one of our faculty in 2012. The title of the project is “Biocomputational and phytochemical screening of the biological activities of the extracts Sidaretusa” and this project received an award for the presentation in an international conference. Many other student projects from neighboring colleges have completed their work in our college. More initiatives in the field of inter disciplinary research is yet to take off.

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

Our institution maintains proper registers for all equipments and other facilities available. The laboratories, computer labs with internet facility, General library and electronic equipment are put to maximum utilization for the practical skill development and Research aptitude of UG and PG students as well as the teachers and research scholars for their works.

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

Yes, UGC grant is the major source of financial assistance to promote research. The funds are utilized for the renovation of laboratory, library facilities and purchase of equipments and instruments. The teachers who are engaged in research projects submit the books and equipments purchased from UGC grant to their respective departments on completion of their project works. This practice is helpful in improving the laboratory and library facilities.

**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.**

Refer Sec.3.1.5

<b>Nature of the Project</b>	<b>Duration Year from to</b>	<b>Title of the Project</b>	<b>Name of the Funding agency</b>	<b>Total Grant received till date</b>
Minor Projects	Refer Sec 3.1.5			
Major projects	Refer Sec 3.1.5			
Industry Sponsored	NIL	-	-	-
In addition to these, the students avail financial assistance from various funding agencies like University of Kerala, KSCSTE for projects.				

### 3.3 RESEARCH FACILITIES

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

Adequate laboratory and library facilities and a general library are available to students and researchers.

#### List of facilities:

##### 1. List of Instruments/Facilities in Chemistry Department

Name of the Equipment
UV-Vis spectrophotometer
Software for molecular modelling
Work station & computers with uninterrupted internet facility
Remi Water bath shaker
Rotary evaporator
Deep Freezer
Magnetic stirrer with heating mantle
Sonicator
Polarimeter
Photoelectric calorimeter
Spectrophotometer
Abbe refractometer
Melting point apparatus
Digital conductivity meter
Digital pH meter
Centrifuge (electrical)
Conductivity meter with unbreakable cell(digital)
Vacuum pump
Stalagmeter
LCD projectors & interactive board

## **2. List of Instruments/Facilities in Physics Department**

1. Spectrometer
2. CRO
3. Function generator
4. Computer
5. Printer
6. DC regulated dual power supply
7. Solar Cell Characteristic
8. Photodiode Characteristic Apparatus
9. Magnetic stirrer with temp.control
10. Hotplate
11. Hall's Apparatus
12. Laser
13. Optical fiber
14. Ultrasonics set up

**3. Library facilities:** Library subscribes about 12 journals and has around 6500 books.

**4. Infrastructural facility:** Research lab with internet facility. The students utilize these facilities for carrying out their academic projects. The proper guidance from the faculty members and other resources available in the college helps them in successful completion of the projects.

### **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?**

With reference to public relevance and the new emerging areas of research, the institution is planning to upgrade and to provide separate infrastructural facility to meet the key research areas.

- A well-equipped computer lab with molecular modeling software worth seventeen lakhs and sixty nine thousand has been setup in our college. Molecular modeling is a new emerging area of research. Using the above mentioned software we do modeling and designing of new molecules and also develop drug molecules for many diseases.
- To establish a research library fully computerized and supplemented with internet facility, journals and books on emerging areas of research.



- Upgrading the infrastructural facilities of laboratories and installing modern equipment to meet the needs of the researchers.

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

Yes, the college has received assistance from the funding agencies like UGC, KSCSTE and DST for doing minor research and student projects.

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

The final year UG and PG students of our college are provided facilities to undertake project from industry and reputed research institutes.

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

- Books and journals facilitating research in concerned subjects are purchased according to the recommendation of the departments. A section of the library is set apart only for the display of research journals and for references by researchers. Internet facility is available in all Department of the College. The faculty members are given facility to participate and present research papers in national and international conferences to get latest information.
- Internet browsing Centre for students and faculty is available in the college.

**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.**

Teachers/research students are promoted to collaborate for research activities in their own level with other laboratories, research organization/industry within/outside the campus.

### **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) -NIL**

**Original research contributing to product improvement -NIL**

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

**Research inputs contributing to new initiatives and social development-NIL**

**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?**

NIL

**3.4.3 Give details of publications by the faculty and students:**

Publication per faculty department wise- Refer the evaluative report of the concerned department.

**3.4.4 Provide details (if any) of**

- ❖ Research awards received by the faculty and recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally.
- ❖ Dr.R.Raveendran is a U.G.C post-doctoral research award winner (2004-2007).
- ❖ Dr. M.S. Latha is a U.G.C post-doctoral research award winner (2013-2015).
- ❖ Dr.Tintu.R. is a PDF award winner.
- ❖ Ms.Sheela Fernandez, HOD, Department of Chemistry, received Best paper award in National conference on Emerging trends in Chemistry (NCETC-2012), Bishop Heber College, Trichy, TamilNadu.
- ❖ Dr. P R Rejikumar, former HOD, Department of Physics, received the Best Paper Award at the National Seminar on Recent Advances in Nano Science &Technology, Sree Narayana College, Kollam, Kerala. (NANO- 2009).

## **3.5 CONSULTANCY**

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

Considering the remoteness of the college and the number of courses offered by the college there is strong limitation for the establishment of institute – industry interface in a productive manner. However, possible efforts are being made to establish institute – industry interface. Students of the various departments of the college conduct industrial visit during the course of their programme.

- The departments of Commerce, Economics, Physics and Chemistry have established institute –industry linkage to engage their student projects in the related industry.
- The science departments associate with industries like CPCRI, Kayamkulam; CFSE, Changanacherry; Sangrose, Mavellikara; KMML, Chavara, Kollam; Center for Bioinformatics, University of Kerala, Kariavattom; Directorate of Land & Disaster Management, Thiruvananthapuram; Kerala State Homeopathic Coorporative Pharmacy, Alappuzha etc., for the conduct of the research projects of the P.G students of the college.
- Entrepreneurial Development club (ED club) with financial assistance from the Directorate of Industries, Trivandrum, conducts various programmes for Entrepreneur skill development among youth, especially for women.
- National/International workshops/seminars form a common platform for interaction between faculty, students and research scholars with experts/industry persons resulting in research/society/community oriented projects.

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

Though the institution does not have any stated policy in consultancy services, it encourages the faculty who are engaged in consultancy services. Students from other colleges are visiting the eminent faculty of the college for guidance and resources for research related to Ph.D and P.G courses. The institution promotes consultancy services of the faculty members. The expertise of our faculty members is advocated and publicized by giving training programmes, projects and lectures to the students of schools and colleges.

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

The institution offers full support to the faculty members to utilize their expertise for consultancy service. Students of nearby aided and unaided colleges were given facilities to do project works in our institution under the guidance of our faculty. The available laboratory resources are freely accessible to the faculty members for their consultancy works. The institute also encourages the faculty and staff to share the knowledge and experience with other institutions and other allied areas as and when the opportunities arise and requests are received.

### **3.5.4. List the broad areas and major consultancy services provided by the institution and the revenue generated.**

Computational Chemistry is one of the areas where the institution has developed considerable consultation potential. There is no revenue generated through this service. Hence, consultation facility is free of cost in our institution for the benefit of students and local people. The other services are as follows:

1. Spoken English training
2. Conduct of science exhibitions
3. Coaching for Entry in Service (PSC, Bank coaching)
4. Research Seminars and work shops
5. As part of the Women's cell, the students were taught fabric painting, jewellery making, pickle making, soap making, detergent making, flower arrangements, vegetable carving, craft making and stitching. Our students were able to earn some money from these activities.
6. Academic consultancy is extended to educational institutions and research scholars.

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

The institution does not generate revenue through consultancy services.

## **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?**

The units of National Service Scheme and the various clubs of the college have been functioning as nodal points of institutional interaction with the Community. These organizations, in consultation with the Local Self Govt. organizations and scientific institutions, undertake social welfare activities such as community health and hygiene awareness camps, charity work etc. After the admission to the Degree Course, students are given a choice to join various organizations such as NSS, varied clubs etc., functioning in the college. The NSS units and the clubs of the college work with a focus on promoting citizenship roles among students. The staff advisor and the coordinators of the respective units track the involvement of the students. The students are also encouraged to participate in National Integration Camps of NSS. The election of college union which is conducted in a democratic manner enhances students political consciousness and social participation.

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

The college principal and the college council had framed various committees for community network and identified students so as to channelize them into social movements. The NSS and the clubs of the college work with a focus on promoting citizenship roles in students. Students are also given the freedom to engage in reasonable levels of democratic political activism in the campus. The student's union comprising office bearers elected by the student community, actively co-ordinates the campus—community interaction through appropriate social extension programmes. The various activities of the union is planned and discharged under the guidance of the principal and a staff advisor. The college facilitates all the students to be the part of any one of the extracurricular activities which fetch them one credit in their academic records.

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

The institution tries to solicit the stakeholders like the students, parents, outgoing students, Alumni based on the overall performance and the quality brought out by the institution. Feedbacks from students, on teachers, and on campus facilities are regularly taken. Analysis of the above feedbacks collected from stakeholders provides us an understanding of the overall performance and quality of the college.

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

Apart from the Extension activities mandatorily undertaken under the curriculum, the faculty and students of the college are engaged in various social service and outreach programmes under the aegis of organizations such as the NSS, Nature Club, Women's Forum and the Bhumithra Club. The NSS unit of the college has been regularly organizing social outreach camps to facilitate interactive programmes in the fields of social hygiene, agricultural innovation, public health surveillance etc, in collaboration with the local population. Social outreach programmes are also conducted by Environmental club, Science club and Human Rights forum. Through the creative efforts of these clubs students are encouraged for outreach programmes. The following outreach programmes are organized by the Institution-

- Social work
- Health and hygiene awareness
- Blood donation camp
- AIDS awareness
- Environment awareness
- Clean & green campaigns

Institution arranges educational tours, excursions etc., for students and extension lectures by faculty members of other Colleges. The budget for such activities is prepared in accordance with the provisions and annual allocation from the parent university. The

details of the annual budgetary expense of the various extension and outreach agencies during the last four years are as follows:

	<b>Amount Sanctioned (Rs)</b>					
<b>Year</b>	2010	2011	2012	2013	2014	2015
<b>NSS</b>	38400	31504	29,935	26820	88743	88000
<b>Women cell</b>	1500 (PTA)	1500 (PTA)	1500 (PTA)	1500 (PTA)	3000 (PD)	1,35000
<b>Bhoomitra Sena Club</b>	--	-	-	50,000 (Dept. of environment & climate change) 55,276/- PTA	10,000 (Dept. of environment & climate change)	-
<b>Science Club</b>	8000/- KSCSTE	8000/- KSCSTE	15000/- KSCSTE	2000/- PTA	20000/- KSCSTE	15000/- KSCSTE

### **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?**

Students are comprehensively informed of the manifold benefits of joining the bodies like NSS. The students are given information about various camps like National Integration Camps, etc., and that are likely to come their way while pursuing higher education. The students successfully completing the service are awarded with grace marks at the end of their course. This mark is beneficial for admission to higher studies and for job placements. The major activities of NSS units of our college are presented in Sec 3.6.1.

### **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?**

Economically backward and meritorious students are supported by scholarships from various agencies. The Women Studies Cell of the college conducts regular seminars on

Women Equity and Social Justice participated by eminent judges and human rights commission. Our NSS volunteers conduct social survey in the neighboring villages during their camp periods. NSS training prepares students morally and ethically strong enough to face challenges and emergencies in day to day life.

**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.**

NSS programme gives value in-

1. Leadership Qualities
2. Health and Hygiene
3. Social Service, and
4. Environment Protection.

The skills are developed to understand and analyse the problems prevailing in the society. It provides rich lessons of practical skill and wisdom from life events. In the light of objectives and expected outcome of the extension activities, Institution is determined to develop students as responsible citizens, development of their sensitivity towards social and environmental issues, development of personal and professional skills and ethical values. They learn skills of organization and time management. The institution maintains good rapport with political and social activists and organizations, and assures their involvement in the programmes undertaken by the college. Experts like doctors, lawyers, social activists and other representatives from Government Welfare Departments share their expertise with the students as well as the community and it paves way for community development. Parent-teacher association play very active role in the involvement of the community in the outreach activities of the institution. They are also involved in the community developmental activities.

**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 NSS of the college involve in several developmental activities every year. The college conducts free blood group determination camps, AIDS awareness programme for



the community. The college also provides special consideration / permissions for students to attend these activities. Refer Sec 3.6.1.

Volunteer students surveyed almost 328 houses in Pampa –Varattar river area to unearth the factors that resulted in the death of Pampa-Varattar river. The students interacted with more than 2000 civilians and also distributed pamphlets and spread information regarding the urgency of rejuvenating the river. The volunteers also made a study of the water collected from 36 selected areas of the river. Several awareness classes were also arranged to the locals in the affected area. The students were successful in developing a documentary film based on the environmental issues posed by Pamba-Varattar river and also attracting much attention to the problem. Dept. of Chemistry conducts water analysis for the people who are living in the neighbourhood.

**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.**

We maintain healthy relation with other colleges and institutions in and around Chengannur. The college allows these institutions to convene NSS camps and other activities in college campus up on their request. For seminars and workshops faculty members and students from neighbouring institutions are invited. The college also promotes student empowerment programmes in collaboration with other institutions. Students are received and sent to attend job Recruitment drives and trainings. During NSS camp periods, the resource persons are invited from other organizations and institution to take up various programmes in the villages.

**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.**

As a part of the extension activity, the office of the Director, Eco- tourism, Govt of Kerala, Trivandrum honoured Sree Narayana College, Chengannur, for promoting and preserving the nature. The activity undertaken by the college is to rejuvenate the extinct tributary of river Pamba. An action plan organized by the students, teachers and the local community of the area jointly prepared a memorandum and submitted before the authorities concerned.

The College was awarded a memento by Dr G Madhavan Nair, then chairman of ISRO for the active participation in the International Year of Chemistry Celebrations 2011, conducted by Bishop Moore College, Mavelikara. The faculty members of Sree Narayana College conducted a series of lectures in various schools in Alappuzha district to create interest in chemistry among school students.

In the Kerala University Youth Festival, 2013 convened at Mavelikara, our college bagged first prize for the open cultural exhibition in the procession.

### **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.**

As a part of the university curriculum the institute emphasizes and gives much priority to the students to visit various industries, companies and other related areas in discipline wise. Members of the faculty who have registered for PhD research are carrying out their work at prestigious research laboratories. The department of chemistry has tie up with industries for conducting the research projects of the P.G students of the college. All the staff members collaborate and interact with a number of research institutions and laboratories at Kerala University, M.G University, Cochin University, NIIST, Thiruvananthapuram etc. on research and teaching strategies. We are getting permission to carry out experiments and training in institutes of repute. The students are given exposure through seminars/conference/workshop. Experts from IISC, Bangalore and from BioInformatics Center, Kerala University give hands on training on new soft wares related to Bioinformatics for M.Sc (Medicinal Chemistry) students. The PG students have done their project work in association with OSDD programme. They are also members of the Open Source Drug Discovery (OSDD) junior Research forum. We have been associating with them since 2009. Students also attended a BOOT camp for eight days and four days respectively in, April 2013 and in May 2014.

Faculties are sent to other reputed Universities and Institutes of higher learning for attending refresher courses. One of our teachers from Chemistry Department attended the Stimulating Teaching through Advanced Training (STAT) programme at NIIST, Trivandrum and also at IIT Madras. Our laboratories are open for research candidates of other institution.

The students visit other research centers/libraries for discussions/collecting research papers/books with the Principal's written consent. UGC sponsored minor and major projects are undertaken by the institution. The numerous seminars, workshops and other academic events the departments host, also pave the way for collaborative interaction with a number of research establishments. These events have been common platforms for interactions among experts, research scholars, students and other members. This is reflected in their research output and publications.

**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.**

The institution is having collaboration with the following organizations OSDD-CSIRUnit, IISC, Bangalore, M.G.University, Kottayam, Pushpagiri Medical Center, Thiruvalla and Central Coir Research Institute, Alappuzha. Such collaborations contributed to the development of Institution. Training programmes given was effective for our students.

**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.**

Seminars and Conferences have been organized in the Campus in collaboration with Technical universities and Scientific institutions such as KSCSTE, Kerala, Academy of Chemistry Teachers (ACT), Kerala and UGC.

**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.**

Refer Sec.3.1.8

**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 -**

Nil

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

Our college started an innovative post graduate programme in Medicinal Chemistry with the aid of UGC. The faculty of our college has designed the syllabus of this course by incorporating emerging areas as computational chemistry, cheminformatics, organic and medicinal chemistry. More over the course facilitates our students to engage in practical's with the assistance of software applications, thereby reducing the load of chemical use, thus cutting the mild levels of pollution in laboratories during the conduct of experiments. Our aim is to equip our students with this technology. Recently the faculty engage in collaborative work with Government of India's initiative viz., *Open Source Drug Discovery Programme* (CSIR) to develop drugs for neglected diseases like TB and Malaria. Further more it is to be added that our M.Sc Medicinal chemistry students are doing their project works under this scheme and the works are in progress.

**Efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations:**

The research committee takes special efforts to motivate the faculty to apply for major and minor research projects. In view of significant achievements, institution has plans to establish a full-fledged Research Center in the campus. Five students have qualified NET/JRF during the period 2007-2013.

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

NIL

# **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?**

Most of the governmental and private sources for funding of infrastructural development of the institution are utilized. Private sources of finance for development and capacity building include loans and grants from agencies such as M. L. A Fund, management funds, UGC Grants etc. Projects and proposals are submitted to the UGC and the Kerala State Higher Education Council on a time bound basis. Proposals for the construction of class rooms, laboratories, computer labs, seminar hall etc., have been submitted .Additional class rooms with standard specifications have to be constructed for the smooth conduct of the new programmes.

#### **4.1.2 Details available for**

a) **Curricular and co curricular activities** –For curricular activities we have Smart class rooms, LCD projectors, white boards, Green boards, well equipped laboratories(with highly specialized equipments like fume hood, UV Spectrometer, multimedia projector etc), equipments for computer aided teaching , facilities for continued learning and research ,a centralized library, computer labs etc. Besides this we have notice board with acrylic doors, wireless mikes, portable wireless amplifier, speakers in whole class rooms, podiums are also there for smooth functioning of the college regular activities. Our college has three separate blocks of which two are situated near the college entrance which houses the Economics and chemistry departments and its class rooms. The chemistry block also houses the college

auditorium. The main block houses a part of the chemistry department (laboratory and HOD room), administrative wing, and the departments of Commerce and Physics. The college has two separate playgrounds. The library building is situated at the tip of the main play ground. There is a total of seventeen class room in our college. Separate computer labs equipped with internet facilities are provided for UG and PG Courses.

b) **Extra curricular activities** –Facility for sports activities such as outdoor and indoor games, gymnasium etc. are available .An auditorium to conduct NSS programmes, cultural activities public meetings, communication skill development classes, yoga, health and hygiene etc are also provided.

c) **Sports and games** - The Physical Education department promotes student participation in sports and games. Separate selection and training of teams in the games such as Cricket, Badminton, Kabaddi, Fencing, Football and Athletic events are regularly conducted. Facilities are also provided for indoor games like Chess, Caroms and Table Tennis. The teams are encouraged to participate in University meets, Zonal and state competitions. A full fledged **Gymnasium** is functioning in the campus under the supervision of the Physical Education Department.

d) **Auditorium**- The institution has a multipurpose auditorium, which is roofed and properly furnished with a capacity of 400 seats. The auditorium hosts all the important meetings in the campus. It is fitted with sufficient number of fans and lamps and an excellent public address system.

e) **NCC & NSS** – Two units of the NSS are functioning well in our campus.

f) **Cultural activities, Public Speaking, and Communication Skill** – The College has a well organized Arts Club which is functioning effectively. The College formally organizes the cultural festival once a year under the aegis of the Students union of the college, which is also a venue for the selection of candidates for the participation in the Arts festival. Apart from this, other mechanisms for promotion of cultural and intellectual

activities on the campus, include organizations such as Quiz programmes, Science Exhibitions, Literary and Debating Club, Science club etc.

g) **Public speaking** -Our College conducts various club activities which facilitates an effective public speaking skill. Communicative ability and public speaking skills among students are augmented through activities organized by clubs and forums functioning in the college. An English and Malayalam news paper reading session is conducted during the lunch break. This session is organized by the Science club of our college. Such session has motivated our students to read more news papers and magazines, thereby updating their knowledge with respect to the local national and international events.

h) **Communication skill**: Various programmes like seminars, debates, ASAP carrier oriented programmes etc., help the students to develop their communication skill.

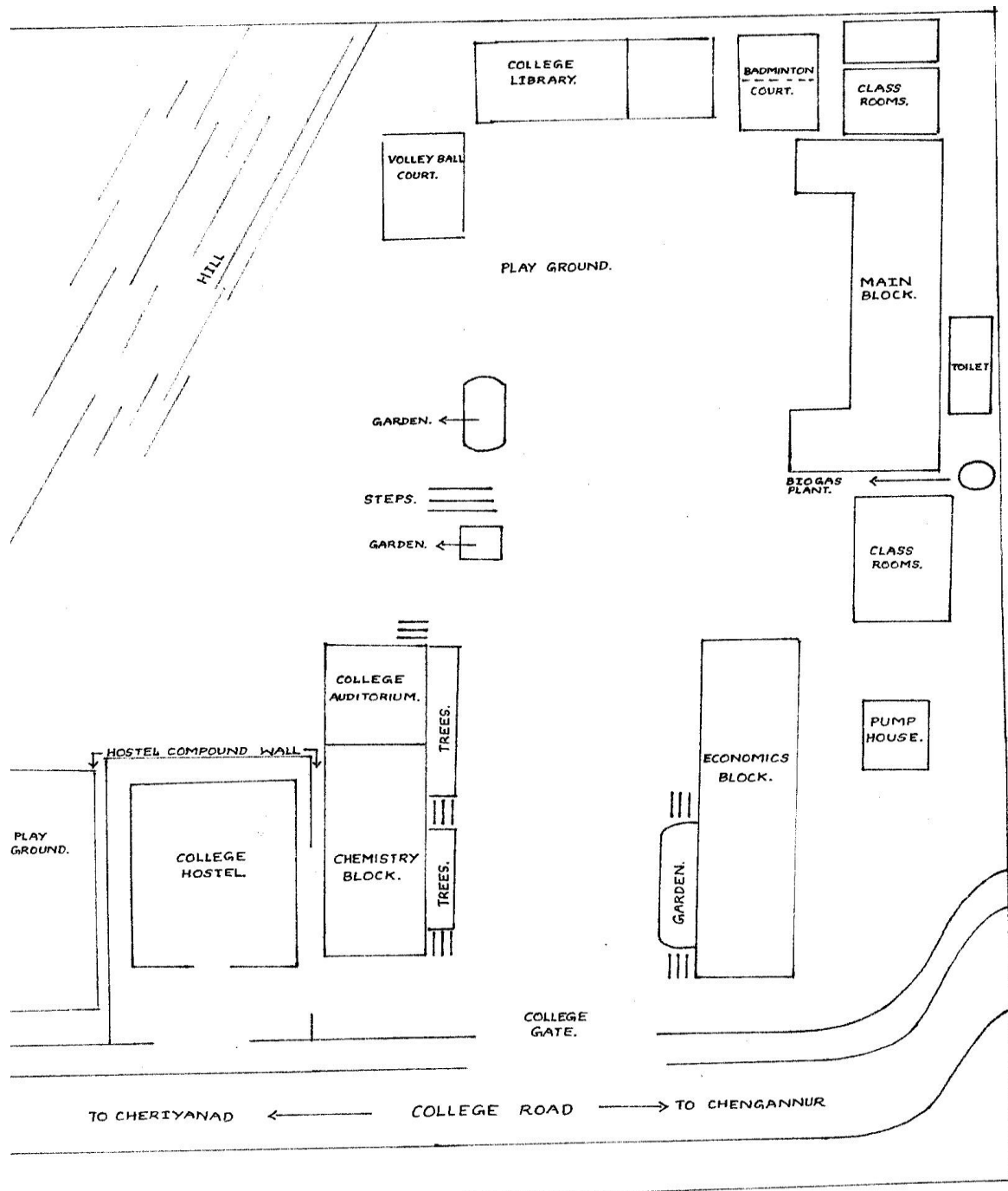
i) **Health and Hygiene**-A Health and Fitness Club functions in the campus under the auspices of the Physical Education Department of the college. In association with the NSS unit, Department of Physical Education invites talks by experts from the fields of public health on relevant topics like awareness against drug abuse, blood donation, Aids awareness class, etc. Yoga and meditation classes conducted occasionally. Sanitation drives by staff and students are undertaken in and around the campus. Girl students of the College are frequently sensitized on the safe practices of maintaining personal hygiene. Retiring rooms and facilities for disposal of sanitary materials for girls are present on the campus. Water cooler is fitted for staff and students separately. Separate toilet facilities for girl students are provided. Medical assistance is provided to the students as and when necessary.

**4.1.3. How does the institution plan and ensure 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 institution ensures the optimum utilization of the available infrastructure by effective participatory planning .The institution plans the classes for the students in such a way by putting the available infrastructure to maximum use. The auditorium is used for conducting various National seminars, meetings of various organizations and clubs like Science club, Music club and also for conducting college Arts day. The institution arranges PSC Coaching classes and UGC-NET classes with the available class room facilities. Various Add on courses in Tally, Audiovisual are also conducted.

Campus play ground is used for the nearby schools for conducting their Annual sports meets. Annual stock verification of furniture, lab equipment and electronic gadgets is carried out in terms of quantity and quality. Repair and maintenance of these items and periodic service of electronic gadgets and device are promptly conducted. Augmentation in terms of number and quantity is undertaken promptly in response to demands submitted in writing by the HOD's. Proposals are submitted to the Management, the Alumni Association, the Parent –Teacher Association, the Kerala State higher Education Council and UGC for financial assistance for infrastructure development initiatives and capacity expansion.





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

Special arrangements are provided for the convenience of students with physical disabilities. Convenient seating arrangements, bottled drinking water, counseling and sensitization of the fellow students are some of the efforts in this regard.

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

- Hostel Facility—A ladies hostel with the capacity to accommodate 60 students is functioning within the safe comforts of our college campus.
- Recreational facilities, gymnasium, yoga center, etc. The hostel have ample space with green spots for student to relax in the midst of nature.
- Computer facility including access to internet in the hostel. The hostel does have a few consoles with computer with internet connectivity. Facilities for medical emergencies- Resident tutors help in providing medical assistance to the students in alliance with the nearby hospitals.
- Library facility in the hostels- The college hostel has a reading room where the students are provided with news papers and periodicals.
- Internet and Wi-Fi facility- Internet facilities are provided.
- Recreational facility- There is a common room with audio-visual equipment. The room serves to show case films, documentaries and educative lectures, etc.
- Constant supply of safe drinking water- A bore well with pumping facility has been constructed. The drinking water facility for students has been provided in verandahs.
- Security- A night watchman has been employed to look after the hostel, after the working hours.

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

A retirement cum First Aid room with information charts and materials to be used in emergency situation has been maintained. Free Medical Checkup Camps are organized on the Campus in co-ordination with private hospitals and charity organizations. Blood group detection camps too are organized free of cost for students. A blood donation club is functioning on the campus under the joint auspices of the Physical Education Department and the NSS.

#### **4.1.7 Give details of the common facilities available on the campus-space for special units like General staff room, NSS office, NCC office, Gymnasium/health club, recreational space for staff and students, safe drinking water facility, auditorium, etc.**

Separate physical space has been allotted for the functioning of the bodies such as, general staff room, NSS, Gymnasium/Health club, etc. Even though the general staff room in the Economics block accommodates the Economics faculty and the Language faculty, the room also serves the function as a general space for teachers during meetings, get together etc. Water purifiers have been installed in all the blocks of the institution. The institution has a multipurpose auditorium furnished with a capacity of 400 seats.

## **4.2 LIBRARY AS 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, students/user friendly?**

Yes, The College Library Advisory Committee is constituted with the following members.

Co-Ordinator	: Smt. Sheela Fernandez (Incharge, Library)
Members	: Smt. Sujatha (H.A- office)
	: Dr. Sreelatha.K (HOD Physics)
	: Sri Aarcha S (Asst.Prof. Commerce)
	: Smt Jisha Sreedharan (Asst Prof. Chemistry)
	: Sri S R Rajeev (H O D, Dept.of Economics)

The committee meets and makes frequent visits to the library and gives creative suggestions for the smooth conduct of the library. The lunch break in the library has been rescheduled to 1.30 pm to 2 pm for the students to access the library during the lunch break.

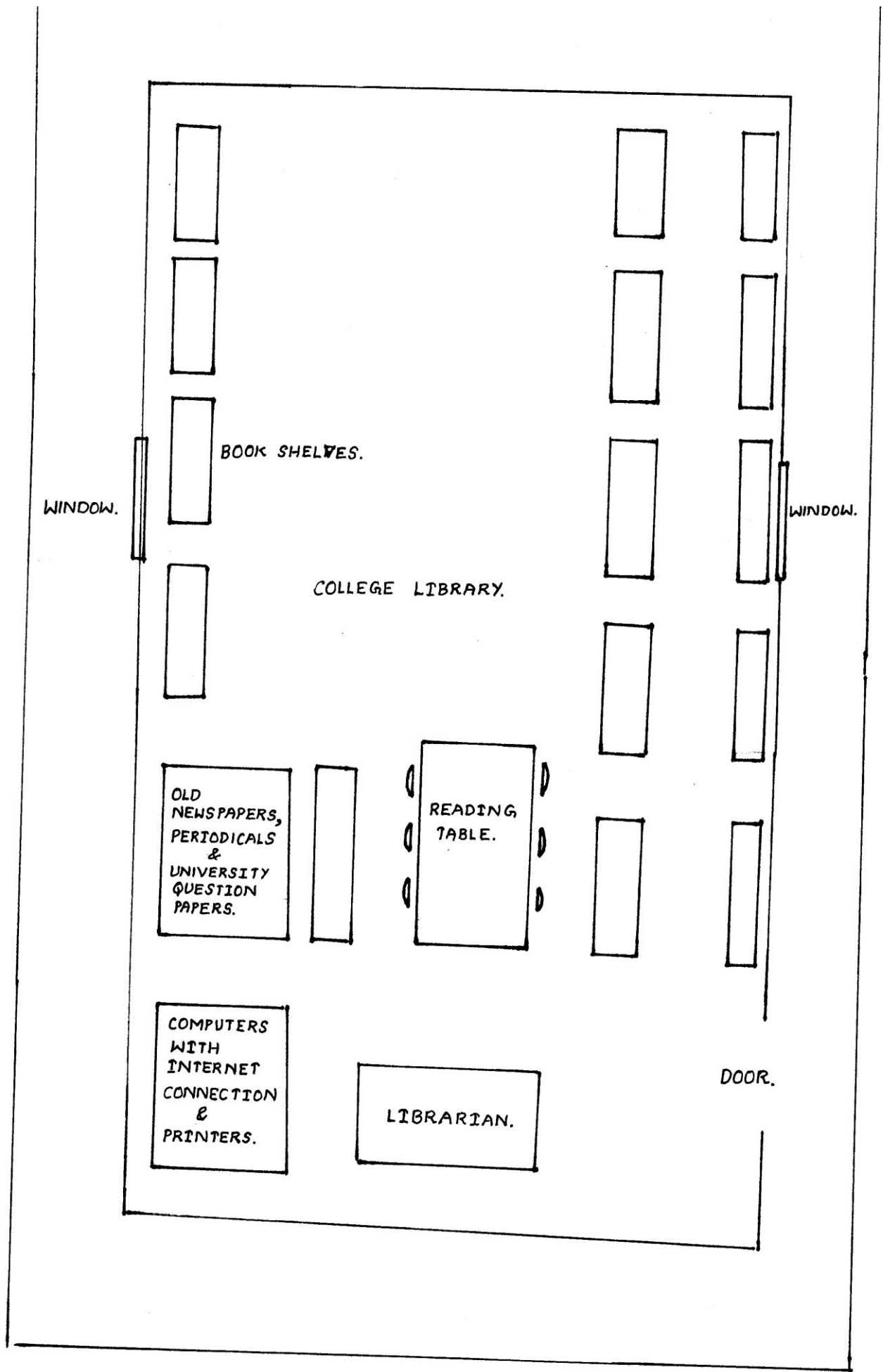
#### **The Facilities available in the Library are:**

1. Internet facility
2. Printers
3. Help Desk (Library assistant)

#### **4.2.2 Provide details of the following**

<b>Total area of the library (in Sq. Mtr)</b>	: 128 Sq.mtr
<b>Total seating capacity in the General Library</b>	: 40
<b>Number of Books</b>	: 6674
<b>Number of journal</b>	: 13
<b>Number of Periodicals</b>	: 16
<b>Number of News Papers (Malayalam)</b>	: 03
<b>Number of News Papers (English)</b>	: 02
<b>Total area of Departmental Libraries</b>	: Nil
<b>Total seating capacity in the General Library</b>	: 60
<b>Working hours</b>	
<b>On Working Days</b>	: 9 AM to 5 PM
<b>On Holidays</b>	: Remains closed
<b>Before Examination Days</b>	: 9 AM to 5 PM
<b>During Examination Days</b>	: 9 AM to 5 PM
<b>During Vacation</b>	: 9 AM to 5 PM

**\*Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources) separate reading enclaves for students and staff, reference section, librarian cubicle.**



BOOK SHELVES.

WINDOW.

WINDOW.

COLLEGE LIBRARY.

OLD  
NEWSPAPERS,  
PERIODICALS  
&  
UNIVERSITY  
QUESTION  
PAPERS.

READING  
TABLE.

COMPUTERS  
WITH  
INTERNET  
CONNECTION  
&  
PRINTERS.

LIBRARIAN.

DOOR.

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

Library holdings	2010		2011		2012		2013		2014	
	Number	Total Cost	Numbe	Total Cost	Numbe	Total Cost	Number	Total Cost	Number	Total Cost
Textbooks	214	39249	627	178997	366	139319	217	94975	230	79222
Reference			3		20		2			
Journals/ Periodical	13	548	12	6012	16	10216	13	7643	8	6363

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

**OPAC** : Nil

**Electronic research management package for e – journal** : Nil

**Federated searching tools to search articles in multiple Databases** : Nil

**Library website** : Nil

**Inhouse /remote access to e -publications** : Nil

**Library automation** : Nil

**Total number of computers for public access** : 1

**Total number of printers for public access** : 1

**Internet band width /speed** : 1(GB)

**Institutional Repository:** Bounded volume of previous question papers of university examinations, news papers, carrier books, employments journal, UGC-NET book for most of the subjects, a huge collection of PSC oriented books.

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

**Participation in resource sharing networks/consortia (like Inflibnet)** : Nil

#### 4.2.5 Provide details on the following items

<b>Average number of walk- ins</b>	: 15-30 students per day
<b>Average number of book issued and returned</b>	: 20-25 students per day
<b>Ratio of library books to students enrolled</b>	: 15:1
<b>Average number of books added during last three years</b>	: 813
<b>Average number of login to (OPAC)</b>	: Nil
<b>Average number of login to e-resources</b>	: Nil
<b>Average number of e-resources downloaded/printed</b>	: Nil
<b>Number of information literacy trainings organized</b>	: Nil
<b>Details of “weeding out” books and other materials</b>	: Nil

#### 4.2.6 Give details of the specialized service provided by the library

**Manuscripts:** Project reports, Seminar reports, PhD thesis, College magazines etc

**References:** Nearly 25 text books are available in the reference section.

**Reprography :** Printing and Photostat

**ILL (Inter Library Loan Service) :** Nil

**Information deployment and notification:** Notice board to carry information on new arrivals.

**Download:** Members are allowed to download the information they required.

**Printing:** Printer facility available.

**Reading list/Bibliography compilation:** providing as per requirement

**In-house/remote access to e-resources:** Nil

**User Orientation and awareness:** yes, formal training imparted.

**Assistance in searching Databases:** nil

**INFLIBNET/IUC facilities:** Not available

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

The service of the library staff is made available for the visually and physically challenged persons.

**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 deployed by the library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)**

A feedback register is maintained in the library for registering the opinions of the users. The advisory committee meetings usually discuss the suggestions and opinions made by the users, in detail, so as to take necessary measures. New books are purchased under the suggestions of faculty members. Journals on different disciplines were ordered, purchased and procured as per the creative suggestions of the faculty members from the various departments.



### 4.3 IT INFRASTRUCTURE

4.3.1 Give details on the computing facility available (hardware and software) at the institution. Number of computers with configuration (provide actual number with exact configuration of each available system.)

Sl No	Desktop PC	Processor	RAM	SYSTEM TYPE	No. of Systems
1.	„	Intel ® core TM i3 -2120 CPU @3.30 GHz	2GB	32 BIT	12 nos
2.	„	Intel Pentium			5nos
3.	„	Intel core 2 duo	1GB	32 BIT	3nos
4.	„	Intel ® core TM i3 -3240TCPU @2.90 GHz	4GB	32BIT	4 no
5.	„	Intel ® core TM i3 -7200CPU @2.53GHz	1.99GB		1no
6.	”	intel pentium dual e 2220 @2.40 GHZ cpu 2.39 GHZ	0.99		2nos
7.	“	ms window xp proffessional 2000 version 2002	0.99		4nos
8.	Lap Top	Intel core i3 clupset mother board DDR -3 15’’monitor	2 GB	32 bit	1nos
9.	„	Intel core i3 250 m CPU @2.30 GH z	2GB	64 BIT	1NO
10.	Desk top PC	Acer core i3 4GB 18.5 inch LED Monitor 500 GB HDD	4 GB	18.5 inch	5 Nos
11.	Desk top PC	Acer , DDr3,500 GB, HDD with DVD	2 GB	18.5 inch	18 No.

44 Computers, with storage capacity ranging between 9.92 MB and memory ranging between 1GB to 4 GB

<b>Computer student ratio</b>	: 14:1
<b>Stand alone facility</b>	: Nil
<b>Wi-Fi facility</b>	: Wi-Fi facility available in chemistry department.
<b>Licensed software</b>	: Aspire, os
<b>Number of nodes/computers with Internet facility</b>	- 12
<b>Any other</b>	– 2 lap tops with internet facility made available.

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

A minimum of one computer is made available to all the departments, with an internet connection. The Science Faculties have been provided with more number of systems. The computers provided to the departments are supplemented with printers and high speed internet connectivity .The UG and PG computer labs of the college provide one student with computer and internet facility within the college campus. Outside the campus a few browsing centers are functioning.

#### **4.3.3 What are the institutional plan and strategies for deploying and upgrading the IT infrastructure and associated facilities?**

- Financial assistance from the higher academic bodies, private sources and the alumni, has been sought for the up gradation of the ICT resources on the campus
- More smart class rooms with modern educational facilities are to be established.
- General library has be digitalized
- Planning to install the OFC (Optical Fiber Cable) for broad band connection.
- Decision should be taken to construct more class rooms.

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

<b>YEAR</b>	<b>AMOUNT UTILISED</b>
	<b>(Rupees)</b>
2010-2011	1,20,000
2011-2012	544695.84
2012-2013	616074
2013-2014	120000
2014-2015	383834

**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?**

- Students and teachers are encouraged to use the computer for various purposes in the college. Those who are weaker in ICT are provided training in the use of computer by the experienced hands of the college.
- Teachers are encouraged to prepare comprehensives notes with the aid of computers and resources in the World Wide Web. Teachers are also encouraged to supplement there their teaching using power point presentations.
- The use of lap top for multimedia presentation in the class room is also promoted. The Computer lab of the college is open to students and teachers for developing programming skills.
- Some learning spaces are provided with interactive boards and LCD projectors.
- Printing, scanning and photo copying facility are provided for students and staff.
- Internet facility is available in all departments

**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 space etc.) by the institution place the students at the center of teaching –learning process and render the role of a felicitator for the teacher.**

- The PG Department of Chemistry is provided with a smart class room with an interactive board. Computers and internet are made available to students for the purpose of resources collection.
- Students are directed to conduct their seminars and colloquiums using self prepared power point presentations.
- Projects and assignments are given in such a way to promote their searching abilities using internet facilities and other IT resources.
- Projecting into wide screens in technology enabled learning spaces, the lectures of eminent scientists, historians and teachers are available in the form of DVDs and CDs or that are downloaded through net facility.
- Students are encouraged to initiate their own inquiry using net facility, to develop hypotheses, and then test them.
- Students are directed to conduct quiz competitions, film shows etc. using modern technology enabled devices.
- Students are encouraged to visit the sites of famous universities and personalities.

## 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)?**

		2010	2011	2012	2013	2014
<b>a.</b>	<b>Building</b>	4581363	905075	1,20,000	-	-
<b>b.</b>	<b>Furniture</b>	-	-	96324	-	-
<b>c.</b>	<b>Equipment</b>	49000	13642	1212722.96	616077	21,00000
<b>d.</b>	<b>Computers</b>	120000	550	544145.84	658509	-
<b>e.</b>	<b>Vehicles</b>	Nil	nil	Nil	nil	Nil
<b>f.</b>	<b>Anyother</b>	Nil	nil	Nil	nil	Nil

The major repairs are done by the hired service technicians and met from the PTA fund.

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

All the Heads of departments maintain a stock register for the available equipment, furniture and the Principal insists upon the interdepartmental verification of stock at the end of every academic year and the missing or damaged items are noted. The Principal, on the basis of a development plan, forward proposals with respect to the infrastructural requirements including equipment to the Director of Collegiate Education and also to the funding agencies concerned. The Government of Kerala allocates and sanctions funds based on assessment of the proposals, student strength, and the nature of the academic programmes offered by the institution. The UGC is also an important source of funds.

**4.4.3 How and with what frequency does the institute take up calibration and other precaution measures for the equipments are done by the department concerned?**

Year wise calibration of instruments and equipment are done by the departments concerned.

**4.4.4 What are the major steps taken for location, upkeep and maintenance of water etc.?**

All the sensitive equipment are protected by UPS

# CRITERION V

## STUDENT SUPPORT AND PROGRESSION

### 5.1. STUDENT MENTORING AND SUPPORT

**5.1.1. Does the institution publish its prospectus/handbook annually? If “Yes” What is the information provided to students through the documents and how does the institution ensure its commitment and accountability?**

Yes. The prospectus is supplied free of cost to every student who had applied for admission in the college. Those who enroll as a UG or PG student is provided a Handbook cum calendar, which give information on aspects such as origin and development of the institution, details of courses offered, details of faculty, research guides on campus, awards and endowments, code of conduct on the campus, various co-curricular options, etc. Now University shifted the mode of admission to an online process. Students upload their details after downloading the prospectus online.

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

Yes, all scholarships are given to the students on respective financial years and dispersed on time.

#### I. University Merit Scholarship for MSc Students

Year 2012-2013

Admission No	Name	Class	Cash Award of Rupees
8200	Monisha M.V	I MSc Chemistry	3000 per year

Year 2013-2014

Admission No	Name	Class	Cash Award of Rupees
8200	Monisha M.V	II MSc Chemistry	3000 per year

## II. Aspire Scholarship (University of Kerala)

Year 2011-2012

Admission No	Name	Class	Cash Award of Rupees
7849	Anugraha S N	MSc Chemistry	4000

## III. Scholarship for Physically Disabled Students (Department of Social Justice)

Admission No	Year	Name	Class	Cash Award of Rupees
7904	2012-2013	Joswa Raju	II BCom	1750

## IV. IGPG Single Girl Child Scholarship

Admission No	Year	Name	Class	Cash Award of Rupees
7851	2010-2011	Sruthy C	I MSc Chemistry	20000
7851	2011-2012	Sruthy C	II MSc Chemistry	20000



## V. Suvarna Jubilee Merit Scholarship

Year 2010-2011

Admission No	Name	Class	Cash Award of Rupees
7720	Arya Surendran	I BSc Physics	10000
7789	Aswathy M	I BSc Chemistry	10000
7787	Deepthi Balan	I BSc Chemistry	10000

Year 2011-2012

Admission No	Name	Class	Cash Award of Rupees
7720	Arya Surendran	I BSc Physics	10000
7789	Aswathy	I BSc Chemistry	10000
7787	Deepthi Balan	I BSc Chemistry	10000

Year 2012-2013

Admission No	Name	Class	Cash Award of Rupees
7720	Arya Surendran	II BSc Physics	10000
7789	Aswathy	II BSc Chemistry	10000
7787	Deepthi Balan	II BSc Chemistry	10000

Year 2013-2014

Admission No	Name	Class	Cash Award of Rupees
8131	Arhana Surendran	II BSc Physics	10000

Year 2014-2015

Admission No	Name	Class	Cash Award of Rupees
8131	Archana Surendran	III BSc Physics	10000

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

More than ninety percent of the students receive financial assistance from government under various categories such as SC, ST, OBC and KPCR schemes for economically backward students from forward communities.

**5.1.4. What are the specific support services/facilities available for the students?**

- Reservation in admission, financial assistance and free remedial coaching are provided, for the Students belonging to SC/ST, physically challenged students and for economically weaker students.

Adhoc facilities are provided.

- Overseas students- Nil
- Financial assistance is provided for training, travel and daily expenses, for the Students who participate in various competitions at state and national level.

- Students are given Medical assistance by providing First aid facilities in the campus. Emergency cases are referred to local government or private hospitals

- Organizing coaching classes for competitive exams

1. Department of Chemistry provide free NET coaching classes for PG students

2. Department of English provides Spoken English Coaching Classes.

- Skill development (Spoken English, Computer literacy etc)-The institution is a nodal centre of Additional Skill Acquisition Programme (ASAP) sponsored by the Department of Higher education council of the Government of Kerala. Students of various departments are given special training in computer skills and communicative English.

- **Support for 'slow learners'-**

(i) The last hour of Friday is reserved as tutorial hour meant for doubt clearance and remedial teaching

(ii) Scholar Support Programme (SSP) – The programme sponsored by Higher education council, Government of Kerala is basically meant for identifying and uplifting the slow learners

(iii) Intelligent students are assigned to support the slow learners.

(iv) Re-tests are conducted for students with below average performance in internal exams.

- **Exposure of students to other institution of higher learning/corporate/business house etc**

P.G students are assigned to participate in seminars conducted by other colleges and research institutions. Our institution assigns students to visit industrial sites, private and public sector units etc, for the purpose of project execution, it is mandatory for the UG and PG students. The participation of students in quiz competitions, cultural events and literary festivals organized by other colleges is also ensured.

- **Publication of student magazine-**

Annual publication of student magazine by college union helps to enhance the creativity of students. The following are the college union magazines published annually

Pangajanyam - 2010-2011

Nostalgia - 2011-2012

Memories – 2013-2014

A wall magazine and a handwritten magazine is also published as a token of student creativity.

1) Sahiti      2) Rainbow

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

- Entrepreneurship development Club is functioning well in our college and the club organizes various Seminars and factory visits for skill development of students.
- The women study unit in association with Entrepreneurship development Club of our college organized training programmes to girl students in various earning activities such as making of handicrafts, ornaments, pickles, fabric painting , embroidery and an Exhibition of these student made items is conducted in Women's day.

**5.1.6. Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, quiz competition, debate and discussion, cultural activities etc.**

- Additional academic support, additional coaching provided to participants in sports and cultural events, re-examination conducted for participants and grace marks provided.
- Special dietary requirements, sports uniform and materials-Institutional jersey, boots, stockings etc are provided. Special allowance is provided to participants for nutritional expenses
- Any other-Training fixtures are provided to different teams in advance. Refreshment is provided to participants.

**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-NET,UGC-CSIR-NET,SIET,AITE/CAT/GRE/TOFEL/GMAT/Central,STATEServices, DEFENCE, Civil Services etc.**

- P.G department provide free coaching to students to write NET. The UGC aided coaching classes for entry into service ,organize coaching sessions taking the aid from teaching and non teaching staff of the college to train students to participate in various competitive exams including PSC, UPSC etc

Year	PSC/UPSC Coaching PG& UG	NET Coaching PG (MSc Chemistry)	Total
2010-2011	52	Nil	52
2011-2012	70	Nil	70
2012-2013	50	Nil	50
2013-2014	79	12	95
2014-2015	Nil	13	13

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

Academic counseling is provided during tutorial hours by the concerned teacher .Career related counseling is organized by the placement cell. Intra –departmental committees have been formed for providing personal counseling to students. The service of a Psychiatric consultant is engaged in the case that wants medical attention.

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

Yes. The placement cell of the college engages classes on soft skill development, recruiting the services of both members of the faculty as well as experts from various other fields. Mock interviews are organized with the help of experts for students in general and specifically for those who are to attend formal interviews for employment.

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

Yes. The student grievance redressal cell comprising representatives of the management faculty and the students look into the issues related to the general welfare and aspirations of the students. In addition every department is equipped with a committee comprising of the HOD and a male and female teacher to address specific issues and complaints raised by students either individually or group.

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

The anti-ragging cell of the college and the students union of the college jointly organize awareness campaigns on the rules and provisions of various laws against sex harassment and indecent representation of women. Girls on the campus have been intimated to approach the convener of the women study cell or the Principal to lodge formal complaints in this regard. The Principal is to form an adhoc enquiry commission to verify the genuineness of the complaint and gather circumstantial evidences. Those who engaged in minor offences are required to go through the disciplinary process recommended by the commission, the complaint along with the findings, is forwarded to the police. The whole process is to be completed within 20 days.

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

Yes. The anti-ragging committee constitutes a student squad every year to sensitize the student community on the issue and to monitor the interaction between the senior students and the fresher's. No complaints of ragging have been received by the committee during the last four years.

**5.1.13. Enumerate the welfare schemes made available to student by the institution.**

Annual scholarships and endowments have been instituted to motivate as well as recognize meritorious students.

## I. Kannam parampil Kunjachan Memorial Endowment

An endowment is instituted by Sri.K.N.Karunakaran in the name of his beloved father Sri. Kunjachan, Kannampampil, Neduvarancode. An Interest amount is divided among the students, who secure the first place in Arts, Science and Commerce at the Degree level in the University Examination.

### Year – 2010-2011

Admission No	Name	Class	Cash Award of Rupees
7653	Sunitha S Pillai	III B Com	500
7588	Syamini Das	III BSc Chemistry	500
7580	Manish Mon M	III BSc Physics	500
7623	Salini R	III BA Economics	500

### Year 2011– 2012

Admission No	Name	Class	Cash Award of Rupees
7495	Soumya S Kurup	III BCom	500
7562	Viji V kurup	III BA	500
7526	Suchithra S R	III BSc	500

**Year 2012-2013**

Admission No	Name	Class	Cash Award of Rupees
7735	Indu R kurup	III BCom	500
7799	Aswathi M	III BSc Chemistry	500
7769	Deepa Padmakumar	III BSc Physics	500
7729	Jyothi Lekshmi	III BA Economics	500

**Year 2013– 2014**

Admission No	Name	Class	Cash Award of Rupees
8632	Reshmi Bhadrans	III BSc Chemistry	500
8664	Athira T Ashok	III BSc Physics	500

**II. Sri V.K.John Memorial Endowment**

An endowment has been instituted in memory of the late Sri V.K.John, HOD of Physical Education who expired in July 1997. Interest from a deposited amount of Rupees 20000 is divided annually as Cash Award to

1. The Best NCC Cadet
2. Athletic Champion (Men)
3. Athletic Champion (Women)



**Year 2010-2011**

Admission No	Name	Category	Class	Cash Award of Rupees
7715	Jayalekshmi KS	Best Athlete (Women)	II Msc Chemistry	500
7573	Rajeesh R Pillai	Best Athlete (Men)	III BA Economics	250
7521	Vishnu K Subash	Best Athlete (Men)	III BA Economics	250

**Year 2011-2012**

Admission No	Name	Category	Class	Cash Award of Rupees
7602	Sethulekshmi M	Best Athlete (Women)	III BA Economics	500
7615	Anil B	Best Athlete (Men)	III Bcom	500
7730	Vipin Mohan	Best NCC Cadet(men)	II BA Econoimics	500
	Aiswarya	Best NCC Cadet(Women)	AMHSS (Edayaranmula)	500 (Extension Activity)

**Year 2012-2013**

Admission No	Name	Category	Class	Cash Award of Rupees
8067	Midhun M S	Best Athlete (Men)	I BCom	500
7890	Saranya S	Best Athlete (Women)	II BCom	500
7878	Ananthu V	Best NCC Cadet	II BSc Physics	500

**Year 2013-2014**

Admission No	Name	Category	Class	Cash Award of Rupees
8261	Stabin S	Best Athlete (Men)	I BA Economics	500
7965	Arya T R	Best Athlete (Women)	III BCom	500
7878	Ananthu V	Best NCC Cadet	III BSc Physics	500

**Year 2014-2015**

Admission No	Name	Category	Class	Cash Award of Rupees
8316	Vijayalakshmi	Best Athlete (Women)	II BSc Chemistry	500
8261	Stabin S	Best Athlete (Men)	II BA Economics	250
8110	Vishnu Balan	Best Athlete (Men)	III BA Economics	250

**III. University Merit Scholarship for MSc Students****Year 2012-2013**

Admission No	Name	Class	Cash Award of Rupees
8200	Monisha M.V	MSc Chemistry	3000 per year

**Year 2013-2014**

Admission No	Name	Class	Cash Award of Rupees
8200	Monisha M.V	MSc Chemistry	3000 per year

#### **IV. Aspire Scholarship (University of Kerala)**

**Year 2011-2012**

Admission No	Name	Class	Cash Award of Rupees
7849	Anugraha S N	MSc Chemistry	4001

#### **V. Scholarship for Physically Disabled Students (Department of Social Justice)**

Admission No	Year	Name	Class	Cash Award of Rupees
7904	2012-2013	Joswa Raju	II BCom	1750

#### **VI. IGPG Single Girl Child Scholarship**

Admission No	Year	Name	Class	Cash Award of Rupees
7851	2010-2011	Sruthy C	I MSc Chemistry	20000
7851	2011-2012	Sruthy C	II MSc Chemistry	20000

## VII. Suvarna Jubilee Merit Scholarship

### Year 2010-2011

Admission No	Name	Class	Cash Award of Rupees
7720	Arya Surendran	I BSc Physics	10000
7789	Aswathy M	I BSc Chemistry	10000
7787	Deepthi Balan	I BSc Chemistry	10000

### Year 2011-2012

Admission No	Name	Class	Cash Award of Rupees
7720	Arya Surendran	I BSc Physics	10000
7789	Aswathy	I BSc Chemistry	10000
7787	Deepthi Balan	I BSc Chemistry	10000

### Year 2012-2013

Admission No	Name	Class	Cash Award of Rupees
7720	Arya Surendran	II BSc Physics	10000
7789	Aswathy	II BSc Chemistry	10000
7787	Deepthi Balan	II BSc Chemistry	10000

**Year 2013-2014**

Admission No	Name	Class	Cash Award of Rupees
8131	Archana Surendran	II BSc Physics	10000

**Year 2014-2015**

Admission No	Name	Class	Cash Award of Rupees
8131	Archana Surendran	III BSc Physics	10000

- Noon meal supply for poor students was arranged through the collaboration of teachers and non teaching staff during the year 2010-2011.
- A student welfare unit has been constituted to take into the academic and non academic issues of needy students. A fund is also constituted for the students by the unit.

**5.1.14. Does the institution have a registered Alumni Association? If ‘yes’ what are its activities and major contribution for institutional, academic and infrastructure development?**

No

## 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.

Analyzing previous four years data

Department of Chemistry

Student progression	Percentage
UG to PG	30 %
PG to PhD	20 %

Department of Physics

Student progression	Percentage
UG to PG	30 %
PG to PhD	Nil

Department of Commerce

Student progression	Percentage
UG to PG	50%
PG to PhD	Nil

Department of Economics

Student progression	Percentage
UG to PG	20%
PG to PhD	Nil

## **Employment in Previous Four Years**

### **Department of Chemistry**

Employment	Percentage
Other than Campus recruitment	50%
Self employed	40%

### **Department of Physics**

Employment	Percentage
Other than Campus recruitment	40%
Self employed	30%

### **Department of Commerce**

Employment	Percentage
Other than Campus recruitment	50%
Self employed	45%

### **Department of Economics**

Employment	Percentage
Other than Campus recruitment	40%
Self employed	30%



**5.2.2. Provide details of the programme wise pass percentage and completion date for the last four years (course/batch wise as stipulated by university).Furnish the programme wise details in comparison with that of the previous performance of the same institution.**

**• Department of Physics**

Year of Completion	Degree	Pass Percentage
2011	BSc	42.8%
2012	BSc	61.9%
2013	BSc	72.0%
2014	BSc	38.0%
2015	BSc	11.1%

**• Department of Economics**

Year	Degree	Pass Percentage
2011	BA	31.0%
2012	BA	39.0%
2013	BA	31.0%
2014	BA	30.3%
2015	BA	57.1%

• **Department of Commerce**

Year	Degree	Pass Percentage
2011	BCOM	33.0%
2012	BCOM	41.0%
2013	BCOM	81.3%
2014	BCOM	66.6%
2015	BCOM	96.6%

• **Department of Chemistry**

Year	Degree	Pass Percentage	Degree	Pass Percentage
2011	BSc	33%	MSc	100%
2012	BSc	36%	MSc	100%
2013	BSc	86%	MSc	33%
2014	BSc	28%	MSc Chemistry	76.9%
			MSc Medicinal Chemistry	80%
2015	BSc	34.6%	MSc Chemistry	Result awaiting
			MSc Medicinal Chemistry	Result awaiting

## Result of University Examination

### Year 2010-2011

SI NO.	Name of course	Total number of students appeared	Number of students passed	Percentage of pass
1	BA Economics	29	9	31%
2	BSc Physics	7	3	42.8%
3	BSc Chemistry	3	1	33%
4	BCom	33	11	33%
5	MSc Chemistry	9	9	100%

### Year 2011-2012

SI NO.	Name of course	Total number of students appeared	Number of students passed	Percentage of pass
1	BA Economics	36	14	39%
2	BSc Physics	21	13	61.9%
3	BSc Chemistry	11	4	36%
4	BCom	31	13	41%
5	MSc Chemistry	12	12	100%

**Year 2012-2013**

SI NO.	Name of course	Total number of students appeared	Number of students passed	Percentage of pass
1	BA Economics	36	11	31%
2	BSc Physics	11	8	72%
3	BSc Chemistry	15	13	86%
4	BCom	32	26	81.25%
5	MSc Chemistry	12	4	33%

**Year 2013-2014**

SI NO.	Name of course	Total number of students appeared	Number of students passed	Percentage of pass
1	BA Economics	30	10	30.3%
2	BSc Physics	21	8	38.0%
3	BSc Chemistry	30	8	28%
4	B.Com	33	22	66.6%
5	MSc Chemistry	13	11	82%
6	MSc Medicinal Chemistry	10	8	80%

### Year 2014-2015

SI NO.	Name of course	Total number of students appeared	Number of students passed	Percentage of pass
1	BA Economics	49	28	57.1%
2	BSc Physics	18	2	11.1%
3	BSc Chemistry	26	9	34.6%
4	BCom	29	30	96.6%
5	MSc Chemistry	Result awaiting		
6	MSc Medicinal Chemistry	Result awaiting		

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

Final year students are counseled during the on go of the course for career advancements. Aptitude tests are conducted in the campus to appraise the students of the respective strengths and weakness. Letters of reference and recommendations are provided to students seeking appointments in various capacities.

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

The students who are found to have a sagging morale and deficient motivation are counseled by the concerned faculty and if necessary, the guardians are contacted, to make a concerted effort to lift them from the risk of failure. Assistance in terms of money, material and moral support is provided to those who have difficulty.

### **5.3. STUDENT PARTICIPATION AND ACTIVITIES**

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

- The college has formed Teams for the following sports and games events.
  1. Cricket
  2. Chess
  3. Badminton
  4. Kabbadi
- Students are given special training in Athletics and Yoga.
- They are also provided with different club activities to develop their inherent skills and talents. The following clubs are effectively functioning in the college.
  1. Music and Cultural Club
  2. Quiz club
  3. Travel and Tourism Club
  4. Health Education and sports club
  5. Literary and Debating club
  6. Bhoomithra club
- Cultural expressions of students on the campus are coordinated by various Forums and clubs such as:-

Music and Cultural Club

College Union Arts Club

- Science Forum Organizes Science Exhibition every year, on February 28 (World Science Day), with the aim of developing innovating ideas and implementing it successfully by the students.
- Human Rights Awareness Forum is functioning well in our college. Major activities of this Forum are listed below.
- Conducted National Seminar on “Gender Issues and Empowerment of Women” on 18 December 2012 Sponsored by National Human Rights Commission, New Delhi.

- Conducted a Training programme on “Human Rights – Rights of the Children: An Introspection” on 09<sup>th</sup> January 2014, Sponsored by National Human Rights Commission, New Delhi.

The major aspects of the sports calendar during the previous and current years are as follows

#### **2013-2014**

- Kerala University Inter-Collegiate Competition 2013-2014
- Students have participated in Cricket, Cross Country, Fencing, Power Lifting and Judo. For Fencing our students won first and third prizes.
- Our college has conducted College Games week from 07-02-2014 to 13-02-2014.
- College annual Athletic Meet on 14-02-2014.

#### **2014-2015**

- Students actively participated in Kerala University Inter-Collegiate Competition 2014- 2015 for the following items.  
Chess, Badminton, Cricket, Athletics, Power lifting and Kabbadi.
- College annual athletic meet was held on 4<sup>th</sup> March 2015.
- Run Kerala Run- A Mass Run was conducted on 19<sup>th</sup> January 2015 to support the “RUN KERALA RUN “ programme and there by supporting National Games hosted by our state during 2015. All the teaching staff, non teaching staff, whole students and our Principal Dr.R.Raveendran participated in the Mass Run. The Mass Run was inaugurated by Sri.P.C.Vishnunath MLA and the meeting was felicitated by Smt.K.Vilasini Karunakaran, Cheriyanadu Panchayath Member. The ward member Sri.Kalesh was also present in that occasion and the programme was a grand success with the whole hearted support of the staff and students.
- On 28<sup>th</sup> March 2015, the health Club of our college organized a “YOGA, MEDITATION AND RELAXATION” Class for whole students and teachers in the college. Class was conducted by Sri. K.P.Mohan, “Yogashiromani” from Yoganandha International school of Yoga and taught 12 basic asanas, pranayama and meditation.

**5.3.2. Furnish the details of major student achievements in Co-curricular, Extra-curricular and Cultural activities at University/ State/ Zonal/ National/ International levels for the previous four years.**

**Year 2013-2014**

- Fencing,

First – Renjini Raveendran [B.A.]

Third- Viswapriya , Karthika T.M [B.A.]

- Our college has won the first prize in the Cultural Procession in Kerala University Youth Festival at Mavelikkara.
- Our college has secured second prize for the float presented in the Cultural Procession in Kerala University Youth Festival at Mavelikkara.

**5.3.3. How does the college seek and use data and feedback from its graduates and employers to impure the performance and quality of the institutional provisions.**

The website of the college and of individual departments carry an interactive portal where the graduates of the institution as well other stake holders are invited to share comments and suggestion.

**5.3.4. How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazines and other materials. List the publications/materials brought out by the students during the previous four academic sessions.**

- The student editor and subeditors of the magazine are in charge of collecting and compiling the articles and other materials offered by other students.
- Every year the college union publishes the students magazines titled.

Pangajanyam - 2010-2011

Nostalgia - 2011-2012

Memories – 2013-2014

- In 2014-2015, a wall magazine named ‘Sahiti’ and a Hand written magazine named ‘Rainbow’ were published.



**5.3.5. Does the college have a student Council or any similar body? Give details on the its selection, constitution, activities and funding.**

Yes. Democratic elections are conducted every academic year to form the Students Union of the college. Elections are conducted under the Presidential System where every student can cast a vote each for all the different seats. The office bearers of the Unions are designated as Chairman, Vice-Chairman, General Secretary, University Union Councilors (2 in number), Magazine editor, Arts club secretary, lady representative, representation of the five Degree classes and PG representatives. The responsibilities of the Union involve the organization of social and cultural events, publication of Students Magazine, acting as interface for grievance redressal between students and office bearers of the college.

**5.3.6. Give details of various academic and administrative bodies that have students' representatives on them.**

Departmental Associations are mandatorily formed to coordinate the academic and co-curricular activities of every discipline. The secretary of the Association is elected by the students from themselves. The students Union envisages and executes various cultural and extra academic programs in the college. Students have their representatives in every forum and club for various purposes in the college.

**5.3.7. How does the institution net work and collaborate with the Alumni and former faculty of the institution?**

Teachers retired/Transferred from the institution have formed an organization called "SNEHA SANGAMAM" in order to collaborate in the academic development of the college. The retired teachers are invariably invited to every formal function on the campus. An annual get together of both the incumbent and retired teachers of the college is a regular affair.

**5.3.8. Any other relevant information regarding student support and progression which the college would like to include.**

Most of the students hail from families with poor socio-economic background. Despite these drawbacks we have been able to produce students with the best academic results, who are molded and supplemented with sufficient employable skills, thereby facilitating an upward social gradation.

# **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.?**

Sree Narayana College, Chengannur was established in the year 1981 at Neduvaramcode, which is set in one of the rural backdrops of Alappuzha district in Kerala state. The vision and mission of the college had been moulded by the saint Sree Narayana Guru who envisioned a society which was devoid of any kind of stratification, and a society equal in all respects. Education according to Sree Narayana Guru is the sole path through which the downtrodden society could emancipate itself out of the binding grip of the shackles which had been imposed upon them for centuries. It is this great and universal vision of the guru, which ignited the thoughts of the college founder, Sri. R. Sankar. The college had kept up these inspiring thoughts, right from the year of its inception in 1981. Considering the fact that the college is situated in an educationally backward region in alappuzha district, the college had kept up this sharp vision through out its mission for the past 33 years, striving its utmost in enlightening and remoulding the lives of the downtrodden rural mass. Today the college serves the educational needs of students hailing from rural backgrounds, setting them ready to meet the challenges of the big world, apart from instilling them with vital vigour and inspiration to climb up the ladders of life. A large section of student community of our college is constituted of girls who hail from rural and economically backward families, who find it difficult to push on to meet the rising expenditure with regard to education. Our college is the sanctuary for such girls, letting open an avenue for higher education, close to their homes, thus letting their future bloom out. The college will continue to sustain and live up to the hopes and aspirations to the rural poor, and to see to this purpose the college plans to extend the educational facilities by the addition of more innovative and undergraduate and postgraduate programmes and a side by side

improvement of infrastructure facilities along with the improvement in innovative practices in teaching and extra curricular activities thus bringing an even more vital boost to the college and the surrounding areas.

### **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, the college principal and the faculty members of the college act as a single entity in creating quality policymaking and execution of such plans. The management of the college is vested in Sree Narayana Trusts, Kollam. The board of the management consist of the members of the executive council of the S.N Trusts with the secretary of the Trusts, as the present manager. There is also a Regional Development Committee (R.D.C) to assist the trust in the management of the college. The regional development committee members conducts constant intertactive sessions with the college principal. Such interactive sessions often become open forums to exchange frank ideas with related to the development of the college and its activities. The principal often summons college council meetings, which is constituted of the heads of the various departments. The council meetings discusses key issues with related to the academic and non academic aspects of the college and the vital decisions of the meetings are chronologically recorded in a register. In the onset of every academic year , the principal along with the council members arranges a staff meeting, where in all staff including the teaching and the non teaching staff participate. Here the principal sets out to declare the plans and policies to be taken for the smooth functioning of the academic year. Similar joint meetings of the college staff is conducted prior and after to the conduct of admission procedures, conduct of internal examinations, and conduct of major cultural events happening in the college, so as to plan and execute the events and programmes in an effective way, and as well as to analyse the positives and drawbacks, once these events and programmes had come to an end. Similarly faculty meetings too are conducted to analyse and push on the curricular and extra curricular activities, making them move in a time bound manner as stipulated by the academic calender of the University of Kerala. Thus the principal becomes a central focal point, creating a smooth link between the management and the faculty through the conduct of regular and periodical meetings, there by ensuring an effective layout for the design implementation and execution of the quality plans and policies of the college.

### **6.1.3 What is the involvement of the leadership in ensuring the policy statements and action plans for fulfillment of the stated mission?**

The college council and staff meeting are held on a timely basis for grading and evaluating the academic and extracurricular activities of the college. There are also monthly department faculty meetings to take stock of all academic and extracurricular activities. Both the college principal and the management ensures that such communication freeways are conducted to let in the policy statements and action plans seep in, to reach the grass root levels.

#### **•Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan.**

The necessity of preparing the departmental action plan is often stressed by the college principal through council meetings. The head of the departments and the faculty members under them conduct a collective discussion, laying out feasible plans which they could execute, taking into consideration the tight schedule of the ongoing semester system. Effective plans are then sieved out, and necessary steps are taken for its effective implementation. The principal and the college IQAC double checks on the departmental plans, and provides sufficient motivation to implement them, taking utmost care taking into consideration the fact that such plans do compromise with institutional policy.

#### **•Interaction with stakeholders**

Leadership plays an important role in the institutional interaction with its stakeholders which includes the college management, principal, staff, students, parents and the society within which it is placed. The management, principal and the college IQAC had taken it a quality policy to maintain a steady and sustained interaction with the stakeholders, so as to create a healthy atmosphere within the institution. Here the management, the college principal and the college IQAC stand as a central pivot in managing an effective interaction between the internal and external stake holders. Moreover, they have taken it a quality policy to emanate, this principle to the teaching and non-teaching staff of the institution, thus enabling them for effective interaction process with the stake holders.

### **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders.**

The college principal, the college council and the IQAC committee analyses the needs of the institution and students through observation, findings and conclusion. The top leadership of the college gives equal weightage to consultation with the various stakeholders. The college council meetings, the Regional Development Committee (RDC) meetings with the college principal, the staff meetings, the PTA meetings, etc., provide apt platforms for the leadership to prepare and plan policy statements through need and plan policy statements through need analysis, research and consultation.

### **Reinforcing the culture of excellence**

Maintaining a culture of excellence, is one of the aims of our college; to this extend the leadership encourages the faculty and the students to aim for the best. In spite of the socio-economical constrains within which our students are hailing from the college strives to bring out students to the thresholds of excellence, through continuously nurturing their growth both in academic and non-academic fields. The principal and the faculty put in their best efforts of leadership to uplift our students to heights of knowledge and victory.

### **Champion organizational change**

Organizational change is pivotal as far as our college is concerned. The college had forever welcomed changing patterns in administration. Each academic year, club activities and committees are rescheduled and reassigned to gain newer leadership thereby bringing novelty to the various activities conducted in the college.

#### **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?**

In order to monitor and evaluate the effective implementation of the policies and the plans undertaken by the college, the Internal Quality Assurance Cell (IQAC) of the college conducts face to face interactive sessions with the faculty members and analyses the progress and implementation of the academic and the non-academic activities of the college. Such brief interactions helps in sustaining the vital energy required to complete the activities

undertaken by the faculty members. The club activities, the N.S.S activities, the tutorial system, the teaching plans employed by each faculty member, employment of innovative techniques in teaching, etc; all come into the discussion rounds of the IQAC. The progress of the above mentioned activities are analyzed and the feedback is briefed upon to the faculty members. This analysis and feed back is often discussed in the college council meetings and in faculty meetings, so as to pave way for an effective implementation and improvement of academic and non-academic activities from time to time.

#### **6.1.5 Give details of the academic leadership provided to the faculty by the top management?**

The management encourages the faculty members for academic leadership by motivating them to do research and practice innovative techniques in teaching. Moreover the teachers are encouraged to take part in activities such as curriculum design, orientation and refresher courses, and various extension activities both from the part of University and as well as from the part of the Government. Furthermore, the management encourages deputation and faculty development programmes by giving sanction to teachers, besides providing financial and moral support to the teachers to this end.

#### **6.1.6 How does the college groom leadership at various levels?**

Leadership training is a prime area concentrated by every educational institution. The raw talents of the fresher's entering into the institution are sufficiently boosted and carefully pruned through the extracurricular activities conducted in the college. Numerous number of clubs function in the college. The basis of selection to these clubs is purely based on their interest and affinity. Some of the clubs do employ a selection procedure, once it is found that there is too much of a rush to be part of it. The club activities provide the students with an ideal platform to think out of the box of the meticulously planned syllabi of the semester system. The leadership of the students is shaped, once they are asked to participate in various events hosted by the club. Each club is assigned to a faculty member, and the student coordinator in charge plays a major role in the above mentioned regard. The N.S.S activities play an active role in engaging the students in various awareness programmes and social works. The exposure which the N.S.S volunteers gets through major events organized in the college and vacation camps, the students trim up their personal skills, and part by part acquire leadership skills. The leadership quality is also encouraged even in class room level, where the class tutors does their level best to sharpen the leadership skills by providing continuous

motivation to students, by engaging them in club activities, societal interaction activities and even by arrangement of local visits and study tours.

**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 college delegates authority and provides operational autonomy to the departments, and depends largely on a decentralized governing system. Authorities to various positions in the college, including governance and club activities are selected from among the faculty members without any bias or partiality. The skills and talents of each faculty member are often analyzed by the IQAC and are discussed in council meetings conducted under the leadership of the principal. Soon after this, a faculty meeting is summonsed where in academic and non-academic works and initiatives are handed over to faculty members taking into their interest and affinity. Similarly the college provides autonomy to the departmental activities, thus giving maximum creative freedom for faculty members in indulging in curricular and extra-curricular activities. Unlike the traditional system of management, where the entire reins to control the institution is vested in the college principal, now the Head of the departments and the faculty members too are given vested powers, by employing their resources to various governing committees and clubs.

**6.1.8 Does the college promote a culture of participative management? If ‘yes’, indicate the levels of participative management.**

Yes, the college is consistently following the principle of management by participation. All the office staff, teachers, and HODs, are consulted and their opinion sort, before a decision is taken by the college council.

## **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 does have a formally stated quality policy, i.e. to provide education and enlighten the student community from the down trodden and socio-economically weaker sections of the society. The college with its campus situated in the rural backdrops, strives its level best from the year of its inception, to impart and enlighten the

masses. It is this quality policy, that had set the institution running for so long and it will continue to remain so. This quality policy is kept alive and driven through quality teaching, a provision of a wider platform for free and frank teacher-student relationship, vibrant running of extracurricular activities through club activities, N.S.S. etc; and through ample provision of financial funding to students through fee concessions, student funding aids and scholarships.

### **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 college does have a perspective plan for further development. The college set in rural backgrounds had humble beginnings in 1981, with the college offering only pre-degree courses in science, humanities and commerce streams. The college then had a leaping stride with the construction with a triple storied college block inaugurated in 1990. Soon the college was upgraded to accommodate degree courses like B.Sc Chemistry, BA Economics, B.Com with computer application, B.Sc Physics and recently B. Sc Mathematics. The college also offers PG programmes like M.Sc Chemistry, M.Sc Medicinal Chemistry (UGC Aided) and M.Sc physics.

Our college has made a steady, if not a leaping process of extension and development. The college is at present housed in just at the tip of a massive land, which may be carefully used to extend the campus further. The availability of land, allows the college to dream till the wide horizons, with respect to its development. Both the college authorities and a supportive management are now planning to construct well equipped college buildings, so as to house more and new innovative courses, to meet with the rising demands for higher education in this portion of Chengannur Taluk.

In spite of the fact that the college is situated to the interiors, away from the access of main roads, the KSRTC and the Private Buses do run along, servicing the needs of our students. However even these facilities have become inadequate taking into account the growing number of students opting to study in our college. Hence the college has recognized it a fact to own and operate a college bus, serving a safe access to the college.

The Physics and Chemistry departments of our college are planning to upgrade themselves as research centers. Even though at present our college is not a research centre, some of our teachers are research guides in various universities ranging from Kerala University, MG University, to Bharathiyar University; and more than ten researchers are

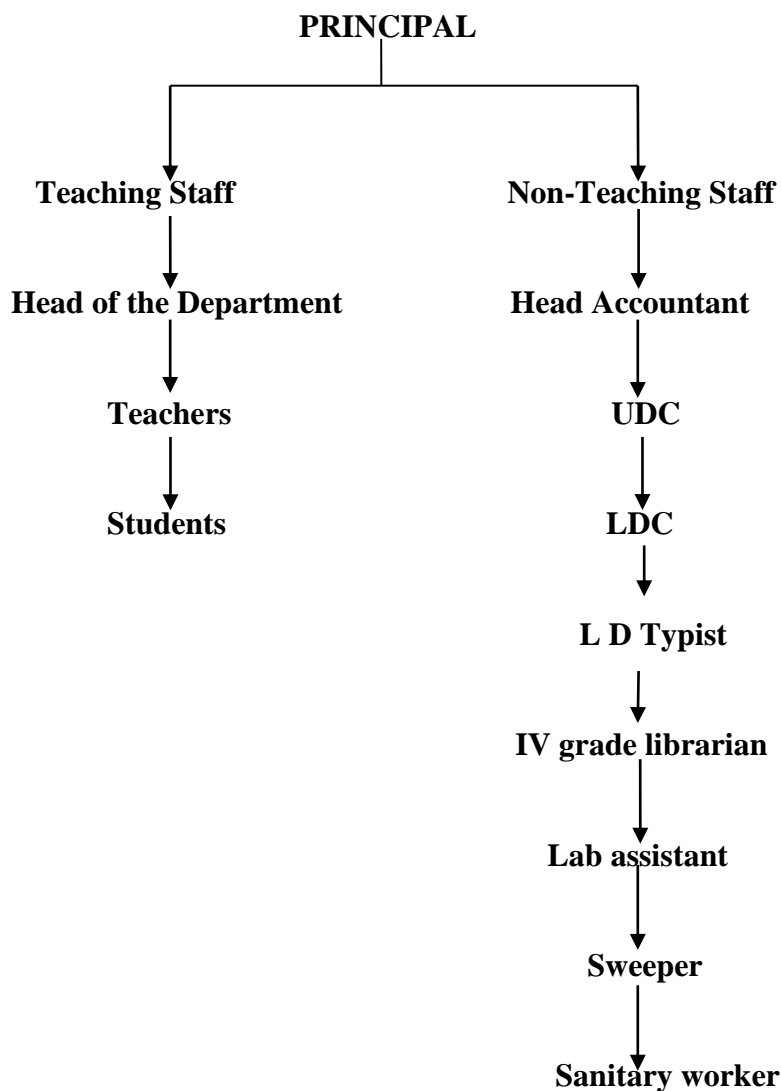


currently doing research under these research guides.

There has been a long felt need to extend the existing facilities available for sports and games, and plans are underway to construct a new multipurpose playground in the campus.

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

The supreme decision making body of the college is the college council consists of the principal and the heads of the department. The college council meets on a timely basis. Decisions are taken after through discussions and analysis of issues with the help of other faculty members. The organizational structure is given below.



#### **6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following**

##### **• Teaching & Learning**

Teaching & Learning process receives the greatest attention in our college. A lot of quality improvement measures are being taken to this regard. In order to bring in the help of the computers and internet browsing, the various departments of the college are provided with computers in the departments. Other output devices like printers too are provided, which would enable the faculty members to browse, collect and distribute information and knowledge. Besides these laptops, LCD's and projectors are made available to faculty members in order to facilitate better teaching-learning experience. Students are encouraged to use the computer lab facility, which enables them to use internet so as to search for required information. Besides these teachers are encouraged to learn more on IT enabled education, and are send for training programmes with this regard. In order to familiarize the teachers with the new approaches and techniques with regard to teaching-learning experience, they are regularly motivated to attend refresher and orientation programmes. A well managed tutorial system too contributes to a concrete teaching-learning experience. Here the class tutor acts as a mentor, who tries to understand the needs of the students, and moulds them taking into account their needs and aspirations. Every faculty members constantly interacts with the class tutors, often giving feedbacks with the general conduct of the class. Such informal discussion sessions often gives the class tutors a general picture with regard to the class, and helps him/her to mould the class the desired outcomes. The extracurricular activities conducted in the college, which includes the club activities and forums add vibrancy to the framework of teaching and learning process. The new initiatives of the higher education department of Government of Kerala, like the FLAIR programme for faculty members, walk with Scholar Programme (WWS) and Scholar Support Programme (SSP) for students will certainly add vigor and nourishments to the existing teaching-learning process.

##### **• Research & Development**

We have a research committee with Dr. Reshmi R as the coordinator and Dr.V.L.Pushpa, Dr.P.R.Rejikumar, Dr M S. Latha, Dr.B.Ramadevi, Dr.Anju.K.S, , Dr.Tintu, and Dr.K Sreelatha as members. The U.G and P.G students of this college under take their projects in their respective subjects for getting their post graduate and under graduate degree. Dr R Raveendran, Dr.V.L.Pushpa, Dr M.S. Latha and Dr.Jitha.S.R, are functioning as

research guides .The teachers of the college also attend and present papers in national and international seminars. The research committee of our college promotes other faculty members to pursue on more research activities, so as to add the knowledge horizons.

- **Community engagement**

The community and social development activities are conducted by the N.S.S unit, extension, club activities of this college. Literary programmes, sanitation programmes, campus beautification, blood donation, cleaning water resources, forestry programmes etc. are regularly undertaken by the N.S.S unit of our college.

- **Human resource management**

Human resource development activities are of prime importance to us .We conduct national seminar on sustainable development, a seminar on Rights of children to this regard.

- **Industry interaction**

The Entrepreneurship Development club of this college is functioning effectively. We undertake industrial tours, skill development programme, seminars etc., for our students. The economics and commerce students of this college undertake industrial projects as part of their curriculum. Campus recruitment programmes and career guidance programmes are conducted in the college under the supervision of the career guidance cell of this college.

### **6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?**

The college principal prepares adequate material with regard to the new ventures and curricular as well as extracurricular activities, so as to inform the top management for a review. This ensures that the college and its activities are smoothly run in a systematic and methodical manner. The college principal takes special initiative in the preparation of the annual reports and other reports of the general functioning of the college like club activities, reports with respect to teaching, student examination result analysis, etc. Such reports are often peer reviewed among the faculty members before being sent to the management.

**6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?**

The management provides sufficient encouragement to the staff members, so as to create an effective and efficient ambience within the institution, there by facilitating the smooth running of the college. The management closely observes the nature and talent of every faculty members, and promotes them and channelizes their talents to specific goals, thus reaping maximum benefits to the institution and the students who depend on it both for knowledge purposes and also for widening their horizons of worldly experiences. Besides these the faculty members are encouraged to expose themselves to learn about the changing scenario of teaching-learning experience, through orientation and refresher programmes. Teachers who wish to undergo research are given N.O.C under the faculty development programmes. Efficient teachers are identified and are promoted as principals too.

**6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.**

The management had taken special initiative in starting new courses in the college, which includes M.Sc. Medicinal Chemistry, M.Sc. Physics and B.Sc. Mathematics. The plans to renovate and refurnish the chemistry lab found fruition last year. The computer lab in the college has been enlarged, by accommodating new computers. The long cherished dream of a women's hostel in the college campus has been constructed using UGC aid and has been inaugurated to accommodate students.

**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? No.**

**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 stake holder relationship?**

The institution ensures that grievances are promptly met with using an effective feedback system. Both students and staff of the college are given ample provision to give free and frank expression with regard to the activities undertaken by the college. Feed back

and grievances with regard to teaching and learning are often analyzed using feedback sheets or even asking the students to give an oral feedback. Every class is entrusted to a class tutor, who collects feedback from the students to facilitate a smooth running of the learning experience. Grievances of the higher order are usually transferred to the Grievances Redressal Cell of the college, which includes the principal and a group of faculty members. The Grievance Redressal Cell in the college includes Dr.Reshmi.R as coordinator and Prof. Geetha.K, Prof.K.V.Lekha, Dr.V.L.Pushpa and Dr.Anju.K.S as members. The Grievance Redressal Cell offers a sanctuary for both the students as well as the staff of the college. The faculty members in the cell, primarily registers the grievances, and the next step is to sort out an effective solution to the issue. This is often done by discussing and dwelling deep into the causes behind the registered grievances. The P.T.A meets to act as a forum to hear grievances. Regular P.T.A meetings are conducted, often by the end of a semester or after the internal examinations. Here both the parents as well as students are given an opportunity to speak out their mind to the concerned teachers, once the formal meeting of P.T.A is over.

**6.2.10 During the last fourty 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?**

We are proud to say that no court cases are existing against our institution.

**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?**

Yes, student feedback on institutional performance is largely collected through the tutorial system. Students are given chances to analyze the teaching as well as the ongoing extracurricular activities through oral feedback sheets. Club activities and forums too at times provide chances to collect feedback, thereby giving ample provision for the institution to collect its draw backs, to be rectified later.

## **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 nonteaching staff?**

The teachers of the college are regularly encouraged to attend orientation courses and Refresher courses at the various Academic Staff Colleges under various universities. At the departmental levels, the teachers are encouraged to take up minor and major research projects, so as to contribute to the existing knowledge canon. Similarly, Seminar paper invitations from colleges and University departments are seen by the college, as doors to expose the faculty members to newer avenues of knowledge and as a chance to meet faculty members from other colleges, so as to share ideas and knowledge. Faculty members who had returned from orientation and refresher courses are encouraged to share their experiences during staff meetings. Similarly the IQAC and the Research committee of the college, motivates faculty members to undergo research, and thereby enhancing their professional development. The non-teaching staffs too are encouraged, to gain more knowledge on computers, and service rules and regulations. Besides this they are also sent for training on SPARK. The new initiatives of the higher education department of Government of Kerala, like the FLAIR programme for faculty members.

### **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?**

The college has realized the need to empower the faculty, based on the changing requirements in the field of education. As the new role of the post modern teacher has branched out from the confines of a traditional text book held, chalk and talk method teacher. The modern teacher is an all rounder, who lectures to students with respect to content areas, and who engages in social reform engagements through the involvement in extracurricular activities. Taking into these novel changes in the teaching-learning scenario, faculty members are encouraged to gain knowledge on IT and computer enabled education, soft skills etc; conducted by Academic staff colleges under Universities. More over the young recruits are made aware of the nature of work, well in advance, and are pruned to sustain themselves in this ever changing scenario.

**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.**

The performance appraisal of the college faculty is largely done by distributing performance analysis sheets to students. Similarly the head of the departments monitor the performance and conduct of the faculty members. Such reports are often discussed by the College council and the IQAC, and adequate scaffolding is provided. Such performance appraisals are also sending to management, when asked for.

**6.3.4 What is the outcome of their view of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stake holders?**

Suitable remedial and corrective measures are taken on the basis of the management appraisal report.

**6.3.5 What are the welfare schemes available for teaching and nonteaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

Welfare schemes like pension, P.F, gratuity medical allowances etc. available to the teaching and non teaching staff of the college. Housing loan, education loan etc. are also available.15% of the teachers has taken Ph.D. under FIP.

**6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?**

Since the college, forms part of a corporate management having colleges under it, across Kerala, it is difficult for the college to sustain the faculty throughout, since they are susceptible too transfers. In spite of all these, the college tries to sustain the faculty members. This is largely done by creating a very healthy internal academic environment. The college has an environment enriched with good relation based on mutual trust and confidence among the management, the principal, the college council, the teachers, students, non-teaching staff, the parents and the general public.

## **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 financial administration of the college is efficient and healthy. There are separate purchasing committee for utilizing the fund for P.D account operation P.G development fund, book purchasing committee etc. the principal and the head accountant take special care for proper settlements of accounts. Two N.S.S units are functioning here. There is efficient utilization of N.S.S funds.

### **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.**

There is financial discipline and good monitoring by the principal and the management in the utilization of various funds of the college. All kinds of audits are conducted regularly as per laws.

### **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 there serve fund/corpus available with Institutions, if any.**

Our major sources of funds are U.G.C funds, fee collection, P.T.A., Salaries, M.L.A/M.P funds, scholarship, from management and other agencies.

### **6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).**

The other sources of funds are KSSTEC funding for science day celebration and department of environment and climate change.



## **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 institution had established an Internal Quality Assurance Cell (IQAC) with Dr.V.L.Pushpa as its coordinator. The Internal Quality Assurance Cell of our college has strived to sustain and boost the quality policy held loftily by the college. It serves as a quality initiating, maintaining, boosting, and monitoring body in the college. Taking into account, the fact that our college is a young college established in 1981, the IQAC takes special initiatives to run the institution in a smooth and fair manner. Through meetings and informal chat sessions it had tried its utmost to boost up the faculty members so as to sustain an effective teaching-learning ambience in our college. Moreover the IQAC identifies faculty members and channelizes their energy to various club activities and Forums. The club activities and the forums forms active centers of learning and sharing of experiences, where values are imported and the vision and goal of students are set. The IQAC not only helps in the running and providing directions to such extracurricular activities, but also conducts feedback, there by maintaining a healthy atmosphere in the institution.

**b. How many decisions of the IQAC have been approved by the management/authorities for implementation and how many of them were actually implemented?**

The IQAC takes decisions only after sufficient interactive sessions among its members and the college principal. Most of the decisions of IQAC were accepted by the management and implemented in the institution. The recommendations of the IQAC like the conduct of remedial coaching classes, tutorial system, diary of teachers, IT based teaching, conduct of cultural activities, yoga classes, etc., were all implemented. Though the college had a humble beginning, it had stood the test of years, and had emerged as one of the leading centers of higher education in the Chengannur Taluk. Taking into consideration the growing educational demand of a society, waiting its turn to enrich itself through the portals of higher learning, the IQAC and as well as the college council had realized a need to build upon the available infrastructure and to extend the facilities in the college. The proposal too had been hopefully received by the management, and steps are on way to its implementation.

**c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**

Yes, the members of the regional development committee of the management forms part of the IQAC committee. Both the IQAC and the regional development committee are striving to implement newer ideas, so as to project our college in the forefront, among the other institutions of higher learning in the Chengannur region.

**d. How do students and alumni contribute to the effective functioning of the IQAC?**

Though the college does not have a formally organized former student's organization, the college and its teaching and non-teaching staff do maintain contact with the outgoing as well as the former students of the institution. Most of the former students of the college, have climbed up the ladders of the society, and some have even reached coveted positions both inside our nation and as well as abroad. Some of our former students had occasionally returned back to one institution in search for a chat with their teachers, who had once instilled upon them with vital motivation. The valuable suggestions and feedback collected from them have proved to be boosting to add upon the activities of the college.

**e. How does the IQAC communicate and engage staff from different constituents of the institution?**

The IQAC of the college has taken the responsibility to communicate and facilitate the staff of the college, so as to maintain the quality policy of the college. In short the IQAC acts as an integral wing of the college, serving as a nerve center to disseminate information with regard to the college. The selection of the coordinators for the various clubs and forums functioning within the college are largely selected and suggested to the college council by the IQAC committee. The IQAC often conducts feedback and analysis both from peers and students, prior to such a selection process. Besides the detection and channelizing of the faculty members, they are given tips, and valuable information with regard to the conduct of clubs and forums. The IQAC of the college had received the new initiatives of the higher education department of Government of Kerala, like the FLAIR (Fostering Linkages in Academic Innovation and Research), WWS (Walk With Scholar) and SSP (Scholar Support Program), and had taken steps to implement these programs in the college. The IQAC of the

college largely communicates itself to the staff, largely using circulars and by conducting brief interactive sessions. During the past few years, the IQAC has stepped up its initiatives in combining the efforts being taken by the students, faculty members, administrative sections and the college office staff, so as to create an efficient work environment.

**6.5.2 Does the institution have an integrated frame work for Quality assurance of the academic and administrative activities? If ‘yes’, give details on its operationalisation.**

Yes, the institution does have an integrated frame work for quality assurance of the academic and administrative activities. This is largely done by the IQAC, and the college council in consultation with the college principal. The combined meetings of the college council and the IQAC representatives become platforms for discussion of academic and administrative activities. It is the IQAC that initiatives and runs the tutorial system in an effective manner. Most often the tutorial system runs in an effective manner. Most often the tutorial files maintained by the class tutors are glanced upon, and the tutoring system is mended where ever necessary. Even though it is the college council that decides upon the internal examination schedules, it is the IQAC that maintains the execution of the internal examinations. Most often, the IQAC assists the college council in the selection, creation and working of the college internal examination committee. Similarly it ensures that the feedback of with regard to the internal examinations is made available to students in time. The IQAC also collects feedback from the various head of the departments as to whether the internal marks of the students were prepared and promptly uploaded to the website of the University of Kerala. The IQAC maintains a close watch on the extracurricular activities like the N.S.S., Clubs, Forums, Sports activities, conduct of events and days of specific relevance, etc., by close interactions with the respective coordinators, and the required aid is supplied, which could material aid as well as in the form of emotional support.

**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, sufficient training is given to the teaching staff, non-teaching staff and students for the implementation of the quality assurance procedures of the IQAC. It strives its level best to train and mould the staff through informal sessions, by briefing to the coordinators of the N.S.S, College clubs and forums, etc., about the projected outcomes that they need to

focus on during the conduct of such activities. The IQAC plans to enlarge such sessions to a formal one, later on, by conducting invited lectures and discussion sessions. The informal sessions conducted right now, have boosted the performance of the staff.

**6.5.4 Does the institution under take Academic Auditor other external review of the academic provisions? If ‘yes’, how are the outcomes used to improve the institutional activities?**

Yes, the institution does undertake academic audit and external review of academic process going on. The college results in University examinations and internal examinations are collected by the class tutors, and are filed in the respective departments. The academic results are often sent to the management, who employ experts to analyze upon it. The review of the academic performance is usually discussed, and remedial measures to be taken are often advised.

**6.5.5 How is the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?**

Equilibrium is established between internal quality assurance mechanism and the relevant external quality assurance agencies so that the internal process is used to the requirements of the external agencies. The external requirements are always well anticipated.

**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?**

Institutional mechanism employed to review the teaching-learning process is the tutorial system and the internal examination system in practice. The tutorial files consist of student profile enumerating upon the socio-economic status of their respective family backgrounds. The serially conducted test papers and internal procedures, and their subsequent results are both monitored by the tutorial system and the IQAC. Both the IQAC and the college council had made counseling a compulsory part of teaching-learning process, where in the teachers, especially the class tutors are encouraged to look into the social,

emotional and the psychological status of the students while conducting the evaluating procedures. Similarly the students too are given ample provision to analyze the efficiency of teachers, lapses in teaching – learning process and even regarding the facilities in the institution, so as to take suitable remedial measures.

**6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?**

The college always maintains good public relation. The college prospectus, calendar, website, council and alumni, P.T.A are all the various agencies by which the external stakeholders are informed and communicated regarding the various activities of the college. The views and suggestions of these agencies are incorporated in the functioning of the various activities of the college. The college website is always uploaded with the programs and projects of the college. Similarly suggestions from the external stakeholders are solicited in the college website. The college website functions as an important source for reciprocal internal and external communication regarding the quality assurance policy mechanism and outcome of the college.

**6.5.8 Any other relevant information regarding Governance Leadership and Management which the college would like to include.**

Nil

# CRITERION 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 does conduct Green Audit of its campus and facilities. Initiatives are being taken to make the campus eco-friendly. A Nature club is functioning in the campus. Along with the Nature club, the BhumithraSena Club regularly conducts various activities to make the campus more Green and eco-friendly. Regular awareness campaigns are being conducted in the campus to promote environmental consciousness among students. Sufficient measures are also being taken to keep the environment of the campus clean and eco-friendly. Projects like Rain Water Harvesting and Biogas Plant etc are functioning effectively in the campus. Rain Water Harvesting Project in the college has reduced the situation of drought in the campus during the summer months; besides this it ensures sufficient drinking water availability round the year. A Biogas Project is initiated in the campus to supplement the energy requirements felt in the college laboratories.

#### 7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

##### **Energy conservation**

- Collective measures are being taken by teachers, students and non-teaching staff to switch off Lights, fans, and air conditioners when not in use. This functional activity had considerably contributed in cutting down the consumption of electricity.
- Classes on energy conservation are being organized for giving a general awareness to the students. Posters and Class campaigns on energy conservation had served to instill this initiative deep into the minds of our students.
- All the equipments in the laboratories are serviced periodically to reduce the unnecessary consumption of power.

### **Use of renewable energy**

- A biogas plant operating itself using food waste is installed in the campus
- The College is planning to install solar panels, so as to meet the energy demands in an eco-friendly channel.

### **Water harvesting**

- Rain water harvesting structures have been installed in the campus so as to reduce water scarcity in the campus. Owing to the hilly terrain in which the college is situated, there is acute water scarcity during summer seasons. However, this issue has been by passed by the installation of rain water harvesting structures.

### **Check dam construction**

- The location of the college is not suitable to construct Check dams

### **Efforts for Carbon neutrality**

- As a part of the Social Forestry Project by the Forest Department, saplings are supplied to students on occasions like the World Environment day. The NSS Volunteers are actively engaged in planting the trees inside and outside the campus.
- Awareness is provided to students and staff in the use of renewable energy sources and also energy conservation
- Smoking and burning of bio-degradable wastes and dead leaves in piles are banned inside the college campus.
- The motto of the NSS unit of the college is to make the campus completely plastic free.

### **Plantation**

- Trees and small bushy plants are being planted by the students so as to maintain and help keep the campus green.

### **Hazardous waste management**

- Lectures are regularly organized to spread the message on hazardous waste management by the N.S.S. unit of our college. Annual Seven day N.S.S. camps are

conducted regularly and out of it three days are being devoted so as to train NSS volunteers in this regard.

- The two day National Seminar conducted by Department of Political Science on Sustainable Development and there is ample avenues for discussion on the hazardous waste management

#### **e-waste management**

- E-waste management is a serious issue encountered by our college. The dead and obsolete computer hard ware's generated from the departments and as well as from the computer labs are stored away and disposed off in an appropriate manner.

## **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.**

- The students are given training in Information and Communication Technology (ICT).
- In the post graduate department of Chemistry, UGC sponsored M.Sc in Medicinal Chemistry has been introduced so as to bring in a paradigm shift and innovation to the teaching and learning of pure Chemistry.
- Our college has been one of the earliest colleges under the University of Kerala, to initiate into the curriculum, the teaching and learning of a U.G degree programme in Commerce supplemented with a computer application course. This degree programme started off in our college in the second half of the 90's, and continues to serve and instill practical knowledge on computers through vibrant sessions in computer labs.
- Remedial coaching classes are being offered to students who need special attention. The coaching classes are scheduled from 9.00 to 10.00am and from 3.30 to 4.30 pm.
- Personality development programmes are being conducted so as to generate and boost the self-reliance and competency of our students.
- Our students are being exposed to the functioning of industries and research institutions. They are also urged and motivated to do projects in collaboration with



various industries, especially during their final semesters of U.G and P.G programmes.

- UGC/CSIR- JRF/NET and PSC coaching classes are being conducted for the students.
- Seminars, workshops and presentation sessions were organized for providing information regarding innovative research activities, and there by instilling vital energy for our students, so as to continue on with the various avenues of research.
- Student feedback is taken for all the courses. The feedbacks are discussed and corrective measures are taken so as to enhance the quality of teaching-learning process.
- The faculties and students are encouraged to attend various seminars and conferences so as to inculcate the best practices in education. The College also encourages the faculty as well as the students to present research papers in national and international seminars and conferences.
- The college website is being regularly updated, bringing in essential information with regard to the college for the benefit of our students, out going students, alumni and the general public.
- Blood donation camps are organized every year. The poster designing and collage competitions are conducted to create awareness among students regarding HIV-AIDS.
- Walk With scholar (WWS) and Student support (SSP) programmes are effectively functioning in the college. Both internal and external mentoring sessions are conducted for the overall development of students.
- Literary and debating club published several issues of wall magazine named “Sahithy”, to enable the students to express their inner feelings.
- The Science club of our college has taken initiative to conduct the new’s paper readings during the noon interval sessions.
- A well-functioning tutorial system is operating in the college, creating an intricate web which facilitates an effective communication channel, between our faculty and students.
- Faculties are given freedom to formulate plans for supporting poor learners and organizing various programmes for enhancing curricular and extracurricular abilities.

## **7.3 BEST PRACTICES**

**7.3.1 Elaborate on any two best practices in the given format at page no. 98, which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.**

### **Format for Presentation of Best Practice**

#### **1. Title of the Practice**

Rejuvenating the Pamba-Varattar River

#### **2. Goal**

The goal is to develop environmental concern among the students of SreeNarayana College Chengannur. Prof. K.P.Mathew, formerly head of the department of Physics, is at the helm of this campaign for the rejuvenation and conservation of Pamba-Varattar river. Varattar, a tributary of the holy river Pamba, is the first documented case of the disappearance of a river in the state. The 15 km long Varattar was once a source of natural irrigation and means of water transport in the central Travancore region. Encroachments and sand mining have turned Varattar into a narrow sand-bank, hemmed in by farmsteads and disease spreading cesspools.

#### **3. The Context**

Lowering of the riverbed and fall in water level in the Pampa because of sand mining over the past three decades have affected the flow of water to the Varattar. A causeway across the Varattar, linking Koipram in Pathanamthitta and Edanadu in Alappuzha, has blocked the flow of water. Mounds of silt have converted the river mouth into more or less a grass-covered hill. Wells in the vicinity have turned dry with the depletion of groundwater, and drinking water scarcity is acute in the 12 sq. km of Varattar basin, especially during summer seasons. A major portion of the river has been encroached upon, and some of the trespassers have managed to get possession certificates for the land. Environmentalists have been campaigning for their eviction for a decade. Government authorities did not initiate steps to protect the river. The area now remaining unutilized has to be revamped into agricultural fields by the rejuvenation of the Varattar. Further, there is severe scarcity of water in this area. The drying up of Varattar involves human rights violation as well, as it has

caused acute drinking water scarcity in the river basin. The rejuvenation of Varattar is imperative to overcome this problem.

#### **4. The Practice**

Volunteer students from SreeNarayana College Chengannur surveyed almost 328 houses in that area to unearth the factors that resulted in the death of Pampa-Varattar river. The students interacted with more than 2000 civilians and also distributed pamphlets and spread information regarding the urgency of rejuvenating the river. The volunteers also made a study of the water collected from 36 selected areas of the river. Several awareness classes were also arranged to the locals in the affected area. The students were successful in developing a documentary film based on the environmental issues posed by Pampa-Varattar river and also attracting much attention to the problem.

#### **5. Evidence of Success**

As an aftermath of the survey several meetings were arranged with MPs, MLAs and several important personalities. The water survey made the civilians aware of the pollution taking place in the river. The  $P_H$  level of the water is also found to be high. The volunteers also made the civilians aware of the reasons for the foul smell emanating from the water of the surrounding wells. On the basis of several studies, discussions and surveys the Pampa-Varattar Rejuvenation Action Plan was developed and it was submitted to the government authorities. By the collective effort of the teachers and students comprising mainly of NSS volunteers, more and more public attention was drawn to the matter and the media and newspapers also contributed to the issue. Rejuvenation of the river will also provide answers to all the pollution problems, water scarcity and flood havoc in that area. In a meeting held for rejuvenating the river, the MP was the chief guest and almost 200 N.S.S volunteers from the college were present there.



**POPULAR CAMPAIGN:** Students and local people pouring Pampa waters into the Varattar at Edanadu on the border of Pathanamthitta and Alappuzha district on Saturday (Courtesy: The Hindu, December 11, 2006).

## **6. Problems Encountered and Resources Required**

Almost 70 individuals stayed away from the interactive sessions. The teachers and students also were subjected to threats from the encroachers. Eventually some of the local leaders withdrew their support for the conservation of the river. In some areas, the encroachers did not allow the students to do the survey and the project coordinator along with other teachers had to do the survey of those areas. The action plan had turned out to be a focused success largely due to the committed work from the part of our N.S.S. volunteers, who had stayed head strong to level up this issue and establish justice.

## **7. Notes (Optional)**

By involving in the rejuvenation of the river, the students grew aware of the urgency in the conservation of our water bodies and environment. This project is one among the commendable step towards upholding our social concerns regarding nature and it will go a long way in nurturing such feelings among younger generations. The students and the teachers were rewarded with a lot of nation-wide appreciation and it is reflected in the increasing demand for the conservation of the river. Several leaders and newspapers supported our efforts for the rejuvenation of the river.

## **8. Contact Details**

Name of the Principal: Dr. Raveendran

Name of the Institution: SreeNarayana College Chengannur

City: Chengannur

Pin Code: 689508

Accredited Status:Not accredited

Work Phone: 04792360140

Website: [www.sncollegechengannur.org](http://www.sncollegechengannur.org)

E-mail:[sncchengannur@gmail.com](mailto:sncchengannur@gmail.com)

Mobile: 9496847108

### **1. Title of the Practice**

MSc Outreach Programmes

### **2. Goal**

The goal is to motivate the students to discover their passion for research and go further in various areas of research. The above practice further aims to directly engage the students in research activities, the students get a first-hand experience of various new emerging arenas in the scientific world. The research experience will allow the students to determine their area of interest, start their career as researchers and eventually to acquire important research chairs in top laboratories.

### **3. The Context**

The MSc students of the chemistry department have been involved in the research activities of ‘Open Source Drug Discovery’ (OSDD) for the past 4 years. The ‘Open Source Drug Discovery’ programme was launched by the Council of Scientific and Industrial Research (CSIR) to combat the scourge of infectious diseases that afflict the developing world. OSDD is a CSIR led consortium with global partnership. Its vision is to provide affordable healthcare to all and especially to the weaker sections. OSDD is a transnational platform for drug discovery, bringing together informaticians, wet lab scientists, contract research organizations, clinicians, hospitals and others who are willing to adhere to the

affordable healthcare philosophy agreeing to the OSDD license. By involving in the research activities the students were able to understand published works, and as research is often performed in teams, they got a platform so as to compare and learn the collaborative efforts required in the laboratory with what they were capable of accomplishing individually.

#### **4. The Practice**

The students of the M.Sc. Chemistry and M.Sc. Medicinal Chemistry have been involved in the OSDD project for the past several years. The students did their dry lab work in IISC Bangalore with Dr U C Jaleel. The wet lab work was done in NIIST (formerly RRL), Trivandrum. The students were involved in the synthesis of a drug for Tuberculosis. The students also got opportunities to attend various national and international conferences during this period. The students were asked to submit their project reports to the college department. The students also participated in various workshops and seminars conducted by the OSDD team and the college provided the registration fees for the students to attend such events. The students are also given training in drug design software like Schrodinger and virtual lab facility from Amrita VishwaVidyapeetham, as the nodal centre.

#### **5. Evidence of Success**

Most of our students come from socially and economically weaker areas and had received very little exposure from outside; however the above mentioned practice improved their skills, attitudes and performance to research activities and as well as to their vision of Scientific world. The students received a far-fetched boost through the university scholarships provided to them for research activities. This practice inculcated a research aptitude among our students and they were motivated to take up further projects. Based on the research experience from their M.Sc projects, the students designed projects entitled “QSAR and Docking Studies of Vasicoline Derivatives against Mycobacterium Tuberculosis” and “Comparative Docking Study of a Tuberculosis Active Drug Molecule Using Autodock And Argus Lab and Investigation of a Tuberculosis Active Molecule Using the Docking Programmes”. The projects were approved by Kerala State Council for Science, Technology and Environment (KSCSTE) for the year 2014-2015.

#### **6. Problems Encountered and Resources Required**

It has been challenging enough to motivate and instill vital energy into our students to nurture their research skills. Efforts had to be taken up to plant saplings of ideas into their

minds right from the grass root level, so as to mould them for the successful completion of their projects. In the wake of the motivating and empowering work initiated by the faculty members of the Chemistry department of our college, we need more instrumental facilities to do OSDD related works so as to promote our students into the avenues of research.

**7. Notes (Optional): Nil**

**8. Contact Details**

Name of the Principal: Dr. Raveendran

Name of the Institution: SreeNarayana College Chengannur

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Mobile: 9496847108

# **EVALUATIVE REPORTS OF THE DEPARTMENTS**



## DEPARTMENT OF CHEMISTRY

1.	Name of the department	:	Chemistry.												
2.	Year of Establishment	:	1991												
3.	Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)	:	B.Sc Chemistry, M.Sc Pure Chemistry and M.Sc Medicinal Chemistry												
4.	Names of Interdisciplinary courses and the departments/units involved	:	<p><b>1. Complementary courses:</b> Mathematics and Physics are offered by the Departments of Mathematics and Physics respectively. Complementary courses in Chemistry by our department for students of B.Sc. Physics.</p> <p><b>2. Open course:</b> Essentials of Chemistry for V semester students of other departments and open courses from other department for V semester Chemistry students.</p>												
5.	Annual/ semester/choice based credit system (programme wise)	:	UG Choice based credit system and PG semester system												
6.	Participation of the department in the courses offered by other departments	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name of the course</th> <th style="text-align: left;">Department</th> </tr> </thead> <tbody> <tr> <td>Health and Fitness Education</td> <td>Physical Education</td> </tr> <tr> <td>Energy Physics</td> <td>Physics</td> </tr> <tr> <td>Fundamentals of financial accounting</td> <td>Commerce</td> </tr> <tr> <td>Human Resource management</td> <td>Economics</td> </tr> <tr> <td>Complementary courses in</td> <td>Mathematics</td> </tr> </tbody> </table>	Name of the course	Department	Health and Fitness Education	Physical Education	Energy Physics	Physics	Fundamentals of financial accounting	Commerce	Human Resource management	Economics	Complementary courses in	Mathematics
Name of the course	Department														
Health and Fitness Education	Physical Education														
Energy Physics	Physics														
Fundamentals of financial accounting	Commerce														
Human Resource management	Economics														
Complementary courses in	Mathematics														

			Mathematics	
			Complementary courses in Physics	Physics
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	Nil	Nil
Associate Professors	02	02
Assistant Professors	06	06

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)

Serial	Name	Qualification	Designation	Specialization of Ph.D.	Experience	Students guided for the last 4 years
1	Dr.Latha M.S	MSc, Ph.D	Assistant Professor	Medicinal Chemistry	19	5
2	Smt.Sheela S.Fernandez	MSc, MPhil	Associate Professor	Polymer Chemistry	18	NA
3	Dr.Pushpa V.L	MSc, Ph.D	Associate Professor	Medicinal Chemistry	19	6
4	Smt.Jisha Sreedharan	MSc, M.Phil	Assistant Professor	NA	4.5	NA
5	Dr.Remadevi B	MSc, Ph.D	Assistant Professor	Organic Chemistry	4.5	NA
6	Dr. Anju K.S	MSc,Ph.D	Assistant	Organic Chemistry	4.5	NA

			Professor			
7	Dr.Reshmi R	MSc,Ph.D	Assistant Professor	Physical Chemistry- Catalysis	3	NA
8	Smt.Induja P (Transferred, Feb 2015)	MSc	Assistant Professor	NA	3	NA

11.	List of senior visiting faculty	Nil
12.	Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty	10%
13.	Student -Teacher Ratio (programme wise)	Total sanctioned strength:126 No of Faculties required: 8 Student teacher ratio:16:1
14.	Number of academic support staff (technical) and administrative staff; sanctioned and filled : 2/2	
15.	Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. No. of teachers with Ph.D : 5 No. of teachers with PG & M.Phil : 2 No. of teachers with PG only: 1	
16.	Number of faculty with ongoing projects from a) National b) International funding agencies and grants received	a) National funding: Two 1. <b>Dr.V.L. Pushpa</b> has successfully completed a UGC funded project entitled “STUDY OF THE DRUG ACTIVITY OF LONGIFOLENE DERIVATIVES ” with financial aid of Rs. 72,500/- (OrderNo.MRP(S)-517/09-10/KLKE052/ UGC-SWRO  2. <b>Smt.Induja.P</b> has a minor project entitled

		<p>“IN SILICOANALYSIS OF ACTIVE MOLECULES AGAINST MICOBACTERIUM TUBERCULOSIS ”</p> <p>accepted by UGC.(Lr. No.F.MRP/12<sup>th</sup>Plan/14-15/KLKE052 dtd. 10<sup>th</sup> December 2014)</p> <p>b) International funding agencies and grants received : Nil</p>
17.	Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received	<p>a) National funding : Two</p> <p>1.<b>Dr.V.L. Pushpa</b> has successfully completed a UGC funded project entitled “STUDY OF THE DRUG ACTIVITY OF LONGIFOLENE DERIVATIVES ” with financial aid of Rs. 72,500/- (OrderNo.MRP(S)-517/09-10/KLKE052/UGC-SWRO</p> <p>2.<b>Smt.Induja.P</b> has a minor project entitled “IN SILICOANALYSIS OF ACTIVE MOLECULES AGAINST MICOBACTERIUM TUBERCULOSIS ” accepted by UGC.(Lr. No.F.MRP/12<sup>th</sup>Plan/14-15/KLKE052 dtd. 10<sup>th</sup> December 2014)</p>
18.	Research Centre /facility recognized by the University:	Applied for the sanction

19.	Publications: a) Publication per faculty:		List of Publications attached			
SI No.	Faculty	No. of publications		Impact factor	h-index	Citation Index
		National	International			
1	Dr. V L Pushpa		06	1.4	-	-
2	Dr. M S Latha		14	5	-	-
3	Dr. Anju KS		07	5	-	-
4	Dr. Remadevi B	01	08	3.5	-	-
5	Dr. Reshmi R		04	3.7	-	-
6	Smt. Sheela S. Fernandez	02	01	1.6	-	-
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 inter departmental/programme b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:		30%  : 70%			

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23. Awards/Recognitions received  
by faculty and students:

**Dr.M. S Latha** was awarded UGC research  
award in the year 2012.

**Smt. Sheela S. Fernandez** has received best  
paper award in National Conference on  
Emerging Trends in Chemistry, Bishop Heber  
College, Trichy, 11<sup>th</sup> Jan 2012.

**Dr. Anju K.S.**

1. Awarded Ph.D in the year 2012.
2. Participated in the UGC-sponsored  
Orientation Programme (IT-Oriented)  
conducted by UGC-Academic Staff  
College, University of Kerala from  
27.06.2014 to 24.07.2014
3. Participated in the Orientation Course for  
the Programme Officers of the National  
Service Scheme, organized by Empanelled  
Training Institution for NSS, Govt of  
India from 9.10.2014 to 15.10.2014
4. Participated in the UGC-sponsored  
Refresher Course in Chemistry conducted  
by UGC-Academic Staff College,  
University of Kerala from 30.01.2013 to  
20.02.2013

**Dr.V.L.Pushpa**

5. Coordinator IQAC
6. One day seminar 18-1-14  
St.Gregorioscollege,Kottarkkara
7. Coordinator of UGC sponsored National  
Seminar Molecular modeling and

- 
- computational chemistry 7-9 May 2014.
8. Boot Camp May 14-17,2014 at IISC  
Banglore
  9. International conference on emerging trends  
in drug discovery July 23- 27, 2014 at  
Amrita  
ViswaVidyapeethomUniversity,Coimbatore  
.
  10. National Seminar 17<sup>th</sup> Oct 2014.Bishop  
Moore College, “Recent trends in general  
Chemistry”
  11. 20-1-2015 annual meeting of board of  
studies, University of Kerala, Trivandrum.
  12. Completed minor research project of UGC  
in 2014.
  13. Guiding two student project supported by  
KSCSTE.
  14. Coordinating BMC, Science club, Nature  
Club and Sree Narayana Studies forum.

**As a subject expert**

15. 5-7-2014, College of Engineering, IHRD,  
Karunagappally, subject expert for the  
selection of assistant professor in chemistry.
16. 22-08-2014, Sree Narayana College,  
Cherthala, subject expert for FDP vacancy  
of UGC

**As a Resource Person**

17. National Seminar “ Principles and  
applications of quantum chemistry” Oct  
30-31,2014-MSM College Kayamkulam
18. Dr.SundaresanMemorial Seminar 6-03-  
15, Sree Narayana College,Kollam

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**Dr. Reshmi R**

19. Dr. Reshmi R attended the Introductory Training Workshop on ‘Nanofabrication Technologies’ conducted on behalf of the Fostering Linkages in Academic Innovation and Research (FLAIR) program at the Centre for Nano Science and Engineering, Indian Institute of Science, Bangalore from 13-16<sup>th</sup> February, 2015.
20. Dr. Reshmi R attended the Induction Training of the FLAIR Programme from 22-24 Jan 2015 at Water Authority Training Centre, Vellayambalam, Trivandrum.
21. Dr. Reshmi R attended the FLAIR National Internship Interview on 23-10-2014 at Office of the New Initiatives in Higher Education, Model Finishing School, Science & Technology Museum Campus, PMG Junction, Trivandrum.
22. Dr. Reshmi R. attended the Interview for the selection to FLAIR Training programmes 2014-15 on 01-08-2015 at Office of the New Initiatives in Higher Education, Model Finishing School, Science & Technology Museum Campus, PMG Junction, Trivandrum.

**Smt. Jisha Sreedharan**

1. Attended an Orientation programme by University Grants Commission,



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Accademic Staff college, University of Kerala, Kariavattom, from 30.04.2014

**Papers Published by Students in National journals-**

1. Gargi Chandran, **V.L.Pushpa**, Anju K.S, "COMPARATIVE DOCKING STUDIES ON PIPER LONGUM AND ITS DERIVATIVES AGAINST MYCOBACTERIUM TUBERCULOSIS" November 2014 (524-530 SSM) ISBN: 978-81-928129-2-2 Swadeshi Science Movement, Tirur, Kerala.

**List of eminent academicians and scientists / visitors to the Department**

<b>Year</b>	<b>Name of the Academician</b>
<b>2010-11</b>	Dr. Desy Koruthu Associate Prof. Christian College Chengannur
<b>2011-12</b>	Prof. S. Sugunan Scientist, CUSAT, Ernakulam, Kerala
<b>2012-13</b>	1. Dr Achuth Sankar S Nair Head The Centre for Bioinformatics, University of Kerala
<b>2013-14</b>	1. Prof. Viswanadhan Rtd. Prof. S N College Chempazhanthi, Kerala. 2. Dr. S K Ghosh Sr. Principal Scientist Advanced Clay & Traditional Ceramics Division Central Glass & Ceramic Research Institute, CSIRScientist, CGCRI Calcutta. 3. Dr. Desy Koruthu Associate Prof. Christian College, Chengannur, Kerala.
<b>2014-15</b>	1. Mr.Girinath G Pillai, Research scholar from Florida University 2. Dr.Krishna Mohan G.P from NIIST 3. Smt.UshaDevi, Retd. Professor, NSS College Pandalam

25. Seminars/ Conferences/Workshops organized & the source of funding:

Academic Year	Type	No. of Seminars	No of workshop	Source of funding
2010-11	National	-	National workshop on computer aided drug design 17,18 & 19 March 2011	UGC&KSCST E
	International	-	-	-
	Institutional	2	-	College
2011-12	National	1		UGC
	International	-	-	-
	Institutional	2		College
2012-13	National			
	International	-	-	-
	Institutional	2		College
2013-14	National	Molecular Modeling and Computational Chemistry 7-9 May 2014	-	UGC
	International	-	-	-
	Institutional	5		College
	National	1	National Seminar cum Workshop from May 7 <sup>th</sup> to 10 <sup>th</sup> 2014	UGC
2014-15		1. Mr.Girinath G Pillai, Research	1. One day Workshop on Genetic	College

		<p>scholar from Florida University</p> <p>2. Dr.Krishna Mohan G.P from NIIST - lecture on Molecular dynamics on <b>26-12-14</b> for our PG students.</p> <p>3. Smt.UshaDevi, Retd. Professor, NSS College Pandalam has engage- two days seminar for MSc S3 students on <b>27-12-14 and 31-12-14</b></p>	<p>Algorithm &amp; SVM on <b>29-12-14.</b></p>	
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26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Year	Applications Received	Selected	Enrolled	
				Male	Female
B.Sc.Chemistry	2010	32	18	1	17
	2011	32	32	11	21
	2012	32	30	11	19
	2013	32	26	5	21

	2014	32	26	9	17
MSc.Chemistry	2010	32	13	0	13
	2011	32	12	2	10
	2012	32	13	0	13
	2013	32	13	2	10
	2014	32	13	3	10

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. Physics	100%	Nil	Nil
M.Sc. Physics	100%	Nil	Nil

28. How many students have cleared national and state :  
competitive examinations such as NET, SLET,  
GATE, Civil services, Defense services, etc.?

Sl. No.	Academic year	No of Students cleared NET/ GATE
1	2012-13	2
2	2011-12	1
3	2010-11	Nil

29. Student progression

Student progression	Against enrolled	%
UG to PG	35%	
PG to M.Phil.	NA	
PG to Ph.D.	2%	
Ph.D. to Post-Doctoral	NA	

<b>Employed</b>	
Campus selection <input type="checkbox"/> <input type="checkbox"/>	
Other than campus recruitment <input type="checkbox"/> <input type="checkbox"/>	50% in various sectors
Entrepreneurship/Self-employment	50%

30. Details of Infrastructural facilities :
- a) Library Yes, General Library
- b) Internet facilities for Staff & Students Yes
- c) Class rooms with ICT facility Yes, Available
- d) Laboratories Yes
31. Number of students receiving financial assistance from college, university, government or other agencies : 62
32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts : Teaching aids like OHP and LCD used.

Academic year	Events	Dates
2010-11	1.National Science Day Celebration Seminar on the Inter disciplinary Topic “gender Equity for Prosperity with peace” 2.Awareness programme on Ozone layer Protection	22 <sup>nd</sup> 23 <sup>d</sup> Feb,2010  23 <sup>d</sup> ,24 <sup>th</sup> ,Sep2010
2011-12	ASAP	March 2012
2012-13	ASAP	March 2013
2013-14	Seminar on Molecular Modeling and Computational Chemistry	7-9 May 2014

2014-15	Students Training Programme at OSDD Division, CSIR, IISC Bangalore	14 th May 2014 to 17-5-14
2014-15	One day seminar St. Gregorios college, Kottarkkara	18-1-14
2014-15	Boot Camp at IISC Bangalore.	May 14-17, 2014
2014-15	Rakhi Rajendran and Gargi Chandran are doing their PG projects by the financial support of Kerala state council for science, technology and environment (KSCSTE). Each of them presented one paper in National seminars and Science congress.	
2014-15	National Seminar “ Principles and applications of quantum chemistry” Oct 30-31, 2014-MSM College Kayamkulam	Oct 30-31 2014
2014-15	National Seminar Bishop Moore College, “Recent trends in general Chemistry”	17 <sup>th</sup> Oct 2014.

### 33 Teaching methods adopted to improve student learning

#### → Group learning , Seminars & assignments

In each class advanced learners hold study groups of students. They help the average students and slow learners in learning activities. Further they are encouraged to take seminars in advanced topics related to their syllabus. The advanced learners are encouraged to participate in intercollegiate competitions, seminars and workshops conducted by neighbouring Colleges, University or other agencies. Resource persons from reputed academic institution are invited to give Guest Lecture on the advanced topics for the benefit of the students. The students are motivated to use college library and e-learning facilities.

#### → Test Papers

Class tests, assignments, seminars and a model examination are conducted to analyse the academic performance of the students. Student attendance is also graded. Results of the internal exams are published promptly, valued and corrected answer sheets are circulated among the students for perusal, doubts are cleared, and deficiencies are

pointed out. Records of all these activities are retained in respective teaching departments.

→ **Projects**

Projects are assigned to students to develop creative thinking and scientific temper as a part of curriculum activity.

→ **Internet facilities** are utilized effectively.

→ Use of **LCD Projectors** for effective teaching.

→ **Remedial Coaching** for slow learners.

34. Participation in Institutional : Students actively participate in NSS, University Social Responsibility (ISR) Youth festival, various club activities of the and Extension activities college.

35. SWOC analysis of the department and Future plans

**Strengths**

- Qualified and competent faculty.
- Well equipped UG and PG laboratories.
- Sufficient computers with internet facility.
- Peer teaching in all classes.

**Weaknesses**

- Very low mark profile of students in the entry level.
- Improve teaching learning process by taking feedback from the students.
- Lack of sufficient permanent teaching faculty.

**Opportunities**

- To take steps to develop as research department.
- To improve the infrastructure by getting funds from the state, central governments and other funding agencies.
- To inculcate the spirit of pursuing research in pure science among the rural youth and bring them to the main stream of Nation building.

**Threats**

Lack of proper infrastructure may lead to migration of students to other institutes

**Future plans**

- To be a Research Department.
- Develop interdisciplinary research.
- Initiate collaborative work with reputed institutions.
- To achieve cent percentage result.

### List of publications of the Chemistry Department

#### Dr. M.S.LATHA

#### JOURNALS

1. M Chandy, US Sarma, **M S Latha**, KS Kumar, Thin film aluminium coated coir fibers deposited by magnetron sputtering, International journal of advanced research, 3, 2015, Issue 3, 703- 706.
2. M Chandy, US Sarma, **M S Latha**, KS Kumar, UV protection ability of silver coated coir fabric by magnetron sputtering, Indian journal of applied research 2015, 5 (2) 855-857,
3. Kajal Ghosal,**Mahima Santhakumar Latha**, Sabu Thomas, Poly(ester amides) (PEAs) – Scaffold for tissue engineering applications, European Polymer Journal, 60, 2014, 58–68.
4. Melvi Chand, M.S.Latha, K.Shreekrishna Kumar and U.S.Sharma, Metal Coated Coir Fiber for Smart Textile Applications, *CORD* , 26(1), 2010, 30-38.
5. Alex M Chen, **Latha M Santhakumaran**, Sandhya K Nair, Peter S Amenta, Thresia Thomas, Huixin He and T J Thomas Oligodeoxynucleotide nanostructure formation in the presence of polypropyleneimine dendrimers and their uptake in breast cancer cells, *Nanotechnology* , 2006, 17, 5449-60.
6. **Santhakumaran, L. M.**, Thomas, T., and Thomas, T. J. Enhanced cellular uptake of a triplex-forming oligonucleotide by nanoparticle formation in the presence of polypropylenimine dendrimers. *Nucleic Acids Res.*, 2004; 32: 2102-2112.
7. Balabhadrapathruni, S., **Santhakumaran, L. M.**, Thomas, T. J, Shirahata, A., Gallo, M.A., and Thomas T. Bis (ethyl) norspermine potentiates the apoptotic activity of the pure antiestrogen ICI 182 780 in breast cancer cells. *Oncogene Reports*, 13: 101-108, 2005.
8. Latha, M. S., Lal, A. V., Kumary, T. V., Sreekumar, R., and Jayakrishnan, A. Progesterone release from glutaraldehyde cross-linked casein microspheres: in vitro studies and in vivo response in rabbits. *Contraception*, 61: 329-334, 2000.



9. Latha, M. S., Latha, P. G., Subramoniam, A., and Jayakrishnan, A. Anti-tumor effect of mitoxantrone-loaded bovine casein microspheres on Ehrlich ascites carcinoma in mice. *Drug Delivery*, 3: 75-79, 1996.
10. Latha, M. S., and Jayakrishnan, A. Calcium Caseinate: A new matrix for sustained delivery of oral drugs. *Pharm. Sci.*, 1: 363-365, 1995.
11. Latha, M. S., Rathinam, K., Mohanan, P.V., and Jayakrishnan, A. Bioavailability of theophylline from glutaraldehyde cross-linked casein microspheres in rabbits following oral administration. *J. Control Rel.*, 34: 1-7, 1995.
12. Latha, M. S., and Jayakrishnan, A. A new method for the synthesis of smooth, round, hydrophilic protein microspheres using low concentrations of polymeric dispersing agents. *J. Microencapsulation.*, 12: 7-12, 1995.
13. **Latha, M. S.**, Jayakrishnan, A., Rathinam, K., and Mohanty, M. Casein as a carrier matrix for 5-fluorouracil: drug release from microspheres, drug protein conjugates and in vivo degradation of microspheres in rat muscle. *J. Pharm Pharmacol.*, 46: 858-862, 1994.
14. **Latha, M. S.**, and Jayakrishnan, A. Glutaraldehyde cross-linked bovine casein microspheres as a matrix for the controlled release of theophylline: in vitro studies. *J. Pharm Pharmacol.*, 46: 8-13, 1994.

### **NATIONAL AND INTERNATIONAL CONFERENCES**

1. Joly.A and **M.S.Latha**, Synthesis of Nanocurcumin, UGC sponsored National Seminar on Nanostructured Materials organized by N.S.S College, Changanassery, 2014.
2. Mereena Luke, **M.S.Latha**, Sabu Thomas, Anticancer effect of G4-OH PAMAM Dendrimer – Nanocurcumin Conjugates , International conference on Nano Biomaterials, Mahatma Gandhi University, Kottayam 2014
3. **M.S Latha**, Green Chemicals for Sustainable Future, National seminar on Green Chemicals at Bishop Moore College, Mavelikara 2012.
4. **M.S Latha**, K Shreekrishnakumar, Anita Das Ravindranath, Arun Sharma, U. S. Sarma  
Phytosanitation of Coir Pith by Gamma Irradiation, NAARRI International Conference, BARC, Bombay (NIC-2010 ).

5. **M.S.Latha**, Nucleic Acid Therapy and Metal Nucleic Acid Interactions, in Bioinorganic Chemistry, UGC sponsored state seminar at B.C.M College, Kottayam.2010
6. **M.S. Latha**, Preparation and Characterization of Oligonucleotide nanoparticles for Gene delivery Applications, in Nanotechnology for Biomedical Applications, UGC sponsored seminar at S.N.College, Chengannur,2009.
7. **M.S Latha**. Polymers in Drug Delivery, Seminar series at TKMM college, Nangiarkulangara,2007.
8. **M.S.Latha**, Environmental Science in Short term course on Advanced Technological Interventions for Environmental sustainability at Rajive Gandhi Institute of Technology, Kottayam, 2007.
9. Thomas, T.J., Chen A., **Santhakumaran, L.**, Thomas, T., and He, H. Robust Production of Oligonucleotide Nanoparticles by Polypropylenimine Dendrimers.Proc.Macro 2004.
10. **Santhakumaran, L. M.**, Thomas, T., and Thomas, T. J. Nanoparticle formation in an antisense oligonucleotide by polypropyliniminedendrimers: Facilitation of cellular uptake and intracellular stability. Proc. Amer. Assoc. Cancer Res., 45: 2938, 2004.
11. Thomas, T., **Santhakumaran, L. M.**, Parikh, M.S., and Thomas, T. J. A possible mechanism for the growth inhibitory action of curcumin on HER-2 over expressing SK-BR-3 breast cancer cells involves the polyamine pathway. Proc. Amer. Assoc. Cancer Res., 45: 729, 2004.
12. Balabhadrapathruni, S., **Santhakumaran, L. M.**, Thomas, T., and Thomas T.J. Apoptotic effect of the pure antiestrogen ICI 182 781 in combination with bis (ethyl) norspermine involves down regulation of spermidine and spermine. Proc. Amer. Assoc. Cancer Res., 45, 2873, 2004.
13. **Santhakumaran, L. M.**, Thomas, T., and Thomas, T. J. Polypropylenimine dendrimer: A promising oligonucleotide delivery vehicle for gene therapy. Proc. Amer. Assoc. Cancer Res., 44: 56, 2003.
14. Jayakrishnan, A., and **Latha, M. S.** Bovine milk protein as a potential drug carrier. Proc. Eur. Conf. Biomat. p.37, 1994.
15. **M.SLatha**. Dendrimers in Gene Delivery, UGC sponsored National Seminar on , Applications of Biotechnology, Bioinformatics and Nanotechnology at TKMM college, Nangiarkulangara,2007.

16. **M.S Latha**, Formation and in vitro evaluation of theophylline loaded casein microsphere, Annual Conference of Indian Association of Biomedical Scientists, 1992.

### **List of scientific/technical books written**

1. Santhakumaran, L. M. (Name Latha M.S as used in publication from US), Chen, A., Pillai, C.K.S., Thomas, T., He, H., and Thomas, T. J. "Nanotechnology in non-viral gene delivery", book chapter in Nanofabrication for Biomedical Applications, (Eds: J. Hormes, C. Kumar, and C. Leuschner), Wiley-VCH, In press.
2. Jayakrishnan, A., and Latha, M. S. Therapeutic possibilities using bovine milk protein casein as a drug delivery matrix. *Macromolecules: New Frontiers*, K. S. V. Srinivasan, Ed., Allied Publishers, New Delhi. p. 590., 1998.
3. Jayakrishnan, A., and Latha, M. S. Biodegradable polymeric microspheres as drug carriers, in *Controlled and Novel Drug Delivery*, (Ed: N. K. Jain), CBS Publishers, New Delhi, p. 236-255, 1997.

### **Dr. V.L. PUSHPA**

#### **JOURNALS**

1. **Dr.V.L. Pushpa**, Dr.K.Kurien Thomas, Divya.G.Nair. 2014 . "Insilico analysis and optimization of an anticholesterol lead compound Isolated from Cucurbita Pepo" , *Procedia Chemistry* , Elsevier , New York , N.Y.
2. V.L.Pushpa, Soubhagya A.S, U.C.Jaleel" in silico development for cholesterol management-by the Inhibition of lanosterol synthase".*Journal of Applied Chemistry (IOSR-JAC)* 2278-5736. Volume 3, issue 1 (nov.dec. 2012), pp 33-37"
3. "Synthetic & bacteriological studies on phthalyl sulphathiazole metal chelate" V.L.Pushpa, K.B.Manoj, M.S.Latha, K.Serji, Kesavamohan,et.al *acta ciencia indica* vol. xxxii c: no 2 (2007) p- 201
4. Lipid metabolism in hexa chloro cyclohexane treated rats fed dietary Fiber" " V.L.Pushpa, Chithra, K..B. Manoj, et.al *acta ciencia indica* vol. Xxxiii c: no 3 (2007) p- 323
5. "Qsar modelling of toxic effect of phthalylsulphathiazole metal chelate "" V.L.Pushpa, K.B.Manoj, ,Kesavamohan et.al *acta ciencia indica*, Xxxiii c: no 4 (2007) p- 577
6. "Synthetic & bacteriological studies on 5-alkyl substituted phthalylsulphathiazole metal chelate"

### **INTERNATIONAL AND NATIONAL CONFERENCES**

1. Divya.G.Nair, **V.L. Pushpa**, K.Kurien Thomas, K.B.Manoj “QSAR and Docking Studies of Substituted Ro48-8071 Compounds as Lanosterol Synthase Inhibitors” Proceedings of International Symposium on Phytochemistry , Kerala Science Academy, 25 April- 2015.
2. Sarithamol S, **V L Pushpa**, K B Manoj, “A QSAR modelling and docking studies on acetoxy chavicol acetate derivatives as potent interleukin 4 inhibitors and efficacious antiasthmatic agents” International Symposium on phytochemistry, organized by KERALA ACADEMY OF SCIENCE on 25 April 2015.
3. Sarithamol, **V.L.Pushpa**, K.B.Manoj “A QSAR STUDY ON ACETOXY CHAVICOL ACETATE, ACTIVE PRINCIPLE OF ALPINIA GALANGA”, Proceedings of National Seminar on New Frontiers in Nanotechnology and Material Science’ March 20, 2015 Department of Physics, S N College, Chengannur.
4. Divya.G.Nair, **V.L. Pushpa**, K.Kurien Thomas, K.B.Manoj “*Molecular Docking and Admet Studies of Beta Sitosterol Derivatives as Lanosterol Synthase Inhibitors*” Proceedings of National Seminar on New Frontiers in Nanotechnology and Material Science, S.N College, Chengannur (20, March 2015).
5. Divya.G.Nair, **V.L. Pushpa**, K.Kurien Thomas, “*Molecular Docking Studies of Lanosterol Synthase Inhibitors as Potential Antihypercholesterolemic Compounds*” in the 27<sup>th</sup> Kerala Science Congress (27-29, Jan -2015).
6. Gargi Chandran, **V.L.Pushpa**, Anju K.S, “COMPARATIVE DOCKING STUDIES ON PIPER LONGUM AND ITS DERIVATIVES AGAINST MYCOBACTERIUM TUBERCULOSIS” November 2014 (524-530 SSM) ISBN: 978-81-928129-2-2 Swadeshi Science Movement, Tirur, Kerala.
7. Divya.G.Nair, **V.L. Pushpa**, K.Kurien Thomas, “*A Review on Anti-hypercholesterolemic Compounds*” Proceedings of the National Seminar on Principles and Applications of Quantum Chemistry, October, 30-31, 2014 M.S.M College, Kayamkulam, & Academy for Chemistry Teachers, Kerala.
8. Divya.G.Nair, **V.L. Pushpa**, K.Kurien Thomas, “*Insilico analysis and optimization of an anticholesterol lead compound Isolated from Cucurbita Pepo*” on ‘Computer Aided Drug Design and Pharmacogenomics, International Conference on Emerging Trends in Drug Discovery- AICADD 2014’, Amrita Vishwa Vidyapeetham University , Coimbatore 23-27, July 2014.

9. Divya.V., **V. L. Pushpa** “A review on the function of G1/S Specific Cyclin D1 and AML” *Proceedings of the National Seminar on “Molecular Modeling and Computational Chemistry”*, May 07-09,2014 Sree Narayana College, Chengannur, Alappuzha, Kerala,& Academy for Chemistry Teachers, Kerala.
10. **V.L.Pushpa** and K.B.Manoj “Molecular Modeling of Longifolene Derivatives” *Proceedings of the National Seminar on “Molecular Modeling and Computational Chemistry”*, 7-9 May 2014, Department of Chemistry, S.N. College, Chengannur, Kerala,& Academy for Chemistry Teachers,Kerala.
11. Divya.G.Nair,**V.L. Pushpa**, K.Kurien Thomas, “*In Silico Analysis to Evaluate the Lanosterol Synthase Inhibitor Activity of Beta Sito Sterol Derivatives*”*Proceedings of the National Seminar on “ Molecular Modeling & Computational Chemistry”*, S.N College, Chengannur 7-9 May 2014,& Academy for Chemistry Teachers,Kerala.
12. Sreekala S Nampoothiri, **V.L.Pushpa**, Preetha G Prasad, “3-D QSAR studies for the prediction of model for the inhibitory action of mycobacterial growth by plumbagin ( 5-hydroxy – 2 – methyl -1, 4 – naphthaquinone and its derivatives” *Proceedings of the National Seminar on “Molecular Modeling & Computational Chemistry”*, S.N College, Chengannur 7-9 May 2014, & Academy for Chemistry Teachers,Kerala.
13. Preetha G Prasad, **V.L.Pushpa**,Siby Geevarghese, Aswathy Devi, Anjana Varkey, Najeeba.P.M, Akhila, Bejoy.S.Raj“Computational Screening on the Phytomolecules 5- methyl Indolo [3,2-b] Quinoline as a lead molecule for the design of inhibitors for NAT2 as a drug target against mycobacterium tuberculosis”*Proceedings of the National Seminar on “Molecular Modeling & Computational Chemistry”*, S.N College, Chengannur 7-9 May 2014,& Academy for Chemistry Teachers,Kerala.
14. Suchithra Surendran, Dr.K.B.Manoj, **Dr.V.L.Pushpa** “Machine learning approach for the optimization of some Xanthone derivatives isolated from Garcinia mangostana for their antitubercular activity”*Molecular Modeling & Computational Chemistry”*, S.N College, Chengannur 7-9 May 2014,& Academy for Chemistry Teachers,Kerala.
15. Divya.G.Nair,**V.L. Pushpa**, K.Kurien Thomas, “ *QSAR Studiesof Ro48-8071 Derivativesas Lanosterol Synthase Inhibitors*” *Proceedings of the National Seminar on“Emerging Trends at the Interface of Chemistry and Informatics”*, S.N College, Varkala 12-13,Dec,2013,& Academy for Chemistry Teachers,Kerala.
16. **V.L.Pushpa** and K.B.Manoj “Studies on the drug activity of longifolene derivatives”. *Proceedings of the National Seminar on “Emerging trends at the interface of Chemistry and informatics”* 12-13 December 2013, organised by Department of Chemistry, S.N. College, Varkala, Kerala,& Academy for Chemistry Teachers,Kerala.

17. Divya.V,**V.L. Pushpa**,Cyclin-D and cyclin Dependent Kinases- Potential target of Cancer *Proceedings of the National Seminar on “Emerging trends at the interface of Chemistry and informatics”* 12-13 December 2013, organised by Department of Chemistry, S.N. College, Varkala, Kerala,& Academy for Chemistry Teachers,Kerala.
18. Divya.G.Nair,**V.L.Pushpa**, K.Kurien Thomas, “Application of Physicochemical Descriptors: QSAR Studies of R<sub>0</sub>48-8071 Derivatives” *Proceedings of the National Conference on Medicinal Chemistry, IIT Madras (25-26,Oct, 2013).*
19. Divya.V,**V.L. Pushpa**, “A review on the action of G1/S Specific Cyclin D1-a well established oncogene causing Acute Myeloid Leukemia and the development of druggable molecules against it”, *Proceedings of the 2<sup>nd</sup> IIT Madras-TokyoTech Joint Symposium on Techniques and Applications of Bioinformatics, Bioinformatics Infrastructure Facility, Department of Biotechnology, Institute of Technology, Chennai, India, India and Global Scientific Information Computing Centre, Tokyo institute of technology, Japan, (September 27-28,2013)*
20. **V.L.Pushpa** and K.B.Manoj,“Computer aided drug design and study of drugability” *Proceedings of the National Seminar on “Computer aided drug design”* March 17-19, 2011, Department of Chemistry, S.N. College, Chengannur, Kerala,& Academy for Chemistry Teachers,Kerala.

### Books Edited

Dr.V.L.Pushpa was the editor of the proceedings of three UGC sponsored National Seminars CADD 2011, MMCC-14, organized by the Department of Chemistry at Sree Narayana College, Chengannur in 2011 and 2014 respectively

### Seminars/

### Conferences/Workshops organized

a)National: 3, Two Workshops –

i) Nanotechnology for biomedical application 17,18/03/09.UGC

ii) “*Computer aided drug designing*”-on 17-19/03/2011. UGC & Kerala State Council for Science Technology and Environment (KSCSTE)

iii)“Molecular Modeling & Computational Chemistry”- 7- 9/05/14.UGC

## **Smt. SHEELA S FERNANDEZ**

### **JOURNALS**

1. Sheela S Fernandez, Sam Kunchandy and Swapankumar Ghosh "Linseed oil plasticizer based Natural Rubber/Expandable Graphite Vulcanizates: Synthesis and characterizations, Journal of Polymers and the Environment, 2015, DOI: 10.1007/s10924-015-0721-z (Impact factor 1.6)
2. Sheela S Fernandez and Sam Kunchandy, Effect of Nano CaCO<sub>3</sub> as a Filler and Linseed oil as an extender on the cure and mechanical properties of natural rubber vulcanizates, Oriental journal chemistry 29, 219, 2013.
3. Sheela S Fernandez and Sam Kunchandy, Comparative study of the Cure and Mechanical Properties of Natural Rubber/Expandable Graphite Vulcanizate Filled with Nano and Precipitated Calcium Carbonate, Asian Journal of Chemistry, 25, 8638, 2013.

### **NATIONAL AND INTERNATIONAL CONFERENCES**

1. International conference on materials science and technology (ICMST 2012), St Thomas College, Pala, Kottayam, 10-14 June, 2012.
2. 25<sup>th</sup> Kerala Science Congress, 29<sup>th</sup> Jan to 1<sup>st</sup> Feb 2013, Techopark, Trivandrum.
3. National Seminar on Green Materials, 27<sup>th</sup> February – 1<sup>st</sup> March 2013, Bishop Moore College, Mavelikara.
4. International Conference on Recent trends in Advanced Materials (ICRAM-2012), VIT University, Vellore, 20 – 22 February 2012.
5. National Conference on Emerging Trends in Chemistry, Bishop Heber College, Trichy, 11<sup>th</sup> Jan 2012.

#### **Seminar Attended:**

1. National Seminar on Smart Materials for a smarter World (SMSW-2012), St Berchmans College, Changanassery, 27, 28 September 2012.

#### **Awards:**

1. Best paper award : National Conference on Emerging Trends in Chemistry, Bishop Heber College, Trichy, 11<sup>th</sup> Jan 2012.



## Dr. K.S. ANJU

### JOURNALS

- 1) 9,10,19,20-Tetraarylporphycenes: **K. S. Anju**, S. Ramakrishnan, Ajesh P. Thomas, E. Suresh and A. Srinivasan, *Org. Lett.* **2008**, *10*, 5545-5548.
- 2) S. Anas, K. Syam Krishnan, V. Sanjayan Sajisha, **K. S Anju**, K. V. Radhakrishnan, E. Suresh and Cherumuttathu H. Suresh. *New J. Chem.* **2007**, *31*, 237–246.
- 3) Calix[n]metallocenyl[m]phyrins (n = 1, 2 and m = 2, 4): aryl vs. alkyl: S. Ramakrishnan, **K. S. Anju**, Ajesh P. Thomas, E. Suresh and A. Srinivasan, *Chem. Commun.* **2010**, *46*, 4746-4748.
- 4) *meso*-Aryl Triphyrin(2.1.1): **K. S. Anju**, S. Ramakrishnan and A. Srinivasan, *Org. Lett.* **2011**, *13*, 2498-2501
- 5) 5,5-Diaryldipyrromethanes: syntheses and anion binding properties: K.C. Gowri Sreedevi, Ajesh P. Thomas, P. S. Salini, S. Ramakrishnan, **K.S. Anju**, M.G. Derry Holaday, M.L.P. Reddy, C.H. Suresh, A. Srinivasan, *Tet. Lett.* **2011**, *52*, 5995-5999.
- 6) ansa-Ferrocene-Incorporated Calixpyrroles and Calixphyrins: Syntheses and Spectral/Structural Characterization: S. Ramakrishnan, **K. S. Anju**, Ajesh P. Thomas, K. C. Gowri Sreedevi, P. S. Salini, M. G. Derry Holaday, Eringathodi Suresh, and A. Srinivasan, *Organometallics*, **2012**, *31* (11), 4166–4173.
- 7) Syntheses of normal, expanded, strapped and N-confused calixbenzophyrins from a single starting material: P. S. Salini, **K. S. Anju**, M. L. P. Reddy, and A. Srinivasan. *Chem. Commun.*, **2013**, *49*, 5769-5771.

### NATIONAL AND INTERNATIONAL CONFERENCES

1. Syntheses, Characterization and Singlet Oxygen Generation Capacity of *meso*-Tetraaryl porphycene. K. S. Anju, National Workshop on Computer Aided Drug Designing, Sree Narayana College, Chengannur, Kerala, March 2011.

#### **List of publications in Conference Proceedings**

1. Syntheses, Characterization and Singlet Oxygen Generation Capacity of *meso*-Tetraaryl porphycene. K. S. Anju, National Workshop on Computer Aided Drug Designing, Sree Narayana College, Chengannur, Kerala, March 2011.
2. Synthesis of *meso*-Aryl Triphyrin (2.1.1), Tetraphyrin(2.1.2.1), Hexaphyrin(2.1.2.1.2.1) and Octaphyrin(2.1.2.1.2.1.2.1): K. S. Anju and A. Srinivasan. [not complete]

#### **Seminars**

- Attended 5<sup>th</sup> Mid-Year CRSI Symposium in Chemistry held during July 23-24, 2010 at the NIIST, CSIR, Thiruvananthapuram



- Participated in the AICTE-MHRD-TEQIP sponsored faculty development training programme on “Green Environment for Academic Campus Through Microscale Chemistry” organized by the Department of Chemistry, NIT Calicut on 9<sup>th</sup>-13<sup>th</sup> December 2013.
- Participated in the UGC sponsored National seminar on “trends in Combinatorial Chemistry and Cheminformatics” organized by the PG Department of Chemistry, TKM College of Arts and Science, Kollam on 20<sup>th</sup> and 21<sup>st</sup> March 2014.

### **Dr. R. RESHMI**

#### **JOURNALS**

- 1, R Reshmi, Sanjay G, S. Sugunan, Catal Commun. 8, 3 (2007) 393-399.
- 2 R.Reshmi, Sanjay.G, S.Sugunan, Catal.Comm. 7 (2006) 460-465.
- 3 R Reshmi, S. Sugunan, Improved biochemical characteristics of Cross Linked $\beta$  glucosidase on nanoporous silica foams, Journal of Molecular Catalysis B: Enzymatic 85-86, 111 – 118, January 2013.
- 4 R. Reshmi, S. Sugunan, Superior activities of lipase immobilized on pure and hydrophobic clay supports: Characterization and catalytic activity studies, J.Mol.Catal B:Enz., 97 (2013) 36-44.

### **Dr. REMA DEVI B**

#### **JOURNALS**

1. “Domino alkylation/oxa-Michael of 1,3-cyclohexanediones: Steering the C/O-chemoselectivity to reach tetrahydrobenzofuranones” **Devi, R. B.**; Henrot, M.; De Paolis, M.; Maddaluno, J. *Org. Biomol. Chem.*, **2011**, 9, 6509-6512.
2. Chiral 3-aminopyrrolidines as a rigid diamino scaffold for organocatalysis and organometallic chemistry. M. Pouliquen, J. Blanchet, M. De Paolis, **Devi, B. R. J. Rouden, M.-C. Lasne and J. Maddaluno. Tetrahedron: Asymmetry**, **2010**, 1511-1521.
3. Novel Multicomponent Reaction Involving Isoquinoline, Dimethyl Acetylenedicarboxylate and Isatrilidene: A Novel Protocol for the Synthesis of Functionalized Spiro-Oxindoles. Nair, V.; **Devi, B. R. Journal of Chemical Sciences**, **2008**, 179.
4. A Novel Multicomponent Protocol for the Synthesis of Oxazinobenzothiazole Derivatives. Nair, V.; Abhilash, N.; **Devi, B. R.**; Suresh, E. *Tetrahedron Lett.* **2007**, 48, 4391.

5. A Facile Synthesis of Thiazazoles and Thiadiazas-fluorene Derivatives Involving Benzothiazole-DMAD Zwitterion with Arylidene malonitriles and *N*-Tosylimines. Nair, V.; **Devi, B. R.**; Paul, R. R.; Pillai, A. N. *Heterocycles* **2007**, *73*, 249.
6. The Huisgen 1,4-Dipolar Cycloaddition Involving Isoquinoline, Dimethyl butynedioate and Activated Styrenes: A Facile Synthesis of Tetrahydrobenzoquinolizine Derivatives. Nair, V.; **Devi, B. R.**; Varma, R. L. *Tetrahedron Lett.* **2005**, *46*, 3333.
7. Novel Pyridine Catalyzed Reaction of Dimethyl Acetylenedicarboxylate (DMAD) and Arylidene malonitriles: A Stereoselective Synthesis of Highly Substituted Buta-1,3-dienes. Nair, V.; **Devi, B. R.**; Vidya, N.; Abhilash, N.; Menon, R. S. *Tetrahedron Lett.* **2004**, *45*, 3203.
8. Novel One-pot Four-component Reaction of Isocyanides, Dimethyl Acetylenedicarboxylate and Cyclobutene-1,2-diones: Synthesis of Novel Spiroheterocycle. Nair, V.; Menon, R. S.; Deepthi, A.; **Devi, B. R.** *Tetrahedron Lett.* **2004**, *45*, 1337.
9. Pyridine Catalyzed Reaction of Dimethyl Acetylenedicarboxylate with Carbonyl Compounds and *N*-Tosylimines: Efficient Synthesis of 2-Benzoyl fumarates and 1-Azadienes. Nair, V.; Sreekanth, A. R.; Abhilash, N.; Biju, A. T.; **Devi, B. R.**; Menon, R. S.; Rath, N. P.; Sreenivas, R. *Synthesis* **2003**, 1895.

## DEPARTMENT OF COMMERCE

1	Name of the department	Commerce
2	Year of Establishment	1998
3	Names of Programmes / Courses offered	B.Com with computer application
4	Names of Interdisciplinary courses and the departments/units involved	<b>Open course:</b> Fundamentals of Financial Accounting for V semester students of other departments such as Economics, Chemistry, Physics and Physical Education and open courses from other department for V semester B.Com students
5	Annual/ semester/choice based credit system (programme wise)	UG courses are in the choice based credit and semester system ( <b>CBCSS</b> ).
6	Participation of the department in the courses offered by other departments:	The students of Commerce Department attend open courses conducted by the department of Economics, Chemistry, Physics 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	04

		Name of the post	Sanctioned	Filled		
		Professor				
		Associate Professor	01	01		
		Asst. Professor	03	03		
10	Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)					
	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
	Sri.K.M.Radhakrishna kurup	M.Com,LLB	Associate Professor	-	32	Nil
	Smt. Thushara.U.S	M.Com,B.Ed	Assistant Professor	-	2	Nil
	Aarcha.S.S	M.Com,B.Ed	Assistant Professor	-	2	Nil
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)			B.Com computer application – 25:1		
14	Number of academic support staff (technical) and administrative staff; sanctioned and filled			Nil		
15	Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.					

	No. of teachers with PG	3
16	Number of faculty with ongoing projects from a) National funding	Nil
	b) ) International funding agencies and grants received	Nil
17	Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received	U G C funded add-on course
18	Research Centre /facility recognized by the University	Nil
19	Publications per faculty	Nil
20	Areas of consultancy and income generated	Nil
21	Faculty as members in a) National committees b) International Committees c) Editorial Boards	Nil Nil Nil
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	Nil 100%
23	Awards / Recognitions received by faculty and students: Nil	
24	.List of eminent academicians and scientists / visitors to the Department: Nil	
25	Seminars/ Conferences/Workshops organized & the source of funding	a) National: Nil b) International: Nil

26	Student profile programme/course wise					
	<b>Name of the Course/programme</b> (refer question no. 4)	<b>Applications received</b>	<b>Selected</b>	<b>Enrolled</b>		<b>Pass percentage</b>
				<b>*M</b>	<b>*F</b>	
	B.Com(2009-10)	<b>170</b>	<b>38</b>	<b>17</b>	<b>21</b>	26%
	B.Com(2010-11)	Centralized allotment	<b>32</b>	<b>12</b>	<b>20</b>	33%
	B.Com(2011-12)	Centralized allotment	<b>34</b>	<b>20</b>	<b>14</b>	41%
	B.Com(2012-13)	Centralized allotment	<b>32</b>	<b>10</b>	<b>22</b>	83%
	B.Com(2013-14)	Centralized allotment	<b>32</b>	<b>18</b>	<b>14</b>	67%
	B.Com(2014-15)	Centralized allotment	<b>30</b>	<b>9</b>	<b>21</b>	
	M = Male *F = Female					
27	Diversity of Students					
	<b>Name of the Course</b>	<b>% of students from the same state</b>	<b>% of students from other States</b>	<b>% of students from abroad</b>		
	B.Com	100%	Nil	Nil		
28	How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?			Nil		
29	Student progression					
	<b>Student progression</b>		<b>Against % enrolled</b>			
	UG to PG		50%			
	PG to M.Phil.		NA			
	PG to Ph.D.		NA			
	Ph.D. to Post-Doctoral		NA			
	<b>Employed</b>					
	<input type="checkbox"/> <input type="checkbox"/> Campus selection		25% in various sectors			
	<input type="checkbox"/> <input type="checkbox"/> Other than campus recruitment					
	Entrepreneurship/Self-employment		25%			
30	Details of Infrastructural facilities a) Library b) Internet facilities for Staff & Students c) Class rooms with ICT facility d) Laboratories			Yes, General Library Yes Yes Yes		
31	Number of students receiving financial assistance from college, university, government or other			Sixty two in the academic year 2013-14		

	agencies	Sixty one in the academic year 2014-15
32	Details on student enrichment programmes (special lectures / workshops / seminar) with external experts	<p>There are departmental seminars and projects for encouraging students. To enrich the knowledge of students in commerce department remedial coaching, quiz programmes, discussions, debate, workshops, interactive sessions etc where held.</p> <p>To create social consciousness and public relations among the students the commerce students were given admission in N.S.S, Science club, nature club, anti-literacy club etc and also students were send as delegates' to participates in seminars.</p>
33	<p>Teaching methods adopted to improve student learning</p> <p>➤ <b>Group discussions, Assignments and Seminars:</b></p> <p>The students are divided in to various groups, the group leader help other students to learn the topic. The students were encouraged to take seminars in topics related to their syllabus in group wise and also encouraged to attend seminars conducted by other colleges and universities</p> <p>➤ <b>Test papers</b></p> <p>The academic standards of students were frequently tested through internal test, quiz programmes, projects etc. Class tests, assignments, seminars and a model examination are conducted to analyze the academic performance of the students.. Results of the internal exams are published promptly, valued and corrected answer</p>	

	<p>sheets are circulated among the students.</p> <ul style="list-style-type: none"> <li>➤ <b>Projects</b> Projects are assigned to students to develop creative thinking and scientific temper as a part of curriculum activity.</li> <li>➤ <b>SSP &amp; WWS</b> Student support programme and walk with the scholar programme are started during 2014-15 academic year for supporting and moulding students</li> </ul>
34	<p>Participation in Institutional Social Responsibility (ISR) and Extension activities</p> <p>The students of commerce department used to participate in the college level arts activities like music, drama literary competitions etc. They were also engaged in extension services like N.S.S, N.C.C, women cell, science club, sports club, nature club etc.</p>
35.	<p><b>SWOC analysis of the department and Future plans</b></p> <ul style="list-style-type: none"> <li>• <b><u>STRENGTH</u></b> We have efficient faculty members and also have a computer lab, internet facility, adequate water supply, PTA association etc.</li> <li>• <b><u>WEAKNESS</u></b> Unfortunately one of our weakness is lack of adequate infrastructural and transportation facilities.</li> <li>• <b><u>OPPORTUNITIES</u></b> Our future plan is to start PG course in commerce, NET coaching and research programme in commerce. We desire to start P.G course in commerce, for that purpose we require a special commerce library. We have also plans to start M.Phil and research programmes in commerce. We require a fully-fledged modern air conditioned computer lab. We also require a separate building for the commerce faculty alone</li> <li>• <b><u>CHALLENGES</u></b> Our challenge is to overcome the weaknesses</li> </ul>



# DEPARTMENT OF ECONOMICS

1	Name of the department	Economics	
2	Year of Establishment	1994	
3	Names of Programmes / Courses offered	BA Economics	
4	Names of Interdisciplinary courses and the departments/units involved	<p><b>1. Complementary courses:</b> History &amp; Political Science.</p> <p><b>2. Open course:</b> Human Resource Management (open to all other disciplines under UG course).</p>	
5	Annual/ semester/choice based credit system (programme wise)	UG courses are in the choice based credit and semester system ( <b>CBCSS</b> ).	
6	Participation of the department in the courses offered by other departments:	<p>Through <b>open course</b> only.</p> <p>The students of Economics department attend open courses conducted by the department of Physics, Chemistry, Physical Education and Commerce.</p>	
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	02	
		Sanctioned	Filled
		Professors	

		Associate Professors				
		Asst. Professors	02			
10	Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)					
	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
	Sri.Rajeev .S.R	M.A., M.Phil	Assistant Professor	Development Economics	10	Nil
	Smt.Vani Jayadevan	M.A.	Assistant Professor	Theoretical Economics	4	Nil
	Dr.Jitha.S.R (Political Science)	MA,Ph.D	Associate Professor	Public Administration & Kerala Politics	20	2
11	List of senior visiting faculty			Nil		
12	Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty			30%		
13	Student -Teacher Ratio (programme wise)			BA - 20:1		
14	Number of academic support staff (technical) and administrative staff; sanctioned and filled			Nil		
15	Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. No. of teachers with Ph.D No. of teachers with M.Phil			1 1		

	No. of teachers with PG	1
16	Number of faculty with ongoing projects from a) National funding	Nil
	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: List of Publications attached	
20	Areas of consultancy and income generated	Nil
21	Faculty as members in d) National committees e) International Committees f) Editorial Boards	Nil Nil Nil
22	Student projects c) Percentage of students who have done in-house projects including inter departmental/programme d) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies	50 % Nil
23	Awards / Recognitions received by faculty and students: Nil	
24	.List of eminent academicians and scientists / visitors to the Department: Dr.M.R.Biju, Associate professor of post graduate department of Political Science, Sree Narayana College Kollam.	
25	Seminars/ Conferences/Workshops organized & the source of funding	Social science Celebrations Day

26	Student profile programme/course wise					
Name of the Course/programme (refer question no. 4)		Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
BA Economics (2008-09)		200	41	12	29	55
BA Economics (2009-10)		180	36	08	28	50
BA Economics (2010-11)		210	43	17	26	30
BA Economics (2011-12)		200	57	35	22	42
BA Economics (2012-13)		Centralised Allotment	48	20	28	48
M = Male *F = Female						
27	Diversity of Students					
Name of the Course		% of students from the same state	% of students from other States	% of students from abroad		
BA Economics		100%	Nil	Nil		
28	How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?			Nil		
29	Student progression					
Student progression			Against % enrolled			
UG to PG			50%			
PG to M.Phil.			NA			
PG to Ph.D.			NA			
Ph.D. to Post-Doctoral			NA			
Employed						
<input type="checkbox"/> Campus selection						
<input type="checkbox"/> Other than campus recruitment			40% in various sectors			
Entrepreneurship/Self-employment			30%			
30	Details of Infrastructural facilities a) Library b) Internet facilities for Staff & Students c) Class rooms with ICT facility d) Laboratories			Yes, General Library Yes Yes Yes		
31	Number of students receiving financial assistance from college, university, government or other			5		

	agencies	
32	Details on student enrichment programmes (special lectures / workshops / seminar) with external experts	Teaching aids like OHP and LCD used. Students encouraged to take seminars
33	<p>Teaching methods adopted to improve student learning</p> <p>→ <b><u>Seminars &amp; assignments</u></b></p> <p>In each class advanced learners hold study groups of students. They help the average students and slow learners in learning activities. Further they are encouraged to take seminars in advanced topics related to their syllabus. The advanced learners are encouraged to participate in intercollegiate competitions, seminars and workshops conducted by neighbouring Colleges, University or other agencies. Guest Lecturers are appointed to overcome scarcity of faculty. The students are motivated to use college library.</p> <p>→ <b><u>Test Papers</u></b></p> <p>Class tests, assignments, seminars and a model examination are conducted to analyse the academic performance of the students. Student attendance is also graded. Results of the internal exams are published promptly, valued and corrected answer sheets are circulated among the students for perusal, doubts are cleared, and deficiencies are pointed out. Records of all these activities are retained in respective teaching departments.</p> <p>→ <b><u>Projects</u></b></p> <p>Projects are assigned to students as a part of the curriculum in their final semester. The projects are valued by the university and graded in accordance with the viva-voce conducted by the university.</p> <p>→ <b><u>Internet facilities</u></b> are utilized effectively when informatics classes are conducted.</p> <p>→ Use of <b><u>LCD Projectors</u></b> for effective teaching.</p> <p>→ <b><u>Remedial Coaching</u></b> for slow learners.</p>	
34	<p>Participation in Institutional Social Responsibility (ISR) and Extension activities</p> <ul style="list-style-type: none"> <li>• Students actively participate in NSS and other external activity clubs.</li> </ul>	
35	<p>SWOC analysis of the department and Future plans</p> <p><b><u>Strength</u></b></p>	

1. Economics department accommodates the lion share of students on behalf of the total student strength of the college.
2. Qualified and experienced faculty members are the strength of the department.

### **Weakness**

1. Infrastructure available is not sufficient to meet departmental needs.
2. Lack of permanent teaching staff.

### **Opportunities**

1. The college is situated in a rural area. It is an opportunity to teach students hailing from poor background.
2. Majority of students belongs to OBC, SC and ST category.

### **Challenge**

1. Insufficient transportation facility is a major challenge.
2. Students from remote places and from long distances can not reached in the college on time.

### **Research Papers Published in Conference / Seminar Proceedings/Research Works**

1. **Rajeev .S. R.** Engaged in research under the guideship of **Dr. P.K. Varghese**, Associate Professor, Bishop Moore College Mavelikara. The topic of study is Innovative **Schemes under MNREGA.**
2. **Dr.S.R.Jitha**

### **LIST OF PUBLICATIONS**

#### **Books**

1. Jitha, S.R. & Reinhart Philip (2013): *Higher Bureaucracy and Social Change*, Kalpaz Publications, New Delhi. (ISBN 9789351280019)
2. Jitha, S.R. (2007): *Higher Bureaucracy and Development*, Kalpaz Publications,

New Delhi. (ISBN 817835523X)

#### **Article in Edited Volume**

1. Jitha, S.R., *Environmental Rights and Human Rights*, in P.K. Rajagopal (ed.), *Green Governance and Human Rights*, Kalpaz Publications, New Delhi, 2013. (ISBN 10, ISBN 13 8178359790, 9788178359793)
2. Jitha, S.R., *Bureaucracy and Human Rights under Liberalization*, in P. Sukumaran Nair (ed.), *Human Rights in a Changing World*, Kalpaz Publications, New Delhi, 251-63, 2011. (ISBN 978-81-7835-901-4)

#### **Journal Articles**

1. Jitha, S.R. & Reinhart Philip (2012): "Bureaucracy and the Challenges of Development under Globalization," *Pragathi*, Quarterly Research Journal, 6(122), October-December, 35-40. (ISSN 0975-377X)
2. Jitha, S.R. & Reinhart Philip (2012): "Higher Bureaucracy, Liberalization and Social Change," *South Asian Journal of Socio Political Studies*, XII(2), Jan.-June, 53-6. (ISSN 0972-4613)
3. Jitha, S.R., "E-Governance as an Instrument for Good Governance," *UCJPS*, Research Journal, Department of Political Science, University of Kerala, 7(1 & 2), March 2012.
4. Jitha, S.R., "Bureaucracy and Sustainable Development," *Pragati*, Quarterly Research Journal, Vol. 5, Iss. 118, Oct.-Dec. 2011. (ISSN 0975-377X)
5. Jitha, S.R., "Bureaucratic Corruption in a Liberalized Society," *Pragati*, Quarterly Research Journal, Vol. 4, Iss. 111, Jan-March 2010.
6. Jitha, S.R., "Bureaucracy and its Role in the Protection of Human Rights," *UCJPS*, Research Journal, Dept. of Political Science, Vol. 5, No. 1 & 2, March 2010.
7. Jitha, S.R., "Administrative Corruption in India," *EDU VISION*, Inter-disciplinary Research Journal, Vol. 1, No. 1, January-June 2010.
8. Jitha, S.R., "Bureaucracy and Common Man," *Holistic Thought*, Research Journal, Sree Narayana College, Kollam, Vol. VIII, No. 1 & 2, January-December 2009. (ISSN 0975-363)
9. Jitha, S.R., "Indo-US Civilian Nuclear Co-operation Agreement," *Holistic Thought*, Vol. VII, No. 1 & 2, January-December 2008.
10. Jitha, S.R., "Civil Service and Political Leadership," *Vijnana Kairali*, Kerala Basha Institute, Vol. 39, Iss. 3, March 2008.

11. Jitha, S.R., "Role of Higher Bureaucracy and the Development Process in Kerala," *UCJPS*, Vol. 3, No. 1, August 2007.

## **SEMINAR PAPERS/PARTICIPATION**

### **Paper Presentations**

1. Jitha, S.R., "Reinventing the Role of Bureaucracy in the Context of Sustainable Development," in *Sustainable Development: Challenges and Opportunities*, UGC Sponsored National Seminar, Department of Political Science, Sree Narayana College, Chengannur, August 20-21, 2013.
2. Jitha, S.R., "Bureaucratic Governance and Development Under Liberalization," in *Parliamentary Democracy and Good Governance in India*, Institute of Parliamentary Affairs, Government of Kerala PG & Research Department of Political Science, Sree Narayana College, Kollam, January 18, 2013.
3. Jitha, S.R., "Women in Governance", in *Gender Issues and Empowerment of Women* in National Human Rights Commission Sponsored one day National Seminar, Sree Narayana College, Chengannur, December 18, 2012.
4. Jitha, S.R., "Democracy, Development and Social Justice, Role of Bureaucracy" in Institute of Parliamentary Affairs, Government of Kerala and Govt. HSS, Mulakkazha, Chengannur, Alappuzha, November 20, 2012.
5. Jitha, S.R., "Bureaucracy and Corruption," in *The Role of Democracy in Ensuring India's Development*, Institute of Parliamentary Affairs, Government of Kerala and SN Trusts HSS, Cheriyanad, Chengannur, November 1, 2012.
6. Jitha, S.R., "Bureaucracy, Development and Social Change," in *Kerala Economy in Transition: Challenges in Governance*, Three Day National Seminar by C. Achutha Menon Study Centre & Library, Trivandrum, July 28, 2012.
7. Jitha, S.R., "Bureaucracy as a Protector of Human Rights: Theory and Practice," in *Human Rights Violation by the Police: The Kerala Experience*, Institute of Parliamentary Affairs, Government of Kerala and Sree Narayana College, Alathur, 6-7 January 2012.
8. Jitha, S.R., "Bureaucracy, Sustainable Development and the Neo-liberal World Order," in *Globalization, Governance and Development: Experience of South Indian States*, Department of Political Science, Kariavattom Campus, University of Kerala, March 23-25, 2011.



9. Jitha, S.R., "E-Governance as an Instrument for Good Governance," in *Good Governance Initiatives*, UGC Sponsored National Seminar, S.N College, Chempazhanty, December 13-14, 2010.
10. Jitha, S.R., "Bureaucracy and Sustainable Development," in *Environment and Sustainable Development in India: Challenges Ahead*, UGC Sponsored National Seminar, St. Dominic's College, Kanjirapally, November 25, 2010.
11. Jitha, S.R., "Bureaucracy and Common Man," in *Changing Role of Bureaucracy: Transitional to Transformatory*, Sponsored by the Government of Kerala and organized by the Department of Political Science, Govt College, Nattakam, 21-22 January 2010.
12. Jitha, S.R., "Bureaucracy and its Role in the Protection of Human Rights," in UGC Sponsored National Seminar on *Human Rights for a Changing World: Problems and Prospects*, N.S.S College, Pandalam, 10-11 December 2010.
13. Jitha, S.R., "Childs Rights as Human Rights," in *Human Rights Issues*, Human Rights Awareness Forum and National Service Scheme, S.N College, Kollam, 24 November 2006.
14. Jitha, S.R., "Kerala Model of Development," in UGC sponsored seminar on *Environment, Growth and Human Development in Kerala*, Dept. of Political science, S.N College, Cherthala, 27-28 February 2006.
15. Jitha, S.R., "Women Representation in US Employment," *11<sup>th</sup> Annual Workshop of the South India America Studies Network*, Madurai, 2004.
16. Jitha, S.R., "Terrorism a Theoretical Framework," in *Global and National Dimensions of Terrorism*, Dept. of Political science, S.N College, Kollam, 3 May 2004.

#### **As Resource Person**

1. Served as Resource Person in UGC Sponsored National Seminar on *Recent Trends in International Terrorism*, Alphonsa College, Pala, 12-13 January 2010.

#### **SYLLABUS REVISION & COURSE STRUCTURING**

- Member, Restructuring of M.A Public Administration & M.A Political Science Syllabus Revision Committee of University of Kerala, Organised by Kerala University and Higher Education Council, March 28-29, 2012.

## **WORKSHOPS/COURSES**

- “Sensitivity, Awareness and Motivation in Higher Education,” UGC Sponsored One Week Training Programme for College Teachers, Sanadana Dharma College, Alappuzha, Feb. 6-10, 2012.
- “Semesterization of UG Programme under Choice Based Credit and Semester System,” Two Day Orientation Programme for College Teachers, UGC Academic Staff College, University of Kerala, August 16-17, 2010.

## **CHAIR/MEMBER OF BOARDS**

- Member, Board of Exams (Valuation), Fifth Semester B.A Political Science, University of Kerala, 2013.
- Chairman, Board of Exams (Valuation), M.A Public Administration and M.A Political Science, University of Kerala, IDE, 2011.

## **SEMINARS/TRAINING PROGRAMME ORGANIZED**

- *Rights of the Children: An Introspection*, National Human Rights Commission Sponsored One Day Training Programme, Department of Political Science & Human Rights Forum, S.N College, Chengannur, January 09, 2014.
- *Sustainable Development: Challenges and Opportunities*, UGC Sponsored Two Day National Seminar, Department of Political Science, Sree Narayana College, Chengannur in association with Department of Political Science, University of Kerala, August 20-21, 2013.
- *Gender Issues and Empowerment of Women*, National Human Rights Commission Sponsored One Day National Seminar, Department of Political Science & Human Rights Awareness Forum, S.N College, Chengannur, December 18, 2012.

## **RESEARCH SUPERVISION**

Doctoral Thesis of Reinhart Philip, UGC-Junior Research Fellow in Political Science, International Centre for Kerala Studies, Kariavattom, University of Kerala on “Globalisation, State and Commodification of Water: A Study of Jalanidhi Project in Kerala.”

## DEPARTMENT OF ENGLISH

1	Name of the department	English		
2	Year of Establishment	1981		
3	Names of Programmes / Courses offered	Language and Foundation courses in English.		
4	Names of Interdisciplinary courses and the departments/units involved	Nil		
5	Annual/ semester/choice based credit system (programme wise)	Choice Based Credit and Semester System.		
6	Participation of the department in the courses offered by other departments:	The department offers Language and Foundation course classes for the students from the various departments of the college.		
7	Courses in collaboration with other universities, industries, foreign institutions, etc	Nil		
8	Details of courses/programmes discontinued (if any) with reasons:	Nil		
9	Number of Teaching posts	02		
		Name of the post	Sanctioned	Filled
		Professor		
		Associate Professor		
		Asst. Professor	02	01
10	Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)			

	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
	Arun Prasad.R	M.A, B. Ed, UGC NET	Assistant Professor	Poetry and aesthetics	4	Nil
	Nimmi. S	M.A, M.Phil	Guest Lecturer	Translation studies.	1	Nil
11	List of senior visiting faculty		Nil			
12	Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty		50%			
13	Student -Teacher Ratio (programme wise)		45:1			
14	Number of academic support staff (technical) and administrative staff; sanctioned and filled		Nil			
15	Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. No. of teachers with Ph.D No. of teachers with PG		2			
16	Number of faculty with ongoing projects from a) National funding		Nil			
	b) ) International funding agencies and		Nil			

	grants received							
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: List of Publications attached a) Publication per faculty <table border="1" data-bbox="296 622 1334 1863"> <thead> <tr> <th data-bbox="296 622 655 775">Name</th> <th data-bbox="655 622 1074 775">Name of the Academic Journal/ Popular Publications. (Online Journals, Anthologies, etc.)</th> <th data-bbox="1074 622 1334 775">Category</th> </tr> </thead> <tbody> <tr> <td data-bbox="296 775 655 1863">Arun Prasad. R</td> <td data-bbox="655 775 1074 1863">           1.The Art of Being Human (Volume 3), An Anthology of International Poetry, compiled and edited by Daniela Voicu and Brian Wrixon.            Web site. <a href="http://www.Blurb.com/books/4372824-the-art-of-being-human-volume-3-an-anthology-of-in">http:// www. Blurb.com/books/4372824-the-art-of-being-human-volume-3-an-anthology-of-in</a>            2.Lake View Journal of arts and Literature, August 2013, edited by Jose Varghese. Web site.  <a href="http://issuu.com/lijla/docs/">http://issuu.com/lijla/docs/</a>            3.Dusun Quarterly: An e-journal of Asian Arts and Culture (summer 2014), Edited by Martin Bradley.            Web site.  <a href="http://issuu.com/martinbradley/docs">http://issuu.com/martinbradley/docs</a> </td> <td data-bbox="1074 775 1334 1863">           Poetry anthology. ISBN No. 978-1-927682-42-5             Online Journal.             Online Journal.         </td> </tr> </tbody> </table>		Name	Name of the Academic Journal/ Popular Publications. (Online Journals, Anthologies, etc.)	Category	Arun Prasad. R	1.The Art of Being Human (Volume 3), An Anthology of International Poetry, compiled and edited by Daniela Voicu and Brian Wrixon. Web site. <a href="http://www.Blurb.com/books/4372824-the-art-of-being-human-volume-3-an-anthology-of-in">http:// www. Blurb.com/books/4372824-the-art-of-being-human-volume-3-an-anthology-of-in</a> 2.Lake View Journal of arts and Literature, August 2013, edited by Jose Varghese. Web site. <a href="http://issuu.com/lijla/docs/">http://issuu.com/lijla/docs/</a> 3.Dusun Quarterly: An e-journal of Asian Arts and Culture (summer 2014), Edited by Martin Bradley. Web site. <a href="http://issuu.com/martinbradley/docs">http://issuu.com/martinbradley/docs</a>	Poetry anthology. ISBN No. 978-1-927682-42-5  Online Journal.  Online Journal.
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20	Areas of consultancy and income generated							
	<table border="1" data-bbox="296 1924 1347 2020"> <thead> <tr> <th data-bbox="296 1924 528 2020">NAME</th> <th data-bbox="528 1924 1106 2020">NAME OF THE INSTITUTION &amp; TYPE OF CONSULTANCY.</th> <th data-bbox="1106 1924 1347 2020">PERIOD.</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	NAME	NAME OF THE INSTITUTION & TYPE OF CONSULTANCY.	PERIOD.				
NAME	NAME OF THE INSTITUTION & TYPE OF CONSULTANCY.	PERIOD.						

	Arun Prasad. R	Academic counselor, IGNOU. (IGNOU Study Centre. S.N College, Kollam)	2011 onwards.		
	Nimmy. S	Visiting faculty, School of Indian Legal Thought, Mahathma Gandhi University, Kottayam.	2014 onwards.		
21	Seminars and Paper presentations <b>NAME.</b>  Arun Prasad. R		<b>SEMINARS ATTENDED &amp; PAPER PRESENTATIONS.</b>  1.Presented a paper entitled, ' <i>Unending Cyber Horizons and New Indian Women: A Study on Lurking Pitfalls and Solutions</i> ', at the UGC sponsored National Seminar on ' <i>Women and Cyber World- imminent Threats and Innovation</i> ', held at Sree Narayana College, chengannur on February 9 <sup>th</sup> and 10 <sup>th</sup> , 2015.  2.Attended the Government of Kerala sponsored national seminar on ' <i>Inter-disciplinary Cross roads: Perspectives in Cultural Studies</i> ', held on 3 <sup>rd</sup> and 4 <sup>th</sup> January 2013 at Government Victoria College, Palakkad.  Attended the two day seminar on ' <i>Human Rights Violations by the Police- The Kerala Experience</i> ', held on 6 <sup>th</sup> and 7 <sup>th</sup> January 2012 at Sree Narayana College, Alathur.		
24	.List of eminent academicians and scientists / visitors to the Department:				
	No	Academicians and scientists / visitors	Designation & Address	Date of Visit	Occasion
	1	Dr. Sudhersana Babu	Formerly of the Department	25.03.2015	Chief guest and resource person

			of Malayalam, Devaswom Board College, sasthanmotta		for Samskriti: A Day of Literary Feast, organized by Department of English and Literary and Debating Club.
	2	Smt. Indira Asok	Contemporary poet and Head, Department of English, T.K.M.M College, Nangiarkulang ara.	“	“
25	Details of Infrastructural facilities a) Library b) Internet facilities for Staff & Students c) Class rooms with ICT facility d) Laboratories			Yes, General Library Yes Yes Yes	
26	Details on student enrichment programmes (special lectures / workshops / seminar) with external experts				
		<b>Date</b>	<b>Title of the programme.</b>	<b>Name of the external experts.</b>	
		25.03.2015	<i>Samskriti: A Day of Literary Feast.</i>	<b>1.Dr. Sudersana Babu</b> <i>(Formerly of the Department of Malayalam, Devaswom Board College, Sasthanmotta, Kollam)</i> <b>2.Smt. Indira Asok.</b> <i>(Contemporary poet and Head, Department of English, T.K.M.M College, Nangiarkulangara)</i>	
27	Teaching methods adopted to improve student learning				
	<p>The following techniques and methods had been employed by the faculty members of the department to improve the student learning-</p> <ul style="list-style-type: none"> <li>• Providing individual attention to students.</li> <li>• In spite of the tight schedules of the semester system, activities to facilitate English communication skills are being incorporated into class rooms.</li> <li>• Supply of additional information to add to the existing knowledge levels.</li> <li>• Assignments to provoke the divergent thinking abilities of students.</li> </ul>				

	<ul style="list-style-type: none"> <li>• A pre scheduled and planned conduct of test papers.</li> <li>• Conduct of internal examinations and evaluations.</li> <li>• Retests for poor scores and absentees.</li> <li>• Maintenance of a healthy teacher student relationship.</li> <li>• Provides additional care to slow learners through SSP (<i>Scholar Support Programme</i>, a new initiative of the Department of Higher Education, Government of Kerala).</li> </ul>
28	<p>SWOC analysis of the department and Future plans</p> <p><b><u>Strength</u></b></p> <ol style="list-style-type: none"> <li>1.A well coordinated team effort by the faculty members.</li> <li>2.Timely preparation and execution of teaching plans.</li> <li>3.Creatively inspired faculty committed to nurture the imaginative skills of our students.</li> <li>4.An effective tying up with the Literary and Debating club of the college to organize humble yet thought provoking activities stirring the minds of the students.</li> </ol> <p><b><u>Weakness</u></b></p> <ol style="list-style-type: none"> <li>1.The department does not offer a degree or a post graduate programme in English language and Literature.</li> <li>2.Vacant permanent faculty post.</li> </ol> <p><b><u>Opportunities</u></b></p> <ol style="list-style-type: none"> <li>1.Commencement of a U.G programme in English Language and Literature would help in diversifying the activities of the department.</li> <li>2.Setting up of a language lab so as to boost the communicative skills of our students.</li> <li>3.Possibilities of starting short term courses in English language like Business English, Editing, Creative writing, etc.</li> </ol> <p><b><u>Threats</u></b></p> <ol style="list-style-type: none"> <li>1.Lack of large lecture halls equipped with facilities for ICT assisted instruction.</li> <li>2.Lack of proper conveyance facilities pulls back the students from attending extra or remedial coaching classes conducted especially after the regular college hours or during Saturdays.</li> </ol> <p><b><u>Future plans</u></b></p> <ol style="list-style-type: none"> <li>1.The further elaboration of the Department of English so as to offer U.G and P.G courses in English Language and Literature can bring a face lift to the functioning of the entire college.</li> <li>2.A strong tie up with the Literary and Debating club to conduct vibrant, creative and socially committed programmes.</li> <li>3.The department plans to conduct short term programmes to inculcate essential life skills and office skills like English communication skills, office etiquettes, inter personal communicative skills, etc.</li> </ol>



## DEPARTMENT OF HINDI

1	Name of the department	Hindi		
2	Year of Establishment	1981		
3	Names of Programmes / Courses offered	Additional Language for B.A/B.Sc./B.Com.		
4	Names of Interdisciplinary courses and the departments/units involved	Nil		
5	Annual/ semester/choice based credit system (programme wise)	Choice Based Credit and Semester System.		
6	Participation of the department in the courses offered by other departments:	Additional Language Hindi for all U.G Programme		
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	01		
		Name of the post	Sanctioned	Filled
		Professor		
		Associate Professor	01	01
		Asst. Professor		
10	Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)			

	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
	Smt. K.Geetha	M.A ,B.Ed, MPhil	Associate Professor	Novel	28	Nil
11	List of senior visiting faculty		Nil			
12	Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty		NA			
13	Student -Teacher Ratio (programme wise)		40:1			
14	Number of academic support staff (technical) and administrative staff; sanctioned and filled		Nil			
15	Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. No. of teachers with Ph.D No. of teachers with PG		1			
16	Number of faculty with ongoing projects from a) National funding		Nil			
	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: List of Publications attached  b) Publication per faculty	Nil
20	Details of Infrastructural facilities a) Library b) Internet facilities for Staff & Students c) Class rooms with ICT facility d) Laboratories	Yes, General Library Yes Yes Yes
21	Details on student enrichment programmes (special lectures / workshops / seminar) with external experts  <ul style="list-style-type: none"> <li>Teaching aids like OHP and LCD used.</li> <li>Students encouraged to take seminars</li> </ul>	
27	Teaching methods adopted to improve student learning <ul style="list-style-type: none"> <li>Providing individual attention to students.</li> <li>Supply of additional information to add to the existing knowledge levels.</li> <li>Assignments to provoke the divergent thinking abilities of students.</li> </ul>	
28	SWOC analysis of the department and Future plans  <p><b><u>Strength</u></b></p> <ul style="list-style-type: none"> <li>Competent faculty members.</li> <li>Effective execution of teaching plans.</li> <li>Good student-teacher relationship</li> </ul> <p><b><u>Weakness</u></b></p> <ul style="list-style-type: none"> <li>The department does not offer a degree or a post graduate programme.</li> </ul> <p><b><u>Opportunities</u></b></p> <ul style="list-style-type: none"> <li>Setting up of a language lab so as to boost the communicative skills of our students.</li> <li>Possibilities of starting short term courses etc.</li> </ul> <p><b><u>Threats</u></b></p> <ul style="list-style-type: none"> <li>Lack of large lecture halls equipped with facilities for ICT assisted instruction.</li> <li>Lack of proper conveyance facilities pulls back the students from attending extra or remedial coaching classes conducted especially after the regular college hours or during Saturdays.</li> </ul> <p><b><u>Future plans</u></b></p> <ul style="list-style-type: none"> <li>To have UG and PG programmes.</li> </ul>	

## DEPARTMENT OF MALAYALAM

1	Name of the department	Malayalam		
2	Year of Establishment	1981		
3	Names of Programmes / Courses offered	Additional Language for B.A/B.Sc./B.Com.		
4	Names of Interdisciplinary courses and the departments/units involved	Nil		
5	Annual/ semester/choice based credit system (programme wise)	Choice Based Credit and Semester System.		
6	Participation of the department in the courses offered by other departments:	Additional Language Hindi for all U.G Programme		
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	01		
		Name of the post	Sanctioned	Filled
		Professor		
		Associate Professor	01	01
		Asst. Professor		
10	Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)			

	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
	Smt. K.V.Lekha	M.A ,B.Ed, MPhil	Associate Professor	Lyrics (Oru vilapam)	15	Nil
11	List of senior visiting faculty		Nil			
12	Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty		NA			
13	Student -Teacher Ratio (programme wise)		75:1			
14	Number of academic support staff (technical) and administrative staff; sanctioned and filled		Nil			
15	Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. No. of teachers with Ph.D No. of teachers with PG		1			
16	Number of faculty with ongoing projects from a) National funding		Nil			
	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: List of Publications attached  c) Publication per faculty	Nil
20	Details of Infrastructural facilities a) Library b) Internet facilities for Staff & Students c) Class rooms with ICT facility d) Laboratories	Yes, General Library Yes Yes Yes
21	Details on student enrichment programmes (special lectures / workshops / seminar) with external experts  <ul style="list-style-type: none"> <li>Teaching aids like OHP and LCD used.</li> <li>Students encouraged to take seminars</li> </ul>	
27	Teaching methods adopted to improve student learning <ul style="list-style-type: none"> <li>Providing individual attention to students.</li> <li>Supply of additional information to add to the existing knowledge levels.</li> <li>Assignments to provoke the divergent thinking abilities of students.</li> </ul>	
28	<p>SWOC analysis of the department and Future plans  <b>SWOC analysis of the department and Future plans :</b>  <u><b>Strength</b></u></p> <ul style="list-style-type: none"> <li>Competent faculty members.</li> <li>Effective execution of teaching plans.</li> <li>Good student-teacher relationship</li> </ul> <p><u><b>Weakness</b></u></p> <ul style="list-style-type: none"> <li>The department does not offer a degree or a post graduate programme.</li> </ul> <p><u><b>Opportunities</b></u></p> <ul style="list-style-type: none"> <li>Setting up of a language lab so as to boost the communicative skills of our students.</li> <li>Possibilities of starting short term courses etc.</li> </ul> <p><u><b>Threats</b></u></p> <ul style="list-style-type: none"> <li>Lack of large lecture halls equipped with facilities for ICT assisted instruction.</li> <li>Lack of proper conveyance facilities pulls back the students from attending extra or remedial coaching classes conducted especially after the regular college hours or during Saturdays.</li> </ul> <p><u><b>Future plans</b></u></p> <ul style="list-style-type: none"> <li>To be a U.G Department.</li> <li>Initiate collaborative work with reputed institutions.</li> <li>To achieve cent percentage result.</li> </ul>	

## DEPARTMENT OF MATHEMATICS

1	Name of the department	Mathematics		
2	Year of Establishment	2014		
3	Names of Programmes / Courses offered	B.Sc. Mathematics.		
4	Names of Interdisciplinary courses and the departments/units involved	<p><b>1. Complementary courses:</b> Physics and Statistics. Mathematics Department offers complementary course for Physics and Chemistry</p> <p><b>2. Open course:</b> Business Mathematics for the student of V Semester students of the college.</p>		
5	Annual/ semester/choice based credit system (programme wise)	UG courses are in the choice based credit and semester system (CBCS).		
6	Participation of the department in the courses offered by other departments:	Complementary courses Physics and Chemistry are offered by the department of Physics and Chemistry respectively.		
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	01		
		Name of the post	Sanctioned	Filled
		Professor		
		Associate Professor	01	01
		Asst.		

		Professor				
10	Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)					
	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
	Smt. K.Mini	M.Sc ,B.Ed	Associate Professor	Real Analysis	27	Nil
	Smt. Sherin	M.Sc ,B.Ed	Guest Lecturer	Statistics	1	Nil
11	List of senior visiting faculty		Nil			
12	Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty		50%			
13	Student -Teacher Ratio (programme wise)		9:1			
14	Number of academic support staff (technical) and administrative staff; sanctioned and filled		Nil			
15	Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. No. of teachers with PG		2			
16	Number of faculty with ongoing projects from a) National funding		Nil			
	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: List of Publications attached d) Publication per faculty	Nil
20	Details of Infrastructural facilities a) Library b) Internet facilities for Staff & Students c) Class rooms with ICT facility d) Laboratories	Yes, General Library Yes Yes Yes
21	Details on student enrichment programmes (special lectures / workshops / seminar) with external experts  <ul style="list-style-type: none"> <li>Teaching aids like OHP and LCD used.</li> <li>Students encouraged to take seminars</li> </ul>	
27	Teaching methods adopted to improve student learning  <ul style="list-style-type: none"> <li>Providing individual attention to students.</li> <li>Supply of additional information to add to the existing knowledge levels.</li> <li>Assignments to provoke the divergent thinking abilities of students.</li> <li>Resource persons from reputed academic institution are invited to give Guest Lecture on the advanced topics for the benefit of the students.</li> <li>Class tests, assignments, seminars and a model examination are conducted to analyse the academic performance of the students.</li> </ul>	
28	SWOC analysis of the department and Future plans <b>SWOC analysis of the department and Future plans :</b>  <u><b>Strength</b></u> <ul style="list-style-type: none"> <li>Competent faculty members.</li> <li>Effective execution of teaching plans.</li> <li>Good student-teacher relationship</li> </ul> <u><b>Weakness</b></u> <ul style="list-style-type: none"> <li>Insufficient infrastructure.</li> <li>Lack of sufficient permanent teaching faculty.</li> </ul>	

**Opportunities**

- To improve the infrastructure by getting funds from the state, central governments and other funding agencies.

**Threats**

- Lack of large lecture halls equipped with facilities for ICT assisted instruction.
- Lack of proper conveyance facilities pulls back the students from attending extra or remedial coaching classes conducted especially after the regular college hours or during Saturdays.

**Future plans**

- To be a Post Graduate Department.
- Initiate collaborative work with reputed institutions.
- To achieve cent percentage result.

## DEPARTMENT OF PHYSICS

1	Name of the department	Physics
2	Year of Establishment	2001
3	Names of Programmes / Courses offered	B.Sc. & M.Sc. Physics
4	Names of Interdisciplinary courses and the departments/units involved	<p><b>Complementary courses</b> in Physics by our department for students of B.Sc. Chemistry and B.Sc. Mathematics.</p> <p><b>Open course:</b> Energy Physics for V semester students of other departments and open courses from other department for V semester Physics students.</p>
5	Annual/ semester/choice based credit system (programme wise)	Both UG and PG courses are in the choice based credit and semester system (CBCS)
6	Participation of the department in the courses offered by other departments:	<p>Complementary courses in Mathematics and Chemistry are offered by the department of Mathematics and Chemistry respectively.</p> <p>The students of physics department attend open courses conducted by the department of Economics, Chemistry, Physical Education and Commerce.</p>
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	04				
		Name of the post	Sanctioned	Filled		
		Professor				
		Associate Professor				
		Asst. Professor	04	04		
10	Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)					
	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
	Dr.R.Raveendran	M.Sc., Ph.D., PDF	Principal	Crystal Growth & Nanoscience	2 5	11 (5/6)
	Dr.K.Sreelatha	M.Sc., M.Ed., Ph.D., PGDCA	Assistant Professor	Conducting Polymers	1 1	Nil
	Dr.Tintu.R	M.Sc., Ph.D., PDF	Assistant Professor	Photonics	3	Nil
	Ms.AmruthaSasidharan	M.Sc.	Assistant Professor	Astrophysics	3	Nil
	Mr.Shinoj John Thomas	M.Sc.	Guest Lecturer	Electronics	2	Nil
	Ms.Sterin Thomas Pallathu	M.Sc. B.Ed.	Guest Lecturer	General Physics	2	Nil
	Ms.Anu S Pillai	M.Sc.	Guest Lecturer	Astrophysics	1	Nil
	Ms.Greeshma K G	M.Sc.	Guest	Electronics	1	Nil

			Lecturer			
	Ms.Leena Mathew	M.Sc.	Guest Lecturer	Electronics	1	Nil
11	List of senior visiting faculty			Nil		
12	Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty			50%		
13	Student -Teacher Ratio (programme wise)			M.Sc. Physics 3:1 B.Sc. Physics 7:1		
14	Number of academic support staff (technical) and administrative staff; sanctioned and filled			2		
15	Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG. No. of teachers with Ph.D No. of teachers with PG			3 6		
16	Number of faculty with ongoing projects from a) National funding			2		
	<ul style="list-style-type: none"> <li>• Dr.R.Raveedran, has successfully completed a UGC funded project entitled “Protonic conductivity of tetravalent metal-acid, salt in the nano form” with financial aid of Rs. 487265/- (Order No. F34-8/2008 (SR) dated 29-12-2008)</li> <li>• Dr.R.Raveedran, has successfully completed two years of the ongoing project on “Polymer-metaloxide nanocomposite for solarcells”, with financial aid of Rs.15,25,000/- from KSCSTE. (Order No. 619/2012/KSCSTE dated 17/09/2012)</li> <li>• Dr.K.Sreelatha has a minor project entitled “Development of Conducting Polymer Blend Complex Films for Optoelectronic Device Applications” accepted by UGC.(Lr.No.F.MRP/12th Plan/14-15/KLKE004 dtd. 10<sup>th</sup> December 2014)</li> </ul>					
	b) ) International funding agencies and grants received			Nil		
17	Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received			Dr.K.Sreelatha has a minor project entitled “Development		

		of Conducting Polymer Blend Complex Films for Optoelectronic Device Applications” accepted by UGC.(Lr. No.F.MRP/12th Plan/14-15/KLKE004 dtd. 10th December 2014)																		
18	Research Centre /facility recognized by the University	Nil																		
19	<p>Publications: List of Publications attached</p> <p>e) Publication per faculty</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Journal</th> <th>Seminar</th> </tr> </thead> <tbody> <tr> <td>Dr.R.Raveendran</td> <td>20</td> <td>24</td> </tr> <tr> <td>Dr.K.Sreelatha</td> <td>6</td> <td>10</td> </tr> <tr> <td>Dr.Tintu.R</td> <td>13</td> <td>11</td> </tr> <tr> <td>Ms.Amrutha Sasidharan</td> <td>-</td> <td>1</td> </tr> <tr> <td>Dr.P.R.Rejikumar (Former Head)</td> <td>3</td> <td>4</td> </tr> </tbody> </table> <p>Books Edited</p> <ul style="list-style-type: none"> <li>• Dr.R.Raveendran was the editor of the proceedings of three UGC sponsored National Seminars NSNANO 2009, NSNANO 2010, NSNANO 2011 organized by the Department of Physics, at Sree Narayana College, Kollam in 2009, 2010 and 2011 respectively.</li> <li>• Dr.K.Sreelatha was the editor of a the proceedings of the KSCSTE sponsored National Seminar organized by the Department of Physics, at Sree Narayana college, Chengannur in March 2015.</li> </ul>		Name	Journal	Seminar	Dr.R.Raveendran	20	24	Dr.K.Sreelatha	6	10	Dr.Tintu.R	13	11	Ms.Amrutha Sasidharan	-	1	Dr.P.R.Rejikumar (Former Head)	3	4
Name	Journal	Seminar																		
Dr.R.Raveendran	20	24																		
Dr.K.Sreelatha	6	10																		
Dr.Tintu.R	13	11																		
Ms.Amrutha Sasidharan	-	1																		
Dr.P.R.Rejikumar (Former Head)	3	4																		
20	Areas of consultancy and income generated	Nil																		
21	<p>Faculty as members in</p> <p>g) National committees</p> <p>h) International Committees</p>	Dr.R.Raveendran is a Member Indian Association of Crystal																		

	i) Editorial Boards	<p>Growth.</p> <p>Dr.R.Raveendran is a</p> <p>a) Member of New York Academy of Sciences</p> <p>b) Life member of Association of Material Chemistry</p> <p>Nil</p>			
22	<p>Student projects</p> <p>e) Percentage of students who have done in-house projects including inter departmental/programme</p> <p>f) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies</p>	<p>B.Sc. 100%</p> <p>M.Sc. 100%</p>			
23	<p>Awards / Recognitions received by faculty and students:</p> <ul style="list-style-type: none"> <li>• Dr.R.Raveendran is a U.G.C post-doctoral research award winner (2004-2007)</li> <li>• Dr.K.Sreelatha was awarded Ph.D in the year 2014</li> <li>• Dr.Tintu.R. is a PDF award winner</li> <li>• Dr.Rejikumar.P.R (Former Head {2010-2014} of the department) was awarded Ph.D in the year 2012</li> </ul>				
24	.List of eminent academicians and scientists / visitors to the Department:				
	No	Academicians and scientists / visitors	Designation & Address	Date of Visit	Occasion
	1	Prof.K.P.Mathew	Former HOD of Physics, Sree Narayana College Chengannur	13/02/2012	Inauguration the Physics Association
	2	Dr. Premlet B	Associate Professor, TKM College of Engineering, Kollam	25/02/2013	Delivered a talk on <i>Basics of Quantum Physics</i>
	3	Dr. Tony Teddy Fernadus	Senior Post-	08/10/2013	Delivered a talk

			Doctoral Fellow, Institute of Optics, CSIC, MADRID, SPAIN		on <i>Light Matter interaction with Lasers</i>
	4	Dr.(Prof.)N.V.Unnikrishnan	School of Pure and Applied Physics, MG University, Kottayam	24/03/2014	Delivered a talk on <i>Evolution of Lasers-53 years of Coherence</i>
	5	Prof.G.K.Sasidharan	Astrophysicist & Former Vice-Chancellor, Calicut University	23/02/2015	Inaugurated the National Science Day Celebrations and delivered a science lecture on <i>'Entanglement between Quantum Physics and Vedic Philosophy'</i>
	6	Dr.Kuruvilla Joseph	Senior professor and Head, Department of Chemistry, Indian Institute of Space Science and Technology, Thiruvananthapuram	20/03/2015	Inaugurated the one day National seminar on 'New Frontiers in Nanotechnology and Material Science' and handled a technical session on 'Polymer Nanocomposites for Medical and Space Applications'
	7	Dr.V.Biju	Head-in-Charge & Assistant Professor, Dept of Physics, University of Kerala		Delivered the plenary talk on 'X-ray Diffraction Analysis of Nanocrystalline Materials'
25	Seminars/ Conferences/Workshops organized & the source of funding National		"New Frontiers in Nanotechnology and Material Science"-on 20/03/2015 Kerala State Council for Science Technology and Environment (KSCSTE)		



	a) International:	Nil				
26	Student profile programme/course wise					
	Name of the Course/programme (refer question no. 4)	Application received	Selected	Enrolled		Pass percentage
				*M	*F	
	B.Sc. Physics(2010-11)	20	7	4	3	42.80
	B.Sc. Physics(2011-12)	100	28	12	16	61.90
	B.Sc. Physics(2012-13)	Centralised Allotment	20	15	5	72.00
	B.Sc. Physics(2013-14)	Centralised Allotment	21	9	12	38.10
	B.Sc. Physics(2014-15)	Centralised Allotment	20	11	9	Result Awaiting
	*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. Physics	100%	Nil	Nil		
	M.Sc. Physics	100%	Nil	Nil		
28	How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?			Nil		
29	Student progression					
	Student progression		Against % enrolled			
	UG to PG		50%			
	PG to M.Phil.		NA			
	PG to Ph.D.		NA			
	Ph.D. to Post-Doctoral		NA			
	Employed					
	<input type="checkbox"/> Campus selection					
	<input type="checkbox"/> Other than campus recruitment		40% in various sectors			
	Entrepreneurship/Self-employment		30%			
30	Details of Infrastructural facilities					
	a) Library			Yes, General Library		

	b) Internet facilities for Staff & Students c) Class rooms with ICT facility d) Laboratories	Yes Yes Yes
31	Number of students receiving financial assistance from college, university, government or other agencies	64
32	Details on student enrichment programmes (special lectures / workshops / seminar) with external experts	Teaching aids like OHP and LCD used. Students encouraged to take seminars
33	<p>Teaching methods adopted to improve student learning</p> <p><input type="checkbox"/> <b>Group learning , Seminars &amp; assignments</b></p> <p>In each class advanced learners hold study groups of students. They help the average students and slow learners in learning activities. Further they are encouraged to take seminars in advanced topics related to their syllabus. The advanced learners are encouraged to participate in intercollegiate competitions, seminars and workshops conducted by neighbouring Colleges, University or other agencies. Resource persons from reputed academic institution are invited to give Guest Lecture on the advanced topics for the benefit of the students. The students are motivated to use college library and e-learning facilities.</p> <p><input type="checkbox"/> <b>Test Papers</b></p> <p>Class tests, assignments, seminars and a model examination are conducted to analyse the academic performance of the students. Student attendance is also graded. Results of the internal exams are published promptly, valued and corrected answer sheets are circulated among the students for perusal, doubts are cleared, and deficiencies are pointed out. Records of all these activities are retained in respective teaching departments.</p> <p><input type="checkbox"/> <b>Projects</b></p> <p>Projects are assigned to students to develop creative thinking and scientific temper as a part of curriculum activity.</p> <p><input type="checkbox"/> <b>Internet facilities are utilized effectively.</b></p> <p><input type="checkbox"/> <b>Use of LCD Projectors for effective teaching.</b></p> <p><input type="checkbox"/> <b>Remedial Coaching for slow learners.</b></p>	

34	<p>Participation in Institutional Social Responsibility (ISR) and Extension activities</p> <ul style="list-style-type: none"> <li>• Students actively participate in NSS, University Youth festival, various club activities of the college.</li> <li>• Mr.Vijayan, Lab Assistant of the Department is the president of Kottarakkara Taluk Cashew and Rubber Growers Processing and Marketing Cooperative Society Ltd.No.1170 Kadaikode, Kollam District, Kerala.</li> </ul>
35	<p>SWOC analysis of the department and Future plans</p> <p><b>Strength</b></p> <ul style="list-style-type: none"> <li>• Qualified and competent faculty.</li> <li>• Well-equipped UG and PG laboratories.</li> <li>• Sufficient computers with internet facility.</li> <li>• Peer teaching in all classes.</li> </ul> <p><b>Weakness</b></p> <ul style="list-style-type: none"> <li>• Very low mark profile of students in the entry level.</li> <li>• Insufficient infrastructure.</li> <li>• Lack of sufficient permanent teaching faculty.</li> <li>• Lack of smart class rooms.</li> <li>• No research facility.</li> </ul> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• To take steps to develop as a research department.</li> <li>• To improve the infrastructure by getting funds from the state, central governments and other funding agencies.</li> <li>• To inculcate the spirit of pursuing research in pure science among the rural youth and bring them to the main stream of Nation building.</li> </ul> <p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Lack of proper infrastructure may lead to migration of students to other institutes.</li> </ul> <p><b>Future plans</b></p> <ul style="list-style-type: none"> <li>• To be a Research Department.</li> <li>• Develop interdisciplinary research.</li> <li>• Initiate collaborative work with reputed institutions.</li> <li>• To achieve cent percentage result.</li> </ul>

## Publications

**Dr.R.Raveendran**

### Research Papers published.

1. **R.Raveendran** &J.R. Pandya, “*Quench Hardness Anisotropy of Indented Potassium Chloride Cleavages*”, Indian Journal of Pure & Applied Physics.32, 906-908, (1994).
2. **R. Raveendran** & J.R. Pandya, “*Anisotropy of Indented Sodium Chloride Cleavages*”,Turkish Journal of Physics.19, No7 (1995).
3. **R. Raveendran** & J.R. Pandya, “*Application of modified Kick’s Law in Anisotropic studies of quenched Potassium Chloride Cleavages*”,Materials Chemistry& Physics.45, 1-5(1996).
4. **R. Raveendran** &J.R. Pandya, “*Mechanical Response of Indented potassium Chloride Cleavages*”, Journal of M. S. University of Baroda. XLII, 3(1995).
5. **R.Raveendran** &J.R. Pandya, “*Quench Hardness Anisotropy of Indented Sodium Chloride Cleavages*”,Iranian Journal of Physics. 20, No3, (1996).
6. **R.Raveendran** & J.R. Pandya, “*Anisotropic Studies of Quenched and Indented potassium Bromide Cleavages*”,Bulletin of Material Science. 19, No6, (1996).
7. **R. Raveendran** & J.R. Pandya, “*Quench Hardness Anisotropy of Indented Potassium Bromide Cleavages*”, Turkish Journal of Physics. 21, 731(1997).
8. G.Sajeev Kumar, **R. Raveendran**, “*Mechanical Response of Alkali halides*”,Proceedings of the twelfth Kerala Science Congress. 140-141, (2000).
9. G.Sajeev Kumar, **R. Raveendran**, A.V. Vaidyan and B. S. Rema Devi, “*Growth features of Ammonium Hydrogen d-Tartrate single crystals*”,Bull. Mater.Sci. 27,323(2004).
10. G.Sajeev Kumar, **R. Raveendran**, A.V. Vaidyan, “*Hardness Anisotropy of Indented Ammonium Hydrogen d- Tartrate Single crystals*”,Proceedings of the 17thKerala Science Congress. 315, (2005).
11. **R. Raveendran**,B. Beena, A.V. Vaidyan and G.Sajeev Kumar, “*Dielectric Behavior and a.c Conductivity of Nano Crystalline Manganese Sulphide*”,Proceedings of the international symposium on advanced materials and processing-ISAMAP-2k4, vol.II, 1539, Dec. (2004).
12. **R. Raveendran**, B. Beena,,A.V. Vaidyan. “*Transport property of Nano Crystalline Manganese Sulphide*”, Proceedings of the3rdNational Conference on Thermophysical Properties-3<sup>rd</sup> NCTP-2005.193, (2005). (To be published in The Indian Journal of Pure & Applied Physics-New Delhi).
13. **R. Raveendran**, B. Beena, A.V. Vaidyan, “*Dielectric Studies of Cerium Molybdate,a Novel Ion-Exchanger*”, Proceedings of the National Conference on Condensed Matter and Material Physics-CMMPO6, Held at M. S. University of Baroda, Gujarat from Jan19-21,2006.
14. M. Abdul Salim and **R. Raveendran**, “*Growth and Characterization of Pure and Doped Barium Oxalate Crystals Grown in Silica Gel*”,Proceedings of the National Conference on Preparation and Characterization of Crystalline Materials, PADIKA –2006 Held in The Department of Physics, S. T Hindu College, Nagercoil, Tamil

- Nadu, from Jan19-21,2006.
15. Remadevi B.S., Nisha J. Tharayil, **Raveendran R** and Ushakumari. L, “*Preparation of Fine Particles of Zn-Mn Sulphide Composite by Chemical Co-precipitation Method and It’s Characterization*”, Proceedings of the 18<sup>th</sup> Kerala Science Congress. 579,(2006).
  16. Nisha J. Tharayil, Remadevi B.S., **Raveendran R** and Vaidyan A.V, “*Chemical Synthesis of Nanosized Zinc Oxide and its Characterization*”, Proceedings of the 18<sup>th</sup>Kerala Science Congress. 581, (2006).
  17. Remadevi B.S., Nisha J. Tharayil, **Raveendran R** and Vaidyan A.V. “*Characterization of Nano Sized Copper Oxide Prepared by Chemical Co-Precipitation Method*”, Proceedings of the National Seminar on *ADVANCES IN MATERIALS SCIENCE.NSAMS-2006*. Held in The Department of Physics, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu. From March 27-28, 2006.
  18. M. Abdul Salim &**R. Raveendran**, “*Comparative study on Growth & Characterization of pure and doped barium oxalate crystals grown in Silica Gel*”,Proceedings of the National Seminar on *ADVANCES IN MATERIALS SCIENCE.NSAMS-2006*. Held in The Department of Physics, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu. From March 27-28, 2006.
  19. Nisha J Tharayil, **R.Raveendran** & A.V. Vaidyan, “*Chemical Synthesis of Nanosized Zinc Oxide and Its Characterisation*”, Proceedings of the International Conference on Nanoscience and Nanotechnology (ICNSNT-2006) From August 26-28, 2006.Held in The Centre for Nanoscience and Nanotechnology,University of Madras , Chennai.
  20. B.S. Remadevi, **R.Raveendran** & A.V. Vaidyan, “*Synthesis and Characterization of Mn<sup>2+</sup> Doped ZnO Nano Particles*”, Proceedings of the International Conference on Nanoscience and Nanotechnology (ICNSNT-2006) From August 26-28, 2006. Held in The Centre for Nanoscience and Nanotechnology, University of Madras, Chennai.
  21. Dedhila Devadathan, **R.Raveendran** & A.V. Vaidyan. “*Synthesis and Characterization of Conducting Polymer Nanocomposites*”, Proceedings of the International Conference on Nanoscience and Nanotechnology (ICNSNT-2006) From August 26-28, 2006. Held in The Centre for Nanoscience and Nanotechnology, University of Madras, Chennai.
  22. P. G Chithra, **R. Raveendran**and B .Beena, “*Para-chloro phenol anchored on tin antimonate-an inorgano- organic ion exchanger selective towards heavy metal ions like Bi(iii) and Cu(ii)*”, Proceedings of DAE-BRNS Symposium on Emerging Trends in Separation Science and Technology-SESTEC-2006. Held at BARC Trombay from Sept. 29-Oct. 1 2006.
  23. Nisha J Tharayil, **R. Raveendran** & A.V. Vaidyan, “*Low Temperature d.c. conductivity of Nanoparticles of Nickel – Cobalt Spinel Oxide*”, Proceedings of the International Symposium on Material Chemistry (ISMC-2006) held at BARC Trombay, Mumbai. From 4-12-2006 to 8-12-2006.

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25. Indulal C R and **Raveendran R**, “*A study on the temperature dependence of particle size and dielectric properties of Cerium Molybdo Tungstate nanoparticles*”, Material Science Research India, 65(2), 2009, 537-543.
26. Indulal C R, Sajeev Kumar G, Vaidyan A V and **Raveendran R**, “*Characterization, dielectric and optical studies of cerium molybdo tungstate nano particles*”, Indian Journal of Pure and Applied Physics, 48, 2010, 893-898.
27. Indulal C R, Vaidyan A V, Sajeev Kumar G and **Raveendran R**, “*Characterization, dielectric and optical studies of nano-cerium phospho iodate synthesized by chemical co- precipitation method*”, Indian Journal of Engineering and Material Science, 17(4), 2010, 299-304.
28. Indulal C R and **Raveendran R**, “*Synthesis, characterization and dielectric studies of cerium phospho iodate and cadmium doped cerium phospho iodate in the nano form*”, Indian Journal of Pure and Applied Physics, 48, 2010, 121-126.
29. Indulal C R, Vaidyan A V, Sajeev Kumar G and **Raveendran R**, “*A comparative study- the effect of doping on the nano-structure and optical band gap of cerium molybdo iodate and cerium phospho iodate*”, Edu VISION, Inter-disciplinary research journal, S.N.College, Chengannur, 2010, 159-165.
30. T. R. Sherly, R. Harikumar Varma, and **R. Raveendran**, “*Synthesis And Optical Studies Of Nano Ceriummolybdophosphate*”, Citation: AIP Conf. Proc. 1391, 606 (2011); doi: 10.1063/1.3643625
31. Indulal C R, Vaidyan A V, Sajeev Kumar G and **Raveendran R**, “*A Comparative Study - The Ion Exchange Properties of Nanosized Cerium Molybdo Iodate and Cerium Phospho Iodate*”, Oriental Journal of chemistry, 27 (4), 2011, 1755-1758.
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35. Dedhila Devadathan, **R.Raveendran**, “*Nano Cobalt Oxide, Nickel Oxide, Magnesium Oxide and Cobalt/Magnesium/Nickel oxides nanocomposite*”, Proceedings of the International conference on Material Processing and Characterization(ICMPC-2012). From March 8-10, 2012. Held in Gokaraju



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37. Dedhila Devadathan, **R. Raveendran** “*Polyindole based nickel - zinc oxide nanocomposite – characterization and antifungal studies*”, International Journal of Chemical Engineering and Applications, Vol. 5, No. 3, June 2014.
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40. Devadathan, Dedhila; **Raveendran R**, “*Removal Of Pb(II) From Industrial Wastewater Using NiO/ZnO Nanocomposite: Performance And Mechanisms*”, AIP Conference Proceedings;2014, Vol. 1620 Issue 1, p96.
41. Dedhila Devadathan, Baiju V, **Raveendran R**, “*Synthesis, Structural and Optical Studies of Polyindole Based Nickel Oxide Nanocomposite*”, Presented in NSNANO – 2014 conducted by Dept. of Physics, Sree Narayana College, Kollam, from 25-26, Feb, 2014.
42. Baiju V, Dedhila Devadathan, **Raveendran R**, “*Structural and Optical Study of Cobalt - Nickel Oxide Nanocomposites Prepared by Co-Precipitation Method*”, Presented in NSNANO – 2014 conducted by Dept. of Physics, Sree Narayana College, Kollam, from 25-26, Feb, 2014.
43. Dedhila Devadathan, R. Biju and **R. Raveendran**, “*Polyindole Based NiO/MgO Nanocomposite as a Photocatalyst and an Adsorbent*”, Proceedings of the National Seminar on ‘New Frontiers in Nanotechnology and Material Science’ on 20 March 2015,organised by Department of Physics, S.N. College, Chengannur, Kerala
44. Dedhila Devadathan and **R.Raveendran**, “*Structural and optical studies of nickel-cobalt-ferric oxides nanocomposite*”, IOP Conf. Series: Materials Science and Engineering **73** (2015) 012020 doi:10.1088/1757-899X/73/1/012020

**Dr.K.Sreelatha**

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3. **K.Sreelatha** and P.Predeep, “*Structure Analysis of Iodine Doped Polyamide*

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7. **K.Sreelatha** and P.Predeep, "*Structure Analysis of Iodine Doped Polyamide Nylon 6 Complex Films by FTIR Spectroscopy and X-Ray Diffraction Studies*" Proceedings of the International Conference on Optics: Phenomena, Materials, Devices, and Characterization: Optics 2011: May 23-25, 2011, Department of Physics, National Institute of Technology, Calicut
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9. **K.Sreelatha** and P.Predeep, "*Intrinsic Electric Conductivity in LDPE Films*", Proceedings of the International Conference on Molecular Spectroscopy of Advanced Materials & Biomolecules, August 7-9, 2012, Department of Physics, Bishop Moore College, Mavelikkara, Kerala.
10. **K.Sreelatha** and P.Predeep, "*Dielectric Studies of Iodine Doped Nylon 6 Polymer Films*", Proceedings of the International Conference on Recent Trends in Applied Physics and Material Science, RAM 2013, Feb 01-02, 2013, Govt. College of Engineering and Technology, Bikaner, Rajasthan.
11. **K.Sreelatha** and P.Predeep, "*Intrinsic Electric Conductivity In Iodine Doped Pet Films*", Proceedings of the International Conference on Perspectives of Vibrational Spectroscopy, August 6-9, 2013, Department of Physics, Bishop Moore College, Mavelikkara, Kerala.
12. **K.Sreelatha** and P.Predeep, "*Electrically Conductive Nylon 6 Films: A Fourier Transform Infrared Spectroscopic Study*", Proceedings of the National Conference on Recent Trends in Vibrational Spectroscopy, August 26-27, 2011, Department of Physics, Bishop Moore College, Mavelikkara, Kerala.



13. **K.Sreelatha** and P.Predeep, “Electrically Conductive Pet-Iodine Complex Films: Investigation of the Structure by FTIR Spectroscopy and X-Ray Diffraction Studies”, Proceedings of the National Seminar on Physical and Bio Medical Applications in Nano Technology, October 12-14, 2011, Department of Physics, S.N. College, Kollam, Kerala & Academy for Chemistry Teachers, Kerala.
14. **K.Sreelatha** and P.Predeep, “Effect of Iodine Doping on Polyamide Nylon 6 Films”, Proceedings of the 99th Indian Science Congress, January 3-7, 2012, KIIT University, Bhubaneswar, Odisha and NISER, Bhubaneswar, Orissa.
15. **K.Sreelatha** and P.Predeep, “Lewis Acid Complexation of Polyamide Nylon 6 Films-Synthesis, Structure and Optical Properties”, Proceedings of the KERALA SCIENCE CONGRESS XXIV (29-31 January 2012), Rubber Board, Kottayam, Kerala.
16. **K.Sreelatha** and P.Predeep, “Polymer Complex Films for Electronic Applications”, Proceedings of the National Seminar on ‘New Frontiers in Nanotechnology and Material Science’ on 20 March 2015, organised by Department of Physics, S.N. College, Chengannur, Kerala

#### **DR.TINTU.R**

#### **INTERNATIONAL JOURNALS**

- 1) **R. Tintu**, V.P.N. Nampoori, P. Radhakrishnan, Sheenu Thomas, “Photoinduced changes in optical properties of Ga–Sb–Ge–Se glasses”, Optics Communications., 284, 222–225 (2011).
- 2) **R. Tintu**, V. P. N. Nampoori, P. Radhakrishnan, and Sheenu Thomas, “Nonlinear optical studies on nanocolloidal Ga–Sb–Ge–Se chalcogenide Glass”, Journal of Applied Physics., 108, 073525 (2010).
- 3) **R. Tintu**, V.P.N. Nampoori, P. Radhakrishnan, Sheenu Thomas, “Preparation and optical characterization of novel Ge–Se–Sb/PVA composite films for optical limiting application”, J. Phys. D: Appl. Phys., 44, 025101 (2011).
- 4) **R. Tintu**, K Sulakshna, K Saurav, V P N Nampoori, P Radhakrishnan and Sheenu Thomas, “ $Ge_{28}Se_{60}Sb_{12}$ /PVA Composite Films For Photonic Applications”, Journal of Non-Oxide Glasses, 2, 167- 174 (2010).
- 5) **R. Tintu** , V.P.N. Nampoori, P. Radhakrishnan, Sheenu Thomas, “Non linear Optical Characterization of erbium doped Ge- Sb- Se thin films, Discourse - Science (In press)
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- 9) T.S Abhilash, Ch Ravi Kumar, R Tintu, P V Lajna and G Rajaram, “*Wet Chemical Etching Characteristics of GaAs and GaAs/AlGaAs using different etch solutions with some process variations*”, Solid State Physics, Proceedings of the DAE Solid State Symposium, Volume 51, ISBN 818372030-7 (2006).
- 10) **R. Tintu**, V.P.N. Nampoore, P. Radhakrishnan, Sheenu Thomas, N V Unnikrishnan, Stacked chalcogenide and polymer structures for photonic applications, IEEE, DOI10.1109/ICOE.2012.6409601,2012
- 11) **R. Tintu**, V.P.N. Nampoore, P. Radhakrishnan, Sheenu Thomas, N V Unnikrishnan, Cluster size and Excitation wavelength dependent Photoluminescence behavior of nano colloidal Ge- Se- Sb- Ga chalcogenide glass solutions , JOAM,vol.14,iss.11-12/2012.
- 12) **R. Tintu**, V.P.N. Nampoore, P. Radhakrishnan, Sheenu Thomas, N V Unnikrishnan, Laser induced photoluminescence from  $Ge_{28}Se_{60}Sb_{12}$  chalcogenide nano colloids, Physica B 41412–15(2013)
- 13) **R. Tintu**, V.P.N. Nampoore, Sheenu Thomas, N V Unnikrishnan, Photodarkening in  $Ge_{28}Se_{60}Sb_{12}$  chalcogenide glass thin film, The Journal of Physics (accepted) 2014

#### INTERNATIONAL AND NATIONAL CONFERENCES

- 1) **R.Tintu**, V. P. N. Nampoore, P. Radhakrishnan and Sheenu Thomas, “*Optical properties of optical properties of erbium doped Ge-Sb-Se thin films*”, International Conference On Materials For the Millennium, MATCON 2010, Department of Applied Chemistry, CUSAT, Jan 11-13, 2010.
- 2) **R.Tintu**, V P N Nampoore, P Radhakrishnan and Sheenu Thomas, “*Spectral and optical Characterization of Ga-Sb-Ge-Se and polyvinyl alcohol amorphous composite*”, International conference on Advances in

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- 3) B Nithyaja, V.K Jisha, **R.Tintu**, A.V Saramma and V P N Nampoori, "*Laser Bacterial Interaction By using Laser Induced Fluorescence Technique*", Photonics 2008, International Conference on Fiber Optics and Photonics., IIT Delhi, Dec 13-17, 2008.
- 4) **R.Tintu**, K Sulakshna ,K Saurav, V P N Nampoori, P Radhakrishnan and Sheenu Thomas, "*Amorphous composite chalcogenide glass films for nonlinear optical applications*", The International Conference on Fiber Optics and Photonics–PHOTONICS-2010, Indian Institute of Technology Guwahati (IIT Guwahati), Dec 11-15, 2010.
- 5) R.Tintu, V. P. N Nampoori, P. Radhakrishnan and Sheenu Thomas "*Fabrication of Ga-Sb-Ge-Se /PVA composite films with strong optical limiting*", International Conference on Recent Trends in Materials Science and Technology(ICMST), IIST, Thiruvananthapuram, Kerala, Thiruvananthapuram, Oct 29-31, 2010.
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*Ge<sub>28</sub>Se<sub>60</sub>Sb<sub>12</sub> /PVA films*”, icmf 2011, Second International Conference on materials for the future, Government Engineering College, Thrissur, Feb 23-25, 2011.

- 11) Tintu.R, "*Visible Luminescence Mechanism in Ge<sub>28</sub>Se<sub>60</sub>Sb<sub>12</sub> Nano Colloids*", Proceedings of the National Seminar on 'New Frontiers in Nanotechnology and Material Science' on 20 March 2015, organised by Department of Physics, S.N. College, Chengannur, Kerala

### **Dr.P R Rejikumar**

#### **Research Papers Published in International Journals**

1. **P R Rejikumar**, P V Jyothy, Siby Mathew, Vinoy Thomas, N V Unnikrishnan "*Effect of silver nanoparticles on the dielectric properties of holium doped silica glass.*" PhysicaB. 405(2010)1513.
2. **P R Rejikumar**, Vasudevan P, Karthika S, George J, N.V.Unnikrishnan, "*Structural and spectroscopic characterization of Ho<sup>3+</sup> in sol-gel silica*" J. of Optoelectr. And Adv. Mater. **12** (2010) 1065.
3. Jyothy P V, **P R Rejikumar**, Vinoy Thomas, Kartika S and N V Unnikrishnan, "*Optical Characterization of CdSe/Dy<sup>3+</sup> doped Silica Matrices*", Pramana**75** (2010) 999.

#### **Research Papers Published in Conference / Seminar Proceedings**

1. **NANO2010**: "*Structural and plasmonic studies of Ag nano particles in silica glass host*" International conference on Nano materials and Nano technology. Centre for Nano science and Technology, K.S Rangasamy college of Technology , Tiruchengode, India
2. **NLS2009**: "*Optical characterization of CdSe/Dy<sup>3+</sup>-doped silica matrices*" National Laser Symposium, Bhabha Atomic Research Centre, Trombay, Mumbai, India.
3. **DARSAN 2009**: "*Effect of Triangular and Spherical Silver Nano particles on the dielectric properties of Ho Dopped SilicaGlass*" Seminar Series held at T.K Madhava Memorial College Nangiarkulangara Kerala.(Invited Talk)
4. **NSNANO 2009**: "*Effect of Triangular and Spherical Silver Nano particles on the dielectric properties of Ho Dopped SilicaGlass*" National Seminar on Recent Advance in Nano Science & Technology, Sree Narayana College, Kollam, Kerala (Best Paper Award in the Poster Section)

## DEPARTMENT OF PHYSICAL EDUCATION

1.	Name of the department	PHYSICAL EDUCATION		
2.	Year of Establishment	1981		
3.	Names of Programmes / Courses offered	Open Course for Semester V Paper: Health and Fitness Education		
4.	Names of Interdisciplinary courses and the departments/units involved	NIL		
5.	Annual/ semester/choice based credit system (programme wise)	Choice Based Credit and Semester System		
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	1		
			Sanctioned	Filled
		Assistant Professor	1	1

10	Faculty profile with name ,qualification , designation specialization ,(D.Sc./D Litt./Ph.D,M.phil etc					
	Name	Qualification	Designation	Specialization	No. of years of experience	No of Ph.D students guided for the last 4 years
	Shereen K	BPE, MPE, NET	Asst.Prof	Physical Education	8	Nil
11	List of senior visiting faculty: Sri. Sunil Kumar, Asst Prof. S D College , Alappuzha Sri Santhosh Raveendran , Associate Prof.,Dept.of Physical Education , S N College, Punalur					
12	Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty				Nil	
13	Student -Teacher Ratio (programme wise)				-	
14	Number of academic support staff (technical) and administrative staff; sanctioned and filled				Nil	
15.	Qualification of teaching faculty with D.Sc / D. Litt/Ph.D /M .Phil./PG					
	Name of Faculty		Qualification			
	Shereen .K		MP E. NET			
16.	Number of faculty with on- going projects				Nil	
17.	Departmental Projects funded by DST-FIST;UGC;DBT;ICSSR,etc and total grants received				Nil	

18	Research Center /facility recognized by the University	Nil
19.	Publications	Nil
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 inter departmental/programme b)Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies:	NA NA
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	One day Yoga class
	National seminar: Nil	
	International seminar: Nil	
26.	Student profile programme/course wise:	NA
27.	Diversity of Students:	NA
28.	How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.	NA
29.	Student progression	NA
30.	Details of Infrastructural facilities a) Library b) Internet facilities for Staff & Students	Yes, General library NA

c) Class rooms with ICT facility	NA
d) Laboratories	NA

31. Number of students receiving financial assistance from college, university, government or other agencies	NA
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32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts			
Name of external experts	Programme	Year of Visit	Funding
Sri K P Mohan ,yogashiromani, International school of Yoga Trivandrum	Yoga for stress relieving	2015	PTA

33. Teaching methods adopted to improve students learning
<ul style="list-style-type: none"> <li>• Lecture Method</li> <li>• Demonstration Method</li> <li>• Practice Method</li> </ul>

34.	<p>Participation in Institutional Social Responsibility (ISR) and Extension activities:</p> <ul style="list-style-type: none"> <li>• Physical Efficiency Test Training for Recruitment in Army and Police candidates</li> <li>• Acted as selector for Intercollegiate Womens Football, Cricket, Ball Badminton and Kabaddi Tournaments .</li> <li>• Acted as team manager for various college teams</li> <li>• NSS co-ordinator for last 4 years</li> <li>• Returning officer for 2014 College Union Election</li> <li>• Model Exam Convenor</li> <li>• Co-ordinator of Sports and Health Club.</li> </ul> <p>SWOC analysis of the department and Future plans</p>
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35

Strength

- A 12 station Multipurpose Gymnasium
- Court for playing Kabaddi and Volleyball.

Weakness

- Lack of proper playground
- Lack of indoor facility
- Lack of hostel facility for boys

Opportunities

- Students are getting Degree and PG admission , Certificates, Cash award
- Students get co -operating mind and team spirit

Challenges

- To overcome the weakness mentioned above

12

30/827/2000-2001  
2/5/2000

UNIVERSITY GRANTS COMMISSION  
BAHADUR SHAH ZAFAR MARG  
NEW DELHI-110 002.

March, 2000

No. F.8-7/97 (CPP-I)

The Registrar,  
University of Kerala,  
Thiruvananthapuram-695 034.

25 APR 2000

Sub:- List of Colleges prepared under section 2(f) and 12-B of the UGC Act, 1956-  
Inclusion of New College.

Sir,

I am directed to refer to letter No.GI/30/666/99-2000 dated 11<sup>th</sup> January, 2000 on the above subject received from the Principal, Sree Narayana College, Chengannur and to say that the name of the following College has been included in the above list under Non - Government Colleges teaching upto Bachelor's Degree:-

<u>Name of the College</u>	<u>Year of Establishment</u>	<u>Remarks</u>
Sree Narayana College, Naduvaramcodu P.O., <u>Chengannur-689 508,</u> (Prof. V.J. Joseph)	1991-92	The College is eligible to receive Central assistance in terms of the Rules framed under Section 12-B of the UGC Act, 1956.

The Indemnity Bond and other documents in respect of the above College have been accepted by the Commission.

Yours faithfully,

*(D.D. Mehta)*  
(D.D. Mehta)  
Under Secretary

Copy forwarded to:-

1. The Principal, Sree Narayana College, Naduvaramcodu P.O., Chengannur-689508.
2. The Secretary, Govt. of India, Ministry of Human Resource Development, Department of Education, T-14 Section, Shastri Bhavan, New Delhi-110 001.
3. The Joint Secretary, UGC South-Western Regional Office, Prasanna Kumar Block, Palace Road, Bangalore-560 009 (Karnataka).
4. All Sections, UGC.
5. S.O. (FD-III Section) UGC, New Delhi.
6. D.T.P. Cell, UGC.
7. Guard file.

*(C.P. Arora)*  
(C.P. Arora)  
Section Officer



Phone: .0471-2305631  
 Fax: +91-471-2307158  
 Email: regrku@gmail.com

**UNIVERSITY OF KERALA**

**Thiruvananthapuram, Kerala, India - 695034**

(Established as University of Travancore by the Travancore University Act in 1937 and reconstituted as University of Kerala by the Kerala University Act of 1957 and presently governed by the Kerala University Act of 1974 passed by the Kerala State Legislative Assembly)

**No. Ac.B/04/014422/2015**

**Dated: 06.03.2015**

**CERTIFICATE**

This is to certify that **Sree Narayana College, Chengannur** is a private aided College affiliated to the University of Kerala since the year 1981, currently offering the following Courses.

Sl.No	Courses	Branch	Intake
1	<b>B.Sc</b>	Chemistry	32
2		Physics	24
3		Maths	32
4	<b>B.A</b>	Economics	50
5	<b>B.Com</b>	Computer Application	24
6	<b>M.Sc</b>	Chemistry	10
7		Physics	12
8	<b>M.Sc</b>	Medicinal Chemistry(UGC aided course-validity upto 2016-2017)	10

This certificate is issued to the Principal, **Sree Narayana College, Chengannur** to apply for NAAC accreditation.



  
**REGISTRAR**





helpdesk-aishe@nic.in via nic.in

May 15

to me

Dear User,

DCF for **Sree Narayana College, Chengannur** has been uploaded successfully on AISHE portal. To refer to this form please use DCF reference number **C-43709-2014**. We appreciate your sincere efforts in compiling and providing the information. Kindly update your Account details on the AISHE portal under the link Remuneration Management so that Remuneration may be transferred.

(This is an auto generated email, kindly do not reply back)

Thanks,  
AISHE Team



## CHERIYANAD GRAMA PANCHAYATH

C3 - 3473/15

Office of the Cheriyamad Grama Panchayath  
Cheriyamad .P.O. PIN-689511  
(Via)Chengannur,Alleppey (Dist)  
Phone:0479-2360149  
E-mail:cheriyamadgp@gmail.com  
Date...10/06/2015...

### CERTIFICATE

This is to certify that Sree Narayana College, Neduvaramcode. P. O, Chengannur, Alappuzha, Kerala is located in rural area of this Grama Panchayat.

This certificate is issued to UGC, Bangolare regional office for the purpose of NAAC accreditation.



ANUSACHETHANAN V.S.  
Secretary  
Cheriyamad Grama Panchayat  
Ph: 0479 2360149

