

SELF STUDY REPORT (SSR) FOR NAAC ACCREDITATION

1st Cycle- 2015

Submitted to



**National Assessment and Accreditation Council
Bangalore**

**SREE AYYAPPA COLLEGE, ERAMALLIKKARA
CHENGANOOR - KERALA**



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To,

The Director

National Assessment and Accreditation Council

PO Box 1075,

Jhana Bharathi Road

Nagarbhavi

Bangalore 560 072

Subject: Submission of SSR for 1st Cycle of Accreditation (Track ID – KLCOGN20864)

Ref:- Your e-mail dated 07/11/2014

Respected Sir,

Sree Ayyappa College, Eramalikkara was established in the year 1995 under the management of Travancore Devaswom Board, a pioneer educational agency in the state of Kerala, and affiliated to University of Kerala, Thiruvananthapuram. As per reference cited, we are pleased to submit the Self Study Report (SSR) for 1st cycle along with all the necessary documents.

We kindly request you to consider our SSR positively for the grant of NAAC Accreditation status to our College.

Thanking you,

Yours faithfully,

Prof. S Lekaha

Principal

Executive Summary and SWOC Analysis of Institution

Executive Summary

Sree Ayyappa College, Eramallikkara was started in 1995 with the vision of creating a scientifically developed, humanely rich, morally responsible community, ensuring equitable regional development through education. Our mission is to provide an ICT- based education accessible to educationally underprivileged areas, thereby attempting to bridge the digital divide. The objective of the college is to provide a chance to acquire technical education, while instilling in the students, a healthy respect for the environment and the need for sustainable development with minimum possible impact on the ecology. The Institution provide a chance for the girl students of this rural population to have technical education within their means and reach and creating professionally competent young men and women who can answer to the needs of the day.

The college made a beginning in 1995 by introducing three UG programs viz. B.Sc Computer Science, B.Sc Electronics & B.Sc Mathematics. It was one of the first Govt. Aided applied science college to offer B.Sc Computer Science & B.Sc Electronics in the University of Kerala. In appreciation of the flourishing output at the academic level, a new six semester B.Sc Biochemistry & Industrial Microbiology degree course was started in 1999. The college enjoys permanent affiliation from University of Kerala in 2003. The college has been recognized by UGC under 2f & 12B certification in 2010. In 2013 we have started M.Sc Computer Science and in 2014 B.Com with Computer Application in aided stream.

The college has five Departments namely Computer science, Electronics, Mathematics, Biochemistry & Industrial Microbiology and Commerce created on the basis of programs offered. A Gist of programs offered by the college are

Sl. No.	Programme	Intake
1	B.Sc Computer Science	20
2	B.Sc Electronics	20
3	B.Sc Biochemistry & Industrial Microbiology	24
4	B.Sc Mathematics	20
5	B.Sc Commerce with Computer Application	40
6	M.Sc Computer Science	14

The college on the basis of feedback of industry, students and faculty members assesses the existing curriculum and suggestions were submitted to the University from time to time by our Board of Studies members. The UG programs have choice based credits thus offering flexibility of choice to students. The College also provides additional input to the students by a Certificate programme in 'Web Development' which is interdisciplinary and helpful the students for getting job opportunities.

At the outset of the academic year the college prepares an academic calendar and plans the academic activities that should inevitably form part of the schedule. Workshops and faculty training programmes are conducted for innovative practices in teaching learning methods. The College continuously evolves innovative methods of teaching, learning and evaluation procedure. Some Innovative teaching methods include, Social Projects, Seminars, INFOFEST Contest, Video conferencing lectures, IT Quiz, newspaper & magazine subscriptions for students and industrial visit at National level. Teachers and students have access to internet, computers and other audio visual aids, Aview, vlabs, nptel, fosse, co-learn.co.in, mobile education, sakshath etc.

The College follows a semester system 75 percent weightage is given to external semester examination by the University and 25 percent to internal assessment. The college conducts internal examination in the centralized manner strictly following the set pattern of university end examinations. Students are internally assessed on the basis of seminar, assignments, test paper and attendance. Department Level Monitoring Committee & College Level Monitoring Committee monitors the conduct of courses and evaluation under Continuous Evaluation(CE). Model examinations are conducted for all Lab courses at the end of each semester. The students' CE report is maintained in the entire department and marks are also displayed on the notice board. The process is transparent and there is a mechanism for grievance redressal. The CE report is informed to the parents in the class wise PTA meeting. One of the major hurdles before our college in the path of excellence and advancement is related to the socio economic and cultural background of the students. Hailing from families belonging to the BPL Category, the opportunities for these students for academic progress and cultural attainment have been meager. The challenge before us is to achieve the progress of these students through enhancement of knowledge and skills in the field of Applied Science and Technology.

SWOC ANALYSIS

STRENGTHS

- To provide a chance for the students of this rural population to have technical education
- Introduced Inter disciplinary career related U G programmes
- Highly qualified and experienced faculties.
- Conducive working environment both for faculty and staff leading to faculty and staff retention.
- Activities undertaken to promote social welfare and inculcate a sense of social responsibility.
- Research environment and importance given to faculty and student research.
- State of the art infrastructure with wifi campus and one of the best Library with large number of books, journals, magazines, e journals with latest edition.
- Awards given to promote Social responsibility and Commitment, Quality Research, Academic and Cultural achievement.
- Continuous progressive evaluation system for students
- Class Mentor system
- Career Orientation course.
- Maximum working days are achieved.

- Large number of initiatives undertaken for supporting number of slow learners and students from diverse backgrounds.
- Maximum participation of faculties in academic bodies for updating curriculum.
- Comprehensive system which ensures platform to promote faculty, students and staff development.
- Use of Innovative teaching.
- Emphasis on holistic development of students.

WEAKNESSES

- Lack of transport facility.
- Lack of space for developing in to a single campus.
- Lack of accommodation for boy students.
- Lack of permanent staffs

OPPORTUNITIES

- To become a Recognized Research Centre for Computer Science.
- To be one of the recognized Institution of Technical Education in State level.
- Free Consultancy Service for the public

CHALLENGES

- Students from below poverty line.
- Enhancing number of students for employment.
- Recruiting permanent faculty and staffs.
- More autonomy in admission procedure to admit nearby students.

PART I
PROFILE OF THE INSTITUTION

Profile of the Affiliated / Constituent College

1. Name and Address of the College:

Name : **SREE AYYAPPA COLLEGE**
Address : **ERAMALLIKKARA.P.O, CHENGANNUR, ALAPPUZHADIST.**
City : **CHENGANNUR** Pin : **689109** State : **KERALA**
Website : **sreeayyappacollege.ac.in**

2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Prof. S Lekha	O: 0479-2427615 R: 0476-2851253	9847477660	0479-2428515	principalsace@gmail.com
Steering Committee	Dr. K S Anil Kumar	O: 0479-2427615 R: 0476-2851894	9447410591		ksanilksitm@gmail.com

Co-ordinator

3. Status of the Institution:

Affiliated College

Constituent College

Affiliated College

Any other (specify)

4. Type of Institution:

a. By Gender

i. For Men

ii. For Women

iii. Co-education

Co-education

b. By Shift

i. Regular

ii. Day

Regular

iii. Evening

5. It is a recognized minority institution?

Yes

No

No

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

6. Sources of funding:

Government

Grant in-aid

Grant-in-aid

Self-financing Any other

7. a. Date of establishment of the college: **13/07/1995**

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)	12/02/2010	
ii. 12 (B)	12/02/2010	

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

d. Details of recognition/approval by statutory/regulatory bodies other than UGC

(AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

NA

Under Section/ clause details	Recognition/Approval/ Institution Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
i.	-			
ii.	-			

(Enclose the recognition/approval letter)

8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes No

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

Yes No

9. Is the college recognized

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

Yes No

If yes, date of recognition: (dd/mm/yyyy)

b. for its performance by any other governmental agency?

Yes No

If yes, Name of the agency and

Date of recognition: (dd/mm/yyyy)

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

Location *	Rural
Campus area in sq. mts.	48000
Built up area in sq. mts.	7200

(* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

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

- Auditorium/seminar complex with infrastructural facilities ✓
- Sports facilities
 - ♦ play ground ✓
 - ♦ swimming pool

- Hostel
 - Boys' hostel
 - i. Number of hostels
 - ii. Number of inmates
 - iii. Facilities (mention available facilities)
 - Girls' hostel ✓
 - i. Number of hostels - **2**
 - ii. Number of inmates - **40**
 - iii. Facilities (mention available facilities) – **additional facilities such as internal library, recreation room, health & fitness centre.**
 - Working women's hostel
 - i. Number of inmates
 - iii. Facilities (mention available facilities)
 - Residential facilities for teaching and non-teaching staff (give numbers available cadre wise)
 - Cafeteria —
 - Health centre –
- First aid, Inpatient, Outpatient, Emergency care facility, Ambulance.....
- Health centre staff –
- | | | |
|------------------|-----------|-----------|
| Qualified doctor | Full time | Part-time |
| Qualified Nurse | Full time | Part-time |
- Facilities like banking, post office, book shops
 - Transport facilities to cater to the needs of students and staff
 - Animal house
 - Biological waste disposal ✓
 - Generator or other facility for management/regulation of electricity and voltage ✓
 - Solid waste management facility ✓
 - Waste water management ✓
 - Water harvesting ✓

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

SI.	Programme No.Level/	Name of the Programme Course	Duration (Years)	Entry Qualifi cation	Medium of instruction Student	Sanctioned/ approved strength	No. of students admitted
	Under-Graduate	B.Sc Computer Science	3	Plus two	English	20	23
		B.Sc Electronics	3	Plus two	English	20	11
		B.Sc Mathematics	3	Plus two	English	20	13
		B.Sc Biochemistry & Industrial Microbiology	3	Plus two	English	24	22
		B.Com with Computer Applications	3	Plus two	English	40	34
	Post-Graduate	M.ScComputer Science	2	B.Sc	English	14	14
	Integrated Programmes PG						
	Ph.D.						
	M.Phil.						
	Ph.D						

Certificate courses	Certificate in Course Web Development (ADD ON Course)	1	Plus two	English	30	28
UG Diploma						
PG Diploma						
Any Other (specify and provide details)						

13. Does the college offer self-financed Programmes?

Yes		No	✓
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If yes, how many?

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

Yes	✓	No		Number	3
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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	Computer Science	✓	✓	
	Electronics	✓		
	Biochemistry & Industrial	✓		
	Microbiology			
	Mathematics	✓		
Arts				
Commerce	Commerce	✓		
Any Other (Specify)				

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

- a. annual system - Nil
- b. semester system - 6
- c. trimester system - Nil

17. Number of Programmes with

- a. Choice Based Credit System - 5
- b. Inter/Multidisciplinary Approach - 2
- c. Any other (MSc Semester system) - 1

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

Yes No ✓

If yes,

a. Year of Introduction of the programme(s)..... (dd/mm/yyyy)
and number of batches that completed the programme

b. NCTE recognition details (if applicable)

Notification No.: Date:

..... (dd/mm/yyyy)

Validity:.....

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

Yes No

19. Does the college offer UG or PG programme in Physical Education?

Yes No

If yes,

a. Year of Introduction of the programme(s)..... (dd/mm/yyyy) and
number of batches that completed the programme

b. NCTE recognition details (if applicable)

Notification

No.:..... Date:

..... (dd/mm/yyyy)

Validity:.....

c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?

Yes

No

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

Positions	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor					
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University / State Government			6	6	1	7	8	2	1	0
<i>Recruited</i>										
<i>Yet to recruit</i>					5				1	
Sanctioned by the Management/ society or other authorized bodies							1			
<i>Recruited</i>										
<i>Yet to recruit</i>							1			

***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./PDF				1			1
Ph.D.			2	-	1	7	10
M.Phil./M.Tech			1	2			3
PG			3	3			6
Temporary teachers							
Ph.D.							
M.Phil.							
PG					1	8	9
Part-time teachers							
Ph.D.							
M.Phil.							
PG							

22. Number of Visiting Faculty /Guest Faculty engaged with the College. 9

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

Categories	Year 2014	
	Male	Female
SC	9	8
ST	0	1
OBC	6	8
General	53	61
Others		

24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M. Phil.	Ph.D.	Total
Students from the same state where the college is located	221	19			240
Students from other states of India					
NRI students					
Foreign students					
Total	221	19			240

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

UG PG

26. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a) including the salary component Rs.

(b) excluding the salary component Rs.

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

Yes No

If yes,

a) is it a registered centre for offering distance education programmes of another University

Yes No

b) Name of the University which has granted such registration.

c) Number of programmes offered

d) Programmes carry the recognition of the Distance Education Council.

Yes No

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

Sl. No.	Programme offered	Teacher-student ratio
1	B.Sc Computer Science	1:12
2	B.Sc Electronics	1:12
3	B.Sc Biochemistry & Industrial Microbiology	1:15
4	B.Sc Mathematics	1:15
5	B.Com with Computer Application	1:15
6	M.Sc Computer Science	1:5

29. Is the college applying for

Accreditation : Cycle 1 ✓ Cycle 2 Cycle 3 Cycle 4

Re-Assessment:

(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)

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

Cycle 1: (dd/mm/yyyy) Accreditation Outcome/Result..... Cycle 2:
 (dd/mm/yyyy) Accreditation Outcome/Result..... Cycle 3:
 (dd/mm/yyyy) Accreditation Outcome/Result.....

*** Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.**

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

195

32. Number of teaching days during the last academic year

(Teaching days means days on which lectures were engaged excluding the examination days)

191

33. Date of establishment of Internal Quality Assurance Cell (IQAC)

22.07.2013

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

AQAR (i) (dd/mm/yyyy) AQAR

(ii) (dd/mm/yyyy) AQAR

(iii) (dd/mm/yyyy) AQAR

(iv) (dd/mm/yyyy)

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

PART II
CRITERIA WISE ANALYTICAL REPORT

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.

♦ **Vision**

“Transcending barriers through knowledge and service. “

Sree Ayyappa College was started with the vision of creating a scientifically developed, humanely rich, morally responsible community, ensuring equitable regional development through education; To create a future India, where narrow frontiers are erased through globally relevant and regionally sensitive quality education that aims at fostering a scientific attitude tempered with literary and artistic sensibility, sense of national integration and concern for fellow beings; To have a futuristic outlook while being rooted in our culture and heritage; To pursue knowledge with stress on humanitarian values.

♦ **Mission**

“To be an instrument for the rural youth to attain holistic development”

Sree Ayyappa College was started with the mission of:

1. Making ICT- based education accessible to educationally underprivileged areas, thereby attempting to bridge the digital divide.
2. Creating manpower that is intellectually trained, professionally skilled, morally righteous, spiritually developed and value oriented responsible citizens committed to the service of the society, dedicated to the spirit of the constitution, and sensitive to the needs of the Environment.
3. Applying knowledge for the meaningful solution of human problems.

◆ Objectives

Sree Ayyappa College was started in the year 1995 with the objective of providing the youth

1. The chance to acquire technical education, while instilling in the students, a healthy respect for the environment and the need for sustainable development with minimum possible impact on the ecology.
2. The chance for the girl students of this rural population to have technical education within their means and reach.
3. Creating professionally competent young men and women who can answer to the needs of the day.
4. Developing the necessary life skills, integrity and character of the youth.

Our mission and vision are fulfilled by constant interaction with the management, annual resource allocation of the college activities and in the notices/information circulated to teachers and students and interaction with other stake holders of the institution. Mission and vision statements are displayed in our College Calendar, College Website and significant places in the College.

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

Our college is a government aided institution affiliated to the University of Kerala. Academic calendar for every semester is published by the University and it is circulated to the teachers for the effective implementation of the curriculum.

- ◆ As per the University guidelines, the college has constituted College Level Monitoring Committee (CLMC) and Department Level Monitoring Committee (DLMC) for coordinating the implementation of curriculum.
- ◆ The teacher's diary is properly maintained.

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 is conducting workshops, orientation programmes and refresher programmes for effectively translating the curriculum for improving teaching practices.
- ◆ A series of workshops for teachers in various courses were organised by the University, providing a platform to discuss and interact on general framework of courses designed and approved by the Kerala State Higher Education Council. Every year teachers are deputed to attend these workshops and refresher programmes.
- ◆ The institution also organizes workshops for teachers on teaching learning process every year.

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 college provides sufficient number of class rooms, smart class rooms, well equipped laboratories, Open Educational Resources (OER), sophisticated teaching aides, advanced design and simulation software, e-learning facility, automated library and seminar hall for effective curriculum delivery.
- ◆ IQAC, CLMC and PTA ensure the effective implementation of curriculum delivery.

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?

- ◆ We have a strong network of Alumnis working in various industries, research organizations and academic sector. Their feedback and information with regard

to the state of art trends in technology are collected. This knowledge is incorporated in the curriculum through our members in Board of Studies and Academic Council, University of Kerala.

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.

- ◆ Two of our faculty members were elected to the Academic Council of the University of Kerala.
- ◆ Two of our faculty members are nominated to the Faculty of Applied Science and Technology.
- ◆ Five members of the faculty are nominated to the various Boards of studies of the University of Kerala.
- ◆ One faculty member was nominated as Convener of B.Sc Computer Science Curriculum Revision Committee, University of Kerala.
- ◆ Twelve teachers participated in the workshop organized by the University for framing the syllabus for CBCSS.
- ◆ Workshops in Computer Science and Electronics were organised under the leadership of our faculty members.
- ◆ Our faculty members were instrumental in the design and implementation of new curriculum of BSc Computer Science and BSc Electronics

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

Certificate Course in Web Development (Add- on Course by UGC)

Internet Popularisation Programme

Yoga & Meditation

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

- ◆ Feedbacks from students are collected and critically evaluated by an expert team.
- ◆ Conducted Input –Output analysis with special attention to evaluate the objectives of curriculum achieved.
- ◆ Remedial classes for slow learners were conducted for the successful implementation of the curriculum at the end of every semester.
- ◆ Implemented Scholar Support Programme and Walk With Scholar Programme.

1.2 Academic Flexibility

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

The college offers four UG Programmes

List of courses available for learners in Sree Ayyappa College

Sl. No	Programme	Subject	Intake	Year of Starting
1	B.Sc.	Computer Science	20	1995
2	B.Sc.	Electronics	20	1995
3	B.Sc.	Mathematics	20	1995
4	B.Sc.	Biochemistry and Industrial Micro Biology	24	1999
5	B.Com	Commerce with Computer Applications	40	2014
6	M.Sc	Computer Science	14	2013
Career Oriented Course (Add on Course) by UGC				
7	Certificate	Web Development	30	2014

1.2.2 Does the institution offer programs that facilitate twinning /dual degree? If ‘yes’, give details ?.

Our university does not give freedom to run twinning programs.

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

- ◆ Range of Core /Elective options offered by the University and those opted by the college
- ◆ Choice Based Credit System and range of subject options
- ◆ Courses offered in modular form
- ◆ Credit transfer and accumulation facility
- ◆ Lateral and vertical mobility within and across programmes and courses
- ◆ Lateral mobility across programs and courses are permitted in the first semester.
- ◆ The college/department can select courses such as complementary and open courses.
- ◆ Enrichment courses

A survey of various common courses offered under UG level bare testimony to it.

List of open courses offered by various departments of this college, available for students of other departments.

Sl. No	Department	Open Course
1	Computer Science	Linux Environment
2	Electronics	Multi Media Communications
3	Mathematics	Operation Research
4	Biochemistry and Industrial Micro biology	Life Style Diseases
5	Physical Education	Introduction to Health and Fitness

It is also expected that the choice will be widened in terms of interdisciplinary, with departments offering more courses in the years to come.

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.

The University of Kerala does not give sanction to run self financing courses in aided colleges as a policy matter.

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.

- ◆ Soft skill training for students is conducted with eminent resource person every semester to improve the communication skill and personality development.
- ◆ Seminars and workshops were conducted by departments in every semester to enrich the students in the modern trends in technology.
- ◆ Hardware workshop and training programme for mushroom cultivation
- ◆ Implemented UGC sponsored Career Oriented Course.
- ◆ Implemented Additional Skill Acquisition Programme.

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 effort made by the institution to supplement the Universities curriculum to ensure that the academic programmes and institutions goals and objectives are integrated.

Our institution has an action plan to achieve our goals and objectives. Our teachers submit an action plan in accordance with the University academic calendar. The teachers strictly follow the University Academic Calendar and internal test papers, Assignments, Seminars, Projects and Study Tour as per University time schedule. Remedial classes are taken for weak students and tutorial system is followed to supplement University curriculum and academic programmes which in turn helps us to attain our goals and objectives.

1.3.2 What are the efforts made by the institution to modify, enrich, and organize the curriculum to explicitly reflect the experience of the students and cater to the needs of the dynamic employment market.

The curriculum is developed by the University and it does not give any freedom to make any changes in it. We enrich our students to cope up with dynamic employment market by conducting add-on courses, career oriented vocational courses, soft skill training, IT literacy to our students. We make consistent efforts to modify the existing curriculum through our board of studies members

1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issue such as gender, climate change, environmental education, human rights, ICT etc. in to the curriculum.

Our institution makes sincere effort to resolve cross cutting issues like gender, climate change, environmental education, human rights, ICT etc. The clubs and organizations like women cell, Bhoomithra club, IETE, NSS unit etc. conduct seminars and workshops to make our students aware of the above said issues.

- ◆ The women's cell conducts seminars on human rights and women empowerment every year.
- ◆ The NSS unit conduct legal awareness programme to make students understand about the legal punishment given to culprits of ragging, Physical and mental harassment to fellow students.

- ◆ Bhoomithra club conducts seminars on environmental issues and nature educational camps.

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

- ◆ moral and ethical values
- ◆ employable and life skills
- ◆ better career options
- ◆ community orientation.

In every academic year we conducts soft skill training, personality development programmes, moral and ethical value classes and vocational training in soap and candle making, mushroom cultivation etc.

- ◆ Every year NSS organize Legal Awareness classes.
- ◆ IETE College Chapter with the cooperation electronics and computer science departments organize programmes for the professional needs of members in the advancement of science and technology.
- ◆ Computer science Department conduct short term courses for students and staff to make the students and staff computer literate.

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

Feedbacks are obtained by means of questionnaire designed specifically for each stake holders. Feedback from various stake holders help our board of studies members to incorporate certain relevant topics while restructuring degree courses during the introduction of CBCSS

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

Enrichment programs like short term course, certificate courses on soft skill training, seminar on personality development and vocational training are conducted and feedback from students are collected and based on this we evaluate these programmes and make adequate changes in the programmes to follow.

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 exclusively designed and developed by the university. However changes in the syllabus can be brought about by the board of studies. Our board of studies members of Electronics department could introduce certain relevant topics like artificial intelligence and expert systems, microcontrollers, java etc. The elective paper of B.Sc Computer Science was changed from Linux to MIS by our board of studies members of Computer Science department.

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?

- ◆ We collect feedbacks from students every year through prescribed forms. These feedbacks are critically analysed by IQAC and discussed in the teachers meeting and changes are brought about in accordingly.
- ◆ Alumni curriculum feedback is collected in the alumni annual meet and feedback from PTA in the PTA general body every year.
- ◆ We also collect feedbacks from industry and all these feedbacks are seriously analyzed and based on this a report is made and is communicated to the

- ◆ University through our Board of Studies members which enables the university to enrich the curriculum

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?)

We have introduced a career related add on courses with the financial support from UGC. We are introducing this career related add on course to make our students well equipped to meet the challenging employment market needs.

Course	Department
Certificate Course in Web Development	Computer Science

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

Best Practices

1. Conducting Info –Fest

A seminar series presented by staff and students every year. This programme ring students and teachers of all departments in a common platform. Awards are given for best papers for the five the different departments.

2. Conducting Personality Enrichment Programme for students and parents by the PTA every year, the objective of this programme is to train the students in all round personality developments ie physical, mental, social and spiritual level.

3. A combined meeting of the alumni members and the present students in which well placed alumni members interact with our students and this helps to communicates the modern trends in industries and this gives or students more exposure.

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?

- a. Prospectus
- b. Institutional Website
- c. Advertisement in Regional/ National Newspapers
- d. Any other (specify)
 - ◆ Admission to various courses is strictly based on the rules and regulations prescribed by the University of Kerala and the Government of Kerala.
 - ◆ University has a centralized online admission portal www.admissions.keralauniversity.ac.in
 - ◆ University notifies a uniform time schedule for the admission process which is widely publicized in all leading regional and national dailies.
 - ◆ The official website of the University and the college also carry the details of courses available, admission procedure and time schedule.
 - ◆ University notification in this regard is displayed in the college notice board.
 - ◆ The College prospectus, which is issued along with application form also contains details on programmes offered, fee structure and admission procedures.
 - ◆ The institution has a regularly updated website www.sreeayyappacollege.ac.in in which a link is provided to the University admission portal.

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.

- ◆ The criteria adopted for admission process is strictly as per the regulations of the University of Kerala. The index mark for rank list preparation is based on the marks that the candidates have secured in the qualifying examination. University online admission is effective from 2012 admissions onwards.
- ◆ 20% management seats are filled by the management and 20% community seats are filled by the college purely based on merit.

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.

<i>B Sc Computer Science Programme</i>	<i>Year</i>	<i>College 1 UIT, Alappuzha</i>		<i>College 2 SN Cherthala</i>		<i>College 3 IHRD Mavelikkara</i>		<i>Sree Ayyappa College, Eramallikkara</i>	
		<i>First Index</i>	<i>Last Index</i>	<i>First Index</i>	<i>Last Index</i>	<i>First Index</i>	<i>Last Index</i>	<i>First Index</i>	<i>Last Index</i>
	<i>2009-10</i>	<i>673</i>	<i>453</i>	<i>1250</i>	<i>770</i>	<i>618</i>	<i>358</i>	<i>601</i>	<i>353</i>
	<i>2010-11</i>	<i>671</i>	<i>404</i>	<i>1266</i>	<i>768</i>	<i>1256</i>	<i>914</i>	<i>1085</i>	<i>745</i>
	<i>2011-12</i>	<i>676.5</i>	<i>447</i>	<i>1234</i>	<i>795</i>	<i>1267</i>	<i>818</i>	<i>1161</i>	<i>798</i>
	<i>2012-13</i>	<i>1391</i>	<i>436</i>	<i>1454</i>	<i>792</i>	<i>1153</i>	<i>842</i>	<i>1377</i>	<i>784</i>
	<i>2013-14</i>	<i>1385</i>	<i>450</i>	<i>1395</i>	<i>787</i>	<i>1185</i>	<i>875</i>	<i>1345</i>	<i>774</i>
	<i>2014-15</i>	<i>1390</i>	<i>520</i>	<i>1385</i>	<i>770</i>	<i>1190</i>	<i>710</i>	<i>1429</i>	<i>855</i>
<i>M.Sc Computer Science</i>									
	<i>2013-14</i>							<i>736</i>	<i>562</i>
	<i>2014-15</i>							<i>771</i>	<i>547</i>

BSc Electronics Programme	Year	College 1 Sree Ayyappa College Eramallikkara		College 2 College of Applied Science Mavelikkara	
		Max. Index Mark	Minimum Index Mark	Max. Index Mark	Minimum IndexMark
	2009 - 10	631/700	335/700	583/700	348/700
	2010 – 2011	1316/1400	492/1400	1202/1400	777/1400
	2011 - 2012	1238/1400	777/1400	1227/1400	842/1400
	2012 - 2013	1062/1400	776/1400	1051/1400	904/1400
	2013-2014	1174 /1400	789/1400	1025/1400	820/1400
	2014-2015	1216/1400	723/1400	1010/1400	790/1400

B. Com with Computer Application Programme	Year	Bishop Moore College Mavelikkara		Sree Ayyappa College, Eramallikkara	
		First Index	Last Index	First Index	Last Index
	2014-15	1268	648	1250	666

B. Sc Mathematics Programme	Year	Sree Ayyappa College, Eramallikkara		BishopMoore College, Mavelikkara		Christian College,Chengannur	
		First Index	Last Index	First Index	Last Index	First Index	Last Index
	2009-10			652	339	601	485
	2010-11			1201	734	1117	758
	2011-12			1359	758	1128	751
	2012-13	1091	735	1331	704	1171	764
	2013-14	1164	770	1342	728	1210	770
	2014-15	1209	790	1302	724	1189	823

B. Sc. Biochemistry & Industrial Microbiology Programme	Year	Sree Ayyappa College, Eramallikkara	
		First Index	Last Index
	2009-10	590	458
	2010-11	967	864
	2011-12	1240	683.5
	2012-13	1211	610
	2013-14	1254	687
	2014-15	1259	620

*No nearby colleges offer this course

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. Prior to 2012 admissions there was a mechanism to review the admission process and student profiles. In this process, the college critically examines their choice for various programmes, their score, economical background etc. While examining the rating of choice and demand for various programmes we implement necessary corrective mechanism in the overall performance of the programme. The university has made the admission process centralized and online from 2012 admission onwards

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**

The institution strictly follows the guidelines on reservation prescribed by the Government of Kerala and the University of Kerala.

- a) 20% of the students admitted belong to SC/ST category
- b) The admission being purely on merit basis, no special preference is extended to women candidates.
- c) 4% of the total seats coming under the general quota is reserved for the differentially abled. However, girls form 51% of the total student strength.
- d) One seat is reserved in any of the programme for the outstanding sports personnel.

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.

Department of Computer Science

Course	Year	Total no of applicants	No of candidates admitted	Demand Ratio
BSc Computer Science	2009 - 2010	136	18	1:8
	2010 - 2011	110	17	1:7
	2011 - 2012	123	22	1:6
	2012 - 2013	*	18	*
	2013 - 2014		18	
	2014 - 2015		23	
Msc Computer Science	2013 - 2014	*	05	*
	2014 - 2015		14	

*From 2012 onwards admission is done through the University centralized admission process.

Department of Commerce

Course	Year	Total no of applicants	No of candidates admitted	Demand Ratio
BCom with Computer Applications	2014-2015	*	34	*

Course	Year	Total no of applicants	No of candidates admitted	Demand Ratio
BSc Electronics	2009 - 2010	164	21	1:8
	2010 - 2011	114	17	1:6
	2011 - 2012	120	16	1:6
	2012 – 2013	*		*
	2013 – 2014			
	2014 - 2015			

*From 2012 onwards admission is done through the University centralized admission process.

Course	Year	Total no of applicants	No of candidates admitted	Demand Ratio
BSc Biochemistry &Industrial Microbiology	2008 -09	66	17	1:2.75
	2009 - 10	60	16	1:2.5
	2010 – 2011	64	18	1:2.66
	2011 - 2012	60	18	1:2.5
	2012 – 2013	*	22	*
	2013 – 2014		20	
	2014 - 2015		18	

*From 2012 onwards admission is done through the University centralized admission process.

Course	Year	Total no of applicants	No of candidates admitted	Demand Ratio
BSc Mathematics	2008 -2009	130	16	1:6
	2009 - 2010	120	15	.1.5
	2010 - 2011	120	18	1:5
	2011 - 2012	105	16	1:5
	2012 - 2013	*		*
	2013 - 2014			
	2014 - 2015			

* From 2012 onwards admission is done through the University centralized admission process

2.2 Catering to Diverse Needs of Students

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

- ◆ Our institution takes care of differentially abled students by arranging their classes in the ground floor and providing additional facilities like wheel chair.
- ◆ For the visually disabled and hearing impaired students special software like Braille, Insightetc are provided.
- ◆ Ramp facilities are provided and mentor care ensured through peers.

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

- ◆ Before the commencement of classes the institution conducts two orientation programmes. During the orientation programme for freshers, we assess the students' in terms of knowledge and their skills by providing them specially prepared formats and collecting the respective data.
- ◆ Through this induction analysis we find out students with special technical skills and encourage them especially while doing technical project works.
- ◆ Various sessions covered in the orientation programme are Prospects & Objectives of the course, CBCSS & Curriculum, Scheme & Syllabus, Evaluation Procedure, Infrastructural Facilities , Extra Curricular Activities etc...

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

- ◆ To bridge the knowledge gap of newly admitted students a two days orientation programme is conducted at Department level. This programme is conducted as per the detailed syllabus prepared at Department level.

- ◆ Through this induction analysis we identify the weak and bright students based on merit.
- ◆ The advanced learners and students with special technical skills are encouraged specially while doing technical project works.
- ◆ Advanced learners are identified as student mentors which itself is a motivation for the teaching of slow learners.

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

- ◆ The Women's Study unit of the College organizes various programmes aimed at women empowerment and skill development among the girl students and lady staff.
- ◆ Bhoomitra club organizes various environment enrichment programmes which have captured special attention of the society.
- ◆ Social & Environmental Awareness Programme is conducted every year by the department of computer science as part of their curriculum.

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

- ◆ Advanced learners are identified based on their performance in class seminars, group discussions, test papers, subject related quizzes, their responses in the teaching learning process.
- ◆ Advanced learners are encouraged to attend seminars and workshops conducted by other institutions. Frequent seminars, group discussions and other academic activities are conducted among them for motivation.

- ◆ Walk With a Scholar (WWS) scheme started during this academic year proposes to arrange specialized mentoring programs to provide guidance for their future.
- ◆ Advanced learners are given additional facilities like A-view, NPTEL lectures etc. They are provided username and passwords to access e journals and e – resources with the INFLIBNET facility.
- ◆ Virtual Lab facilities are provided to enthuse students to conduct experiments. This would help them in learning basic and advanced concepts through remote experimentation.

2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc.)?

- ◆ The details of the drop outs are maintained in the institution and are analyzed from time to time.
- ◆ All the teaching departments offer counseling to the students through their interactions outside the class hours in the tutorial sessions.
- ◆ The economically backward students get the benefit of financial assistance of the Government in the form of scholarships.

The drop out rate is practically negligible. It is made possible by the following measures.

- ◆ Toppers of all classes are given cash prizes and mementos during college day celebration.
- ◆ Various endowment prizes and merit awards instituted in the different departments offer the students a motivation to excel in their studies.

- ◆ Class PTA meetings organized at the department level address issues such as student absenteeism and underperformance.

2.3 Teaching -Learning Process

2.3.1 How does the institution plan and organize the teaching-learning and evaluation schedules? (Academic calendar, teaching plan and evaluation blueprint, etc.)

- ◆ At the outset of the academic year the college prepares an academic calendar and plans the academic activities that should inevitably form part of the schedule. The syllabus is analyzed threadbare.
- ◆ A detailed teaching plan is prepared based on the syllabus, dividing it into various modules depending on the effective teaching hours the teacher is likely to enjoy during each term. The teaching plan is strictly monitored by the college governing council.
- ◆ The feedback received from the students on a subject/class during the academic year is also thoroughly scrutinized by College Level Monitoring Committee and steps are taken to improve the teaching learning process.

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

The IQAC, comprising the senior-most faculties, is invested with the tasks of monitoring, recommending and implementing various steps to enhance the efficacy of teaching and effectiveness of learning. The IQAC of the college has been instrumental in transforming our traditional classrooms into an ICT-enabled ambience. The IQAC also monitors the participation of teachers in periodic training programmes and academic seminars.

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?

With the induction of CBCSS the college has shifted to a very perceptible mode of student centered pedagogy. The college has developed support structures and system for teachers and students necessary for interactive teaching, collaborative and independent learning.

1. Interactive learning : Seminars, Group discussions,Project work.

- ◆ All departments are equipped with LCD projectors, computers and access to the internet, opening up large scale use of syllabus based e-learning resources. The teacher facilitates the execution of assignments and students' seminar and ensures that the student makes larger use of library and internet resources. Project work which provides access to gain knowledge and skill for data collection, presentation, analysis and interpretation is compulsory for all UG programmes.

2. Collaborative learning:

- ◆ Students of all UG programmes undergo industrial visits / training programmes /field visits, project data collection and surveys as a part of their curriculum. This provides a better platform for them to have better experiences of collaborative learning.

3. Independent learning :

- ◆ Quizzes and seminars are integral part of all programmes. It gives them better opportunities to evolve independent learning experiences.
- ◆ All sorts of learning resources are available in the department and Central Library. Students independently prepare for test papers, seminars and class assignments using these resources.

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

Students make use of various platforms in the college some of which are integral part of their curriculum.

Curriculum based project works

- ◆ Paper presentation contest as a part of INFOFEST and UGC sponsored seminars
- ◆ Mini projects

- ◆ Activities of Internationally accepted professional bodies like Institution of Electronics and Telecommunication Engineers & Industrial visits etc impart sufficient platforms to nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators.
- ◆ The visits to R&D organizations and interaction with eminent scientists help them evolve scientific temper. The professional bodies like student chapter of IETE established in the college give better opportunities for the students by stimulating role by encouraging outside-the-classroom studies / practical work / seminars and workshops.
- ◆ Their research aptitude is sorted out and nurtured through their course of study and make them life long learners and innovators.
- ◆ A few of our Students attended INDIAN SCIENCE CONGRESS 2009 as organizing volunteers.

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

The college has subscribed virtual lab facilities from *vlab.co.in*, open course wares on technical education from *NPTEL and NME-ICT*/ Subscription of Open Educational Resources from Amritha Institute i.e Amritha Gurukul is a major step in this regard and all the Departments of this college avail the virtual lab facilities provided by them. Also students are exposed to webinars and expert lectures available in various topics in association hours.

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

Three UGC sponsored National Conferences and one state level UGC sponsored seminar are conducted so far.

- ◆ Staff attend on line workshops, webinars and other programmes .
- ◆ Faculty members regularly attend refresher courses organised by the Academic Staff Colleges of various Universities.
- ◆ The institution organizes seminars/ workshops to update themselves with the recent developments in the various subjects. Invited teachers in current topics , Experts and scholars from Universities/colleges and research organizations are invited to discuss topics of current development. On behalf of Associations expert seminars are conducted on a regular basis.
- ◆ The Science Association and INFOFEST provides a common platform for exchanging ideas for students.
- ◆ IETE provides all sorts of support to Electronics and Computer science departments.

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

- ◆ Students Personal Effectiveness Enrichment Programmes are organized every year. The class mainly focused on how to face an interview and also how to lead a competent academic life.
- ◆ Students of our college attended the Campus Selection process of various leading organizations such as Cognizant Technology Solutions, Kochi, Tata Consultancy Services, Wipro Ltd and HP. Many students got placements in these companies.

Structure and Mechanism:

- ◆ Tutorial system: The curriculum stresses the implementation of tutorial system for every subject. Each Dept. maintains records in this regard.
- ◆ Mentor system: In order to attain a healthy feedback and implement remedial measures , each student individually subjected to the mentor system. Each Dept. maintains records in this regard.
- ◆ Counseling: Individual counseling is given to students those who are in need.
- ◆ Grievance redressal cell: The grievance redressal mechanism is very effective in the college.

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

- ◆ Workshops and faculty training programmes are conducted for innovative practices in teaching learning methods.
- ◆ Teachers are given opportunities to present innovative teaching methods to be implemented .
- ◆ The College has made all efforts to make available almost all technological tools to provide the joy of learning to the learners. Both teachers and students have access to internet, computers and other audio visual aids.
- ◆ Innovative methods implemented are :Aview, vlabs, nptel, fosse, co-learn.co.in, mobile education, sakshath

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

- ◆ Library is well equipped with much of resources like text books, reference books, question banks and web resources. The reprographic facilities are also available.
- ◆ Subscription of INFLIBNET N-LIST facility in the library gives ample opportunities to the students. The programme facilitates access to about 1 lakh ebooks and 3000 e journals, to get them in pace with recent developments in their fields. The N-LIST project provides access to e-resources to students, researchers and faculty from colleges and other beneficiary institutions through server(s) installed at the INFLIBNET Centre.
- ◆ Computer and free internet facility is provided for students to access e-resources and other E- learning resources.

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.

Our college is one of the rarest institutions that gets the maximum number of effective teaching hours in the state as the academic atmosphere is very peaceful and the public (local body members, PTA, CDC etc..) provide maximum support for smooth conduct of the classes.

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

- ◆ Feed back system is made highly effective in the college and evaluate the teaching learning process.
- ◆ Students’ assessment of teachers is carried out on a regular basis. Quality improvement cell of the College collects the student feedback on teachers in the format prescribed by NAAC.
- ◆ Self assessment is submitted by faculties in the prescribed format.

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

Members of the faculty are selected strictly following the guidelines laid down by the government, the university and the UGC from time to time. The vacancies are notified prominently in regional and national dailies. Weightage for selection as per the present norms is as follows:

- ◆ Academic qualification 40%
- ◆ Teaching/ research experience 15%
- ◆ Publications 15%
- ◆ Additional degree 5% and
- ◆ Interview 25%

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.			2	1	1	7	11
M.Phil.			-	1	-	-	1
PG			4	4	-	-	8
Temporary teachers							
Ph.D.							
M.Phil.							
PG					3	10	13
Part-time teachers							
Ph.D.							
M.Phil.							
PG							

Immediately when a vacancy of a teacher arises the Management reports it to the University and after getting concurrence from the University steps are taken to fill up the posts

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

- ◆ Appointment of new faculties in the context of curriculum development
- ◆ The teachers entrusted with teaching in the specific area participate in a series of workshops and seminars are being organized under the auspices of the Academic Staff Colleges .
- ◆ Teachers are always encouraged to attend refresher courses, conferences and symposiums. It is ensured that the faculty is well equipped in the latest development in their field of specialization.
- ◆ Teachers are allowed to undergo FDP on their demand to complete their research work

No. of teachers made use of FDP : Five.

No. of teachers undergone research award programme : one

2.4.2 Providing 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	Number of faculty Nominated
Refresher courses	5
HRD programmes	
Orientation programmes	4
Staff training conducted by the university	15
Staff training conducted by other institutions	12
Summer / winter schools, workshops, etc.	10

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

- ❖ Teaching learning methods/approaches
 - ❖ 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
- ◆ The faculty training programme is conducted on a regular basis. Workshop on teaching learning methods and innovative teaching practices is conducted regularly every year.
 - ◆ Faculty attend department level workshop on new curriculum implementation. To frame the curriculum of Add-on courses a workshop was organized by the institution.

- ◆ Workshop is conducted for teachers on content/knowledge management by knowledge management experts.
- ◆ Reference materials are provided to the students (books, journals, lecture notes, ppt)
- ◆ Feedbacks from students are collected and analyzed.
- ◆ All faculty members are well versed with audio-visual teaching aids.

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

- ◆ We are strictly following UGC FDP policy in this institution and teachers avail FDP in accordance with this.
- ◆ Management promotes study leave for teachers other than FDP on demand.
- ◆ No. of UGC supported Minor Research Projects (completed) : 4
- ◆ No. of UGC supported Minor Research Projects (ongoing) : 5
- ◆ Institution promotes teachers for attending workshops and seminars and are allowed to entertain duty leave for the same.
- ◆ We have consultancy policy approved by the college governing council for promoting consultancy work on free of cost basis without affecting regular work in the college. Two faculty members were permitted to engage in consultancy work in industries.

2.4.5 Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate

how the institutional culture and environment contributed to such performance/achievement of the faculty.

None of our teachers have received national/international awards in teaching.

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

- ◆ Feed back system of students, PTA, Alumni members and other stake holders is implemented and is found to be very effective in improving the teacher quality.
- ◆ IQAC analyses the feedback confidentially and is reported to the Principal for taking necessary corrective measures.

2.5. Evaluation Process and Reforms

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

- ◆ In the beginning of every academic year, teachers are informed about the feedback collected from the students for evaluating their performance. Students' feed back are collected at the fag end of the academic year.
- ◆ Details of students' continuous assessment evaluation system published by the university are provided to the students through academic calendar. Before the commencement of the internal examinations and the University examinations the evaluation methods are again communicated by issuing notices through Student Notice Board.
- ◆ All letters, circulars, ordinances regarding examination and decisions, regarding evaluation are brought to the notice of the college. In addition to this, the university also communicates the programme of revaluation, reassessment and dates of annual examinations, supplementary examinations through their website and special columns in all the News Papers

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

- ◆ The College Level Monitoring Committee is constituted every year to look after all the Examination related activities like preparation of Examination schedules, conduct of In semester examinations, End semester examinations, Practical Examinations and publishing of CA results were monitored by the above said committee.
- ◆ Students are internally assessed on the basis of seminar, assignments, test paper and attendance.
- ◆ Internal evaluation accounts for one fourth of the total weightage. The college conducts internal examination in the centralized manner strictly following the set pattern of university end examinations.
- ◆ Department Level Monitoring Committee & College Level Monitoring Committee monitors the conduct of courses and evaluation under CE.
- ◆ CLMC is responsible for the conduct of the first degree programme ensuring instructional days, making arrangements for ESE of various semester. This committee shall consider all complaints not redressed by the DLMCs.

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?

- ◆ With the introduction of Choice-Based Credit & Semester System (CBCSS), DLMC & CLMC ensures effective implementation of the evaluation reforms of university and those initiated by the institution.
- ◆ Academic progresses of the students are communicated to the parents through PTA meetings. Internal assessment marks are published on the

notice board at the end of each semester. Continuous assessment mark sheet has to be signed by the students before forwarding to the University. The principal monitors & ensures the effective implementation of examination system in the college.

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

❖ **Internal assessment evaluation process**

- ◆ Internal Mark is assessed through a series of class tests, seminars, assignments. Attendance / Regularity is also assessed for the evaluation of internal marks. Model examinations are conducted for all Lab courses at the end of each semester.
- ◆ The students' CE report is maintained in the entire department and marks are also displayed on the notice board. The process is transparent and there is a mechanism for grievance redressal. The CE report is informed to the parents in the class wise PTA meeting

❖ **End semester evaluation process**

- ◆ End semester Examinations of all programmes in all semesters are conducted by the University.
- ◆ Input output analysis and result analysis is done by every department after the publishing of semester examination results by the University and remedial measures are adopted by each department.
- ◆ Special attention is given to weak students or slow learners and progress is monitored

2.5.5 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.

- ♦ Class Tutor
- ♦ Student Mentor System
- ♦ Tutorial System
- ♦ Department Level Monitoring Committee
- ♦ College Level Monitoring Committee
- ♦ Class PTA
- ♦ General PTA
 - o The college is keen on attendance of the students and the subject teacher ensures maximum attendance. The parents are invariably kept informed about the performance of the students. The meetings of the Parent Teacher association are conducted at regular interval. This ensures students' attendance and progress. This helps the college and parents to monitor the academic performance of the students.
 - o Tutorial is an effective system to monitor the students' progress. The achievements of the students are discussed with parents during class PTA meeting.
 - o The tutor keeps the record of the grades students have scored in the internal exams, seminars and assignments.
 - o The students' progress report is maintained in the department and marks are also displayed on the notice board.

- o Input output analysis and result analysis is done by every department after the publishing of semester examination results by the University.

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

- ♦ Students are internally assessed on the basis of seminar, assignments, test paper and attendance.
- ♦ The continuous internal evaluation takes care of the overall performance , punctuality, regularity behavioral attitude , self study and communication skills of students.
- ♦ The college ensures a hundred percent transparency in the award of grades in the internal examinations at the college level. The students can have their grievances redressed at the Department / College / University level.
- ♦ After publishing the consolidated internal marks, time is given to students to register complaints or grievances at college level
- ♦ All tests and assignments/Seminars are conducted as per the academic calendar.
- ♦ CLMC ensures effective implementation of the evaluation reforms of university as per the academic calendar and those initiated by the institution.

2.5.7 Does the institution and individual teachers use assessment/evaluation 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,

- ♦ **Class Tutor**

Regularly monitors the overall performance of the students and corrective measures are taken.

- ♦ **Student Mentor System**

The mentor system helps the student to get personal care and counseling for achievement.

- ♦ **Tutorial System**

The tutor keeps the record of the grades that students have scored in the internal exams, seminars and assignments which is an indicator of overall performance of students.

- ♦ **Remedial Coaching**

Conducted during free hours for students who are slow learners.

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

- ♦ Grievance redressal cell is constituted every year. A three tier students' redressal mechanism functions to look in to the complaints. The students can have their grievances redressed at the Department / College / University level (Department Level Monitoring Committee, College Level Monitoring Committee, University Level Monitoring Committee). The college ensures a hundred percent transparency in the award of grades in the internal examinations at the college level.

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?

- ♦ All the departments conduct awareness classes (orientation programmes) at the beginning of every academic year focusing on the relevance, purpose, future scope, job prospects etc. Learning objectives of each course is clearly stated in the Scheme & syllabus of various programmes.
- ♦ Student learning outcomes statements clearly state the expected knowledge, skills, application, attitudes, competencies, and habits of mind that students are expected to acquire at an institution of higher education.
- ♦ The syllabus is completed well on time. An end semester test paper will be conducted. Immediately after the announcement of results staff meeting will be held where teachers assess student's progress and performance.

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

To achieve the learning outcomes of our college, college plans the academic calendar and ensures the effective implementation through the following.

- ♦ Innovative Teaching Learning Methodologies.
- ♦ Interaction with experts of excellent institution.
- ♦ Techniques to create critical thinking
- ♦ ICT enabled teaching with the help of smart class room, audio-video aids, Multimedia, OER,
- ♦ Feedback from students on curriculum.
- ♦ The tutorial system caters to the individual needs of the learners.
- ♦ The college promotes introduction of ICT in the class rooms
- ♦ Remedial coaching and Book Bank facilities are made available to the needy,

- ♦ INFLIBNET facilities are available.
- ♦ Walk with a Scholar programme(WWS)
- ♦ Scholar Support Programme(SSP)

2.6.3 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality Jobs, and research aptitude) of the courses offered?

Keen interest is taken by the institution to apply the knowledge and expertise acquired by the students through their courses in designing developing and implementing socially and economically relevant projects.

Social and economically relevant projects : Students of final year electronics (2006 batch) along with faculty S.Suresh built a Low Cost Traffic & Car Parking System and another project Bridge signaling system (2005 batch) during their course.

Career guidance & Placement Cell : Actively promotes career counseling and placement services. Programmes are conducted to find best career options and guidance for students in choosing the right career. An employability skills development programme was conducted for students.

Research & development –

- ♦ To promote basic and applied research in the field of science and technology a research and development cell is developed in our college.
- ♦ Seminar presentations are compulsory requirement of continuous evaluation. The visits to R&D organizations and interaction with eminent scientists help them evolve scientific temper.
- ♦ Project idea contest is conducted through which opportunities are given to the students to have critical scientific thinking.

- ♦ Best project ideas and best projects are awarded in a function. Also students get opportunity to present seminars college wise in a common platform. There also their best presentations are awarded. (INFOFEST).
- ♦ The professional bodies like student chapter of IETE established in the college give better opportunities for the students by stimulating role by encouraging outside-the-classroom studies / practical work / seminars and workshops.
- ♦ The research aptitude is sorted out and nurtured through their course of study by the research and development cell.

2.6.4 How does the institution collect and analyse data on student learning outcomes and use it for planning and overcoming barriers of learning?

- ♦ Student feedbacks on curriculum, teaching learning & evaluation process are collected every year through structured questionnaire.
- ♦ However, faculty members who are part of the academic bodies of the University actively campaign for reforms in evaluation, curriculum and restructuring.

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

- ♦ Feedbacks from Alumni are collected to ensure the achievement of learning outcomes.
- ♦ IQAC conducts academic audit and compares the performance and achievement of each department academic co-ordinators and refer to DLMC and CLMC for necessary remedial measures.

2.6.6 What are the graduates attributes specified by the college/affiliating university?

How does the college ensure the attainment of these by the students?

Student learning outcomes statements clearly state the expected knowledge, skills, application ,attitudes, competencies, and habits of mind that students are expected to acquire at an institution of higher education. Transparent student learning outcomes statements are:

1. Quality
2. Employability

2.6.7 Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.

- ♦ Advanced learners are entrusted to take remedial coaching for slow learners . Evaluation of answer scripts of test paper is done under the strict supervision of teachers. The peer teaching and peer evaluation enhance the knowledge level of students.
- ♦ Peer evaluation by the teachers in class room teaching created an atmosphere of healthy exchange of ideas and improved the class room teaching and learning process.
- ♦ Walk with a scholar scheme proposes to arrange specialized mentoring programs for students in U G programme and to provide guidance for their future.
- ♦ Scholar support programme aims at imparting personalized additional support to the needy students through tutorial study materials, additional lectures, question bank and interactive sections.

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?

The college at present offers only PG and UG courses and not yet recognized as a research centre. PG course has started during the academic year 2013- 2014. However, our college has shown its utmost interest towards the promotion of research constituting a research committee.

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.

The college Research Committee which guides teachers and gives suggestion for making policy decision regarding improving research among teachers and students.

A Research Committee comprises of Principal as Chairman, a convener and 5 members to oversee research related developments. The committee will monitor and coordinate research activities of various departments of the college. The college has laid an emphasis on research and encouraged teaches to actively engaged in research related activities.

Activities & recommendations

- ◆ Faculty members are informed about the notifications from various funding agencies and the time of submission of applications
- ◆ Evaluate research project proposals for external funding,
- ◆ To give guidance and suggestions to students for the seminar / presentation included in their curriculum.

- ◆ Organizes seminars and workshops to motivate teachers to undertake research projects
- ◆ Present manuscript of the papers before communicated to various journals / seminars for peer review and comments.

Activity Milestone reached

- ◆ UG and PG project is being carrying out in association with various external research institutions
- ◆ Teachers from various departments are already been send for FDP/PDF.
- ◆ INFOFEST,a seminar series conducted annually so that students and teachers were obtained opportunity to present their research papers
- ◆ Orientation on research methodology were conducted prior to starting their project works
- ◆ Teachers are enrolled as research guides in approved research centers under University of Kerala
- ◆ Various external funded research projects are being handled by teachers of various departments.
- ◆ National conference sponsored by UGC were conducted by various departments

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

The institution has given all the possible facilities, support and conducive environment to the carry out the research

- Providing seed money
- Autonomy to the Principal Investigator
- Time-off
- Timely Release of grant
- Timely Audit
- Submission of Utilization Certificate and annual reports to funding Agency

- Utilization of existing Infrastructure
- Knowledge Resources

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

The Science club of this college has been functioning with the aim of fostering a scientific attitude among the students. The club organizes seminars, invited talks on various specific and general science related topics.

The college organizes a seminar series titled “Infofest” which gives the students a platform to interact with eminent researchers as well as present papers on their own. Best-Paper Award were given to the outstanding student.

- IETE Students’ Forum is established in the college to nurture the critical thinking, scientific temper and interaction with experts. It also provides technical and scientific support to conduct seminars and workshops.
- UGC sponsored National and state level seminars and workshops has been conducted by various departments of the college.

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.

A number of faculties are actively engaged in research related activities. Since most of the department in the campus provides only undergraduate courses most of the research related activities are limited with undergraduate project.

Sl.No.	Name of the Faculty	Department	Contributions
1	Dr.Jayasree T K	Physics	Research Guide
2	Dr.Anil Kumar.K.S.	Computer Science	Two research projects funded by UGC, Kerala state IT mission& KELSA
3	Dr.Manjula.K.V	Malayalam	UGC funded project

4	Prof Sreedevi.S	Computer Science	UGC funded project
5	Prof Jisha Nair B J	Computer Science	UGC funded project
6	Dr.Nitha.B	Microbiology	UGC funded project
7	Dr.Ganga.G	Microbiology	UGC funded project
8	Dr.N.Madhavan	Physical Education	UGC funded project, Research Guide
9	Prof Prakash.K.C	Electronics	UGC funded project
10	Prof Suresh .S	Electronics	UGC funded project
11	Prof Ushakumary.KL	Electronics	UGC funded project

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.

A seminar series titled 'INFOFEST' and National Conferences were organized by the institution in which the students and staffs were actively participated and present research papers in their respective disciplines. Best paper award was given to outstanding students. Renowned scientist and distinguished professional from various disciplines were participated in this event.

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

Name of the Faculty as	Prioritized Research Areas recognized guide	University
1. Dr.Jayasree.T.K	Polymer Physics	University of Kerala
2. Dr.N.Madhavan	Sports Medicine	University of Kerala

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

Various departments / associations of institute had conducted seminars which provided an ample chance for the students and teachers to interact with eminent personalities of various discipline.

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?

The Govt of Kerala is not providing any Sabbatical leave of State Aided College Faculties

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

The policy of the institution is that academic knowledge is meaningless unless translated into socially useful schemes and extension activities. The institution has the policy also to implement at least two schemes each year, based on the technical expertise available in the college. All these extension activities are implemented with the aim of making academic and purely scientific knowledge to the welfare of the society. Consultancy services offered by the college are instrumental in transferring scientific knowledge into practical application.

❖ Department of Biochemistry and Industrial Microbiology

- ◆ House hold Water quality I assessment of the Thiruvandoor panchayath through biological and Chemical analysis methods
- ◆ Milk quality assessment of raw milk obtained from the cows of Thiruvandoor panchayath
- ◆ Blood Group detection camp for all the students staffs and residents of Panchayath

- ◆ A cancer detection camp was organized in joint venture with NSS unit of this college
- ◆ In joint venture with Bhoomithra club and Microbiology Department a water quality testing Laboratory was established for the Panchayath people.
- ◆ In connection with Veterinary clinic of cheriyanad panchayath a mastitis milk testing kits were procured .This would be beneficial for screening detection mastitis

❖ **Department of Computer Science**

- ◆ **Cyber- Literate- Cyber Crime Devoid Campus Project'** .In order to extent our department activities towards the benefit of common man we have translated our mission of “giving society its due”, into meaningful projects of social relevance. ‘Cyber- Literate- Cyber Crime Devoid Campus Project’ organised jointly by Kerala State IT Mission(KSITM) and Kerala State Legal Services Authority (KELSA) .This project has been designed with maximum participation from the society.
- ◆ **“Social and Environmental Awareness Programme** was conducted to keep students of applied science and technical courses in touch with the realities and basic needs of the society and environment.
- ◆ **IT Literate Campus Programme** A computer literacy programme has been conducted to familiarize the staff and the students of other departments of our college with basic skills and knowledge in computer. This is the first step towards declaring our campus as IT Literate Campus. Since ICT skills are a basic necessity for any profession, we hope that our extension activity will make them capable of facing the demands of employment more efficiently.
- ◆ **IT Literate ward** The department has conducted among the residents of Ward II of Thiruvuvandoor panchayat to list out the people who are not aware of the

facilities and application of Information Technology. A programme is being conducted to impart them fundamental knowledge to operate computer and use internet facilities.

❖ Department of Electronics

- 1) E-waste management awareness programme for public and energy literacy survey was conducted, An energy literacy programme was conducted in Thiruvandoor panchayath.
- 2) Engaged in the solar powered project

❖ Department of Mathematics

A statistical survey was conducted regarding the use of Panparag ,tobacco and intoxic substances .Based on the survey few people were identified .A one day seminar was conducted for those people by expertise and anti drug addition pledge were taken by them

3.2 Resource Mobilization for Research

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

At present, no separate fund allotted /earmarked for the purpose of research, but initiatives are being taken to tap the fund from external funding agencies like UGC, &KSCSTE .Steps are also taken to ensure that the faculty engaged in research is given timely release of the grant received from the funding agency.

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

At present, there is no practice of giving seed money to the faculty for research. Teachers are provided knowledge and infrastructural facilities for promoting research.

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

- ◆ Students are allowed to carry out academic research in respective department utilizing infrastructure of the institution, Students are encouraged to in house project which would be a part of external funded project
- ◆ Interested students are encouraged to carry out the part of research work in Govt funded external institute so that they can utilize the facilities in a cheaper rate or at free of cost.
- ◆ Students are intimated about the available summer fellowships funded by the national institute in time

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

There has been a study improvement in the research performance of the college during the last four years. The College has taken several steps to promote interdisciplinary research by applying project on interdisciplinary research areas. This helps the young researchers and teachers to imbibe research aptitude and broaden their perspective on their subjects.

- The current on going UGC funded research project of Microbiology departments are Interdisciplinary
- Department of Computer Science has various projects on Mutli disciplinary aspects .
- A faculty in Depart of Biochemistry and Industrial Microbiology completed her PhD in the area of nano medicine in cancer therapy

- Academic research of Undergraduate students also involves multidisciplinary work of Biochemistry and Microbiology and Molecular biology which involves is being carried out jointly with various research institute such as Unibiosys Kochi Kottakkal Research Institute, ICAR institutes, Biogenix, Kollam CPCE etc.

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

- Every year depends on the fund availability a sizable amount of money is being kept for the procurement of necessary chemicals and equipments to all department
- All departments are technologically uplifted by providing computer and internet facility
- Laboratory and library facilities are open for research purpose on extra hours and holidays.
- Log book maintenance, assets acquired through projects are surrendered as institutional property.

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?

- The members of teaching faculty have been doing Research projects sponsored by external funding agencies.
- The funding thus obtained has been used for the development of infrastructure and facilities of the college.

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

Institute promote teachers to apply for grants to various funding agencies. Faculties of various departments secured UGC grant and few projects were completed and reports were submitted. Few works are on going and details are furnished below.

Funding agency/ Minor Projects	Duration	Title of the project	Amount sanctioned In INR (RS)	Amount received In INR(RS)
Kerala IT Mission & KELSA	2010-2012	The cyber Literate-Cyber crime Devoid campus Project	1,40,000	1,40,000
UGC	2011-2012	Anomaly intrusion detection inference system using hybrid intelligent systems	1,10,000	1,10,000
UGC	2011-2012	Design and simulation study of micro strip fed dielectric resonator antennas	1,20,000	92,500
UGC	2011-2012	Design and development of compact antenna for RFID applications	1,25,000	1,25,000
UGC	2011-2012	Analysis of Mammogram Imaging Using Computational Intelligence Techniques	1,15,000	1,15,000
UGC	2012-2013	An evaluation on postural deviation among blind students	95,000	1,10,000
UGC	2012-2013	Modelling of photo voltaic systems	1,60,000	1,90,000
UGC	2012-2013	Otharakerathile thottam pattukal bhasha sasthanparamaya sameepanam	50,000	80,000
UGC	2012-13	Secure and efficient biometric key generation for kryptography	1,60,000	1,40,000
UGC	2013-2014	Diagnosis and characterisation of Chlamydia in female population of Kerala	1,50,000	1,25,000
UGC	2013-2014	Screening of Antimicrobial action of Mushroom	1,80,000	1,25,000

3.3 Research Facilities

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

At present the college offers only One PG Course, we have the necessary research facilities and lab facilities as per the requirements of the programme. College also offers ample opportunity for undergraduate academic researchers by providing facilities like

- Guidance from experts of various fields, staff with good academic track and research experience are a immense asset for students in various departments
- The college has installed soft wares like MATLAB and SIMULINK, which are applicable at an advanced stage of research. INFLIBNET connectivity which enabled to down load more than 3000 research journals
- Antenna design software HFSS is also installed which is a design and simulation software applicable for Microwave engineering. P SPICE
- Biochemistry and Microbiology labs are well equipped with modern instruments for carrying out undergraduate research
- All the departments in the college have experts with sufficient facilities to carry out undergraduate research activities.
- New books with latest editions were procured to library to keep in pace with the advancement in respective fields.

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?

College receives grant for Collegeredevelopment from UGC. In addition to it, Management provides year wise grant towards the development. PTA of the institute also provide the fund for department maintenance.

- College Development committees are formulated for the proper and timely utilization of allocated fund
- Lab maintenance and infrastructure development were made in various department
- Purchase of latest books in the respective disciplines were carried out computers and software were done
- Purchase Computers and software were done, Wifi and internet facilities were accessed to students and faculties
- Work shop on Introduction to Computer and internet technology were carried out for students and staff
- New buildings and renovations works were carried out to accommodate new equipments and enhance the working space

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. A Joint venture financial support of TCDU, Water authority and Pollution control board for a Jalasree project a lab was set with a grant of 25,000 which enabled to develop a water testing laboratory facilities in connection with Microbiology department

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

- Research facilities are made available to the students for their project work, which is part of their curriculum.
- The students of the Department of Biochemistry and Industrial Microbiology do their project work in Uni Biosys Biotech Research Labs, Kalamassery, Ernakulam

- Students of the Department of Electronics do their projects in Keltron, Thiruvananthapuram.
- Vocational training was carried out by students of Microbiology Department in various external research organization like Milma industries, Avian Veterinary Research Laboratory Thiruvalla and Pushpagiri Medical College Thiruvalla
- Students are being taken to various research institute by the department faculties which helped them to interact with research scholars, research fellows and renowned scientist of their respective field.

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

- Library facilities are upgraded to meet the necessary facility for the PG students.
- “National Library and Information Services infrastructure for Scholarly Content (N-LIST)” programme provides access to more than 3800+ e-journals (including current issues with 10 years back files) and 80,000+ e-books.
- Access for various e- journal, INFLIBNET and internet access to all department

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

At present there is no collaborative research work being carried in 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) .Original research contributing to product improvement .Research studies or surveys benefiting the community or improving the services Research inputs contributing to new initiatives and social development

Staff are engaged in active research programme in various disciplines. Many faculties are completed their PhD by research and few are in pursuing FDP programme. Guidance for academic UG ,PG and PhD research are being carried out effectively .Many teachers are taken up external funded project address to social relevance and the input of the wok will be beneficial for the common man in the society.

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?

There is no publications of research journal from the institute.

3.4.3 Give details of publications by the faculty and students: only number wise list is needed

Department wise Number of Publication during the period 2010-2015

Departments	No of members	International	National	Seminars & symposium (Abstracts & presentation)	Books	Article in books	Data base	Total
Computer Science	4	2	15	30				51
Electronics	4		5	20				25
Biochemistry &	5	23	11	26			25	85
Industrial								
Microbiology								
Mathematics	3	5	7	5				17
Oriental studies								
English	2		2	3	1			5
Hindi	1		5	10				15
Malayalam	1		6	8		3		17
Physical Education	1		3		1			4

3.4.4 Provide details (if any) of research awards received by the faculty /recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally /incentives given to faculty for receiving state, national and international recognitions for research contributions.

Our faculties received awards as a token of recognition for their outstanding works in the field of Scientific Research. The college recognize their talent by appreciating them.

3.5 Consultancy

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

Steps have been initiated for establishing institute industry interface. Our students are associated with organizations like C DIT, Technopark, Infopark, Keltron, Information Kerala Mission, MILMA, Pushpagirimedical college Biosys, UniBiosys, Wipro, Cognizent Technology, Solutions etc for their project work.

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

The consultancy services of the college are coordinated by the consultancy cell. The consultancy services, the available expertise, rules and regulations regarding administrative and financial commitments on the part of both the institutions and the beneficiary agency .

- College extends to its faculty members the privilege of offering consultancy services, so that this leads to the professional development and stature of the faculty member and will in turn benefit the institution as well.
- The faculty member should secure advance approval for the consulting activities from the Principal. The Management through the Principal ensures that there is no conflict with the duties in the college and do not diminish the

quality and quantity of professional services rendered by the faculty member in the college as part of the faculty member's duty and responsibilities.

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

- The college offers human resources and infrastructure facilities for consultancy services.
- The consultancy policy provide autonomy to the staff to utilize their expertise in consultancy services.

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

Faculty members of this college were provided consultancy for various agencies .Consultancy services so far give were of free of cost.

Consultancy Services offered by the faculties :

Dr.K.S. Anil Kumar,Dept of computer science

- Service Co-operative Banking sector for implementing core banking software
- IT Consultant in N S Memorial Institute of Medical Sciences at Kollam for implementing a fully computerized and networked Hospital Information System (HIS)
- Technical Committee member for the computerization of Travancore Devaswom board temples.
- For implementing computerization at Kerala Coir Workers' Welfare Fund Board, Alappuzha.

II Prof K.C Prakash Dept. of Electronics

- serving as a consultant for developing design of Power Electronics based electronic products of M/s Altron Power Ltd, Calicut.

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?

Consultancy services were till now offered as free of cost. Consultancy services are preferred to be offering in public/government sector undertaking.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

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

The institution is committed to promote extension activities as part of the institutional social responsibility and duty to the community. Special care is taken to inculcate in the students a sense of social commitment and responsibility through motivation sessions convened by individual departments. The extension wing identify plan and execute extension activities.

- NSS units of this college organizes various programmes which are aimed to carried out in regular provide the students with the chance of involving themselves in social causes and service. Extension activities are undertaken with the help and involvement of the local bodies and all the extension activities are organized with the aim of benefitting the society and the community. The extension activities of the institution serve as a platform to promote college-neighbouring community network and social service.
- The programmes of Poonkavanam nature club, sukruham charity club, Bhoomitra club, are undertaken with the aim of instilling the qualities of social sensitivity, team spirit, empathy towards less fortunate fellow- beings and sense of a college- society network in the minds of the students.

- Science club of the college has conducted cycle rally against cancer awareness ,class on life style disease and management. Many programmes were conducted to encourage school children and foster scientific talents in young minds.
- Red ribbon club of this college is aimed at collecting a data base of voluntary blood donors to facilitate blood donation during emergencies and creating awareness campaign on HIV.
- Women study unit of the college dedicated to issues related to women students/teaching and non teaching staff. Several awareness programmes were conducted to address the issues related to women inside the campus .

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

- NSS unit organizes programmes to observe all the days of national importance in the college, with the involvement of the local bodies, often in the presence of the local body members.
- Any social issue which merits a mention gets addressed in the college and the students are guided to react to the issue by writing letters to the editor, organizing rallies and awareness campaigns etc. All national and international days of importance are observed in the college.

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

We have an efficient feedback mechanism to gather, monitor and evaluate the perception and opinion of various stakeholders of the college,

- ◆ Students, parents, Local bodies ,Alumni, representatives from the panchayath local community etc. we organize PTA meetings periodically to

invite the parents to voice their opinions about the various aspects of the college like teaching- learning, governance, student amenities etc.

- ◆ Apart from general PTA meetings, we have class PTA meetings, when the parents can meet the teachers and clarify their doubts regarding grading and internal assessment.
- ◆ Grievance redressal Cell functioning at this college get support from the stakeholders to take up necessary steps are taken for the speedy redressal of the issues, in case of any

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

An Extension Wing is functioning in the college with the aim of coordinating the extension activities of the college. It plans and charts out the extension activities at the beginning of the academic year. The extension activities of the Various Departments, NSS, Science club, Redribbon and Red cross club, Bhoomithra Club, and Women's Study Unit and various department club are coordinated by the extension wing.

Extension Activities

➤ DEPARTMENT OF COMPUTER SCIENCE

- **“Cyber Literate – Cyber Crime Devoid Campus Project @ Chengannur Taluk”**, implemented in schools and colleges of Chengannur Taluk with the support of Kerala State IT Mission(KSITM) and Kerala State Legal Services Authority(KELSA). aims to give awareness to the students community regarding the pros and cons of using Mobile Phones, highlight the threats and abuse, different types of Cyber crime in Campus.

- **“Social and Environmental Awareness Programme** to keep students of applied science and technical courses in touch with the realities and basic needs of the society and environment. Funded by Department of computer science.
 - **IT Literate Campus Programme** A computer literacy programme has been conducted to familiarize the staff and the students of other departments of our college with basic skills and knowledge in computer. Funded by Department of computer science.
 - **Dept of Biochemistry &Industrial Microbiology**
 - Water quality analysis, Milk quality testing
 - Blood grouping, Blood glucose detection Funded by department of Microbiology
 - **DEPARTMENT OF MATHEMATICS**
 - The Department conducted a survey regarding the educational, economic and cultural status of all the families of Eramallikkara Panchayath
 - A survey was conducted in Thiruvandoor panchayath regarding the use of tobacco and alcohol in members of the panchayath. Funded by gramapanchayath and Dept of Mathematics.
 - **DEPARTMENT OF ELECTRONICS**
 - E-Waste awareness programme was conducted for the students in the campus.
 - Energy literacy Programme funded by department of Electronics
- National Service Scheme(NSS) funded by MHRD/ NSS University of kerala**
- **Surveys**

- **Socio economic survey** .Socio economic status survey was conducted
- **Rural reading habit survey** aimed for total restructuring of rural libraries in Kerala

➤ **Construction Projects**

- Home for the homeless – A house was constructed for a poor student of our college.
- A rural library was launched.
- Waiting shed was constructed
- Bio gas plant was constructed.

➤ **Cleaning mission**

Places of public importance like Primary health center, Taluk Hospital, premises of court complex Railway stations were selected and conducted cleaning programmes.

➤ **Participation in outside programmes**

- Each year volunteers will be given chance to attend intercollegiate programmes, volunteer leadership training camps and PRD selection.

➤ **HEALTH & FAMILY WELFARE PROGRAMMES**

- ◆ **Blood Group detection and Donors' directory**
- ◆ **World Diabetes day**
- ◆ **Chikun guinea awareness**
- ◆ **Health accreditation camp.**

➤ **Charity Programme**

The members of the NSS unit visited rehabilitation centres of disabled weaker section of the society clothings and other needful materials were provided to the inmates

➤ **BHOOMITRA CLUB**

- ◆ International day for the preservation of Ozone layer
- ◆ Nature Education camp
- ◆ An awareness programme on “Protection of Our Environment and Prohibition of Plastic Carry Bags”
- ◆ Water harvesting by planting tree saplings in association with Social Forestry Division, Alappuzha.
- ◆ HERBAL GARDEN in the campus
- ◆ Observation of Wild Life week by the Forest Department
- ◆ Observation of World Environment Day.
- ◆ Observation of the EARTH HOUR
- ◆ “Protection of Our Environment and Prohibition of Plastic Carry Bags in the Eramallikkara village.

➤ **Women’s Study Unit**

- Workshop on Fabric painting and designing
- Workshop on Mehanthi designing, Glass painting, ornament making and embossed painting
- Training in driving two and four wheelers

➤ **Science Club**

Cancer awareness through Cycle rally, various Competition for school children, Intercollegiate competitions and interschool competitions etc. with aid of Fund given by KSTEC.

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

The institution designs and implements extension works to meet the demands and requirements of the local community, thus reinforcing our mission and vision statements. Two NSS units with a total annual enrolment of about 100 students are functioning in the college. The activities are coordinated by two NSS programme officers, who are members of the faculty. Red Ribbon and Red Cross society of the college conducting several activities like seminar, symposium awareness classes etc

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?

Since our college is established to serve the minority communities of rural village, all attempts and efforts made by this college in the mode of Education will always reflects to upliftment of under-privileged categories of various facet. Various department of our college, NSS had conducted various surveys in connection with their extension activities .

- The Department of Computer Science conducted a survey to assess the rate of computer literacy in the Thiruvandoor Panchayat.
- A social survey on drug abuse was conducted by Mathematics departments

- Electronics department and NSS of the college jointly conduct a survey on Energy literacy awareness.
- Students who are not getting better education system in Lakshadweep are being permitted in our college. Those students are getting fee concession for hostel accommodation.
- Taking Serious note on Increasing atrocities against woman students in connection with Physical education department students were given self defense classes .
- Scholarships are available for students of different department based on the merits and economical status where underprivileged categories are prioritized

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

- ✿ The extension activities are conducted with the aim of inculcating in the students, a sensitivity towards common social issues, the need to be a responsible part of the society and the principle of ensuring a balanced social development.
- ✿ The students take part in all the extension activities and they imbibe the sense of social togetherness, a sense of fellow-feeling and the realization that students have a powerful role to play in the formation of a well- balanced society.
- ✿ This complements academic learning experience, since academic learning alone will not help the students to achieve a holistic development, which is a desired outcome of all the academic and non-academic activities in the college.

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?

All public awareness programmes and extension activities conducted by various departments, NSS, clubs were actively involved the community participation.

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

The institution always establishes a working relationship with the local bodies, and organizes all the extension activities with their support and involvement

- ✿ E-waste management in conducted by the Department of Electronics in collaboration with local self government bodies.
- ✿ Medical Camp and health awareness programme, was conducted by NSS in association with PHC
- ✿ AIDS awareness programme was organized by NSS in association with PHC
- ✿ Water quality testing programme is the result of the association of local self govt & Dept of IMB)
- ✿ Computer Literacy programme is the outcome of the association of local governing bodies and the Dept of Computer Science.
- ✿ The Bhoomitra club organises tours into the forests in collaboration with the Department of Forests and Wildlife. The World Wild Life Of India has conducted sessions for the benefit of the students.

- ✿ Cyber- Literate Cyber- crime Devoid campus programme was conducted in collaboration with Kerala Legal Services Authority.
- ✿ School children from the schools surrounding the campus were allowed to visit the lab and students and teachers interacted with them.

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.

No award has been received within the four year however, the institute had received award in the year back

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.

For the purpose of capacity building of staff and students, institute takes initiative to develop a knowledge sharing systems with various nationally recognized institutes in terms of research related activities.

The college has signed an MOU with BOOTCAMPS India for conducting workshops on Website designing. Physical Education department is having association with LNCPE(LakshmiBhai National College for Physical Education) to conduct the research in Physical education

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 college has signed an MOU with BOOTCAMPS India for conducting workshops on Website designing.

Physical Education department is having association with LNCPE(LakshmiBhai National College for Physical Education) to conduct the research in Physical education

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.

We have organized different induction training programs with industries and meritorious students are absorbed by placement cell of those industries.

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.

National Seminar on	Department	No.of Participants
Recent Trends in Information technology”	Computer science	125
Recent Trends Signal Processing technology	Electronics	120
Algebraic graph theory”	Mathematics	60
INFOFEST	All departments	100

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

- The Mou executed with BootscampIndia have resulted knowledge sharing in Web Design and Development.
- The collaboration with MACFAST, a college offering PG programme in computer science, have resulted knowledge dissemination of faculties and students of both the institutions.

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

We have developed consultancy policy, guidelines on collaborations for implementing new initiatives.

Criterion IV: Infrastructure and Learning Resources

4.1 .Physical Facilities:

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

The infrastructure of Sree Ayyappa College, Eramallikkara is updated to keep pace with the changing world. Specifically, based on the change in curriculum, the research activities and maintain the physical and mental health, a cost effective and optimally used infrastructure is available to facilitate effective teaching and learning process. The optimum use of the infrastructure and its protection to preserve them for the future generation is the obligation for the stake holders and a matter of pride. Sree Ayyappa College, Eramallikkara is working on the same policy. It must be added that the whole campus provides an atmosphere for learning with pleasure.

4.1.2 Detail the facilities available for

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

The college possesses the basic infrastructure facilities like spacious, ventilated and furnished 16 number of class rooms. The same class rooms are also assigned as the space for tutorials. The institution has a grant seminar hall which also satisfies the purpose of the auditorium. Three class rooms are arranged as common smart class rooms. It also provides facilities to improve the skills of communication and public speaking. There are well equipped laboratories attached with each Department.

Department of Computer Science	:	Computer Lab
Department of Electronics	:	i) Electronics Circuits Lab ii) Digital Electronics Lab
Department of Biochemistry & Industrial Microbiology	:	i) Biochemistry Lab ii) Microbiology Lab iii) Chemistry Lab
Department of Mathematics	:	i) Computer Lab ii) Physics Lab

Sree Ayyappa College has its own Herbal Garden established by the Nature Club POONKAVANAM, years before. It is established as a Botanical garden in the campus. . Research facilities are available in each department. A common research lab is to be established soon. ICT enabled teaching learning process including LCD projector and two way interactive class rooms are to be incorporated in the remaining departments.

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

*The physical and infrastructural facilities available in the campus for the games like football, volleyball, basket ball, tennis, cricket, badminton and athletics.

*The College has established a Multi Gym facility with 12 point Physical fitness system.

*A Yoga centre and a room for NSS are available.

*The Department of Physical Education also focus on the physical and mental health of the students and staff of the college through yoga.

*A 250 seated auditorium is available for cultural programmes.

*Special attention is given to the Health and hygiene in the campus.

*The plastic carry bags and flex boards are completely banned from the campus in order to make the campus an eco-friendly. Facilities are also provided to dispose both plastic and glass bottles , which comes as a waste in the Biochemistry and Microbiology lab.

*A project is being carried out in the Dept. of Electronics regarding the e-waste. A bio gas plant is also functioning in the campus.

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

Master Plan

The Institution stands in line with its academic growth. Common smart class rooms and a centralized computer lab with internet facilities are there at present. In addition to the centralized computer lab, each department has computers of their own with internet facilities. A Ladies hostel has been constructed very near to the college with the grant of Rs.40 lakhs sanctioned from the UGC and Rs.25 lakhs from the Management, Travancore Devaswom Board. Construction of new class rooms, as an extension is also sanctioned by the Management to accommodate the PG and UG courses to be approved by the University of Kerala.

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

The Institution is a multi storied building. For the time being, it is planned to accommodate the classes accordingly for such students.

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

- Hostel Facility – Accommodation available
- Recreational facilities, gymnasium, yoga center, etc.
- Computer facility including access to internet in hostel
- Facilities for medical emergencies
- Library facility in the hostels
- Internet and Wi-Fi facility
- Recreational facility-common room with audio-visual equipments
- Available residential facility for the staff and occupancy Constant supply of safe drinking water
- Security

*Hostel facility for the ladies is available from the beginning of the college itself. It could accommodate about 40 students. A new Ladies hostel which can accommodate 50 students has been constructed very near to the college. Computer with internet facilities are available in the hostel. As the Ladies Hostel is very near to the college, the inmates could also be able to utilize the College library facilities including computer with Internet facilities. Common room is there for reading and recreation purpose. Magazines are also subscribed towards the hostel, along with the leading Malayalam and English dailies. Inmates could utilize the College library up to 5 pm. Accommodation

is also provided for the Ladies Staff. Safe drinking water facility is available in the hostel.

*College provides uninterrupted supply of water

*Hostel is within the campus and provided with round the clock watch and ward arrangements

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

A first aid centre is available in the campus. In addition, the facilities at the Govt. Health Centre, Eramallikkara which is about 0.5 km distance from the college is made available to the students and staff in the College and hostel on the need basis.

*Medical camps are arranged in every year by the National Service Scheme unit of Sree Ayyappa College, Eramallikkara.

4.1.7 *Give details of the Common Facilities available on the campus –spaces for special units like IQAC, Grievance Redressal unit, Women’s Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.*

Separate spaces are available for the Grievance Redressal unit, Women’s Cell, Counseling and career guidance Cell, Placement Unit, Recreational facilities for staff and students and safe drinking water facility. The seminar hall itself satisfies the function of the auditorium. Canteen facility is also arranged.

4.2 Library as a Learning Resource

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

*Library has an advisory committee headed by the principal and convened by a faculty member. All the departments are represented in the committee along with the Librarian and an office staff. The committee co-ordinates the functions of the library to ensure the requirements like centralized semi automated library facility, text books, journals, periodicals, resources, circulation, clipping, bibliography, compilation, reference, reprography and internet.

*The e- resources are made available through INFLIBNET-National Library and information Services Infrastructure of Scholarly Content(N-LIST) programme funded by the Ministry of human Resource Development under the National Mission on Education through ICT. The N-LIST programme provides access to more than 3800 journals and 80000 e-books. Full Text e-resources, bibliographic database, e-books subscribed under N-LIST Programme are available from the publisher's Web site.

4.2.2 Provide details of the following:

* **Total area of the library (in Sq. Mts.)**

200 sq.mts.

* **Total seating capacity**

65

***Working hours (on working days, on holidays, before examination days, during examination days, during vacation)**

Working days : 9.00am to 5.30pm

Before Examination days : 8.00am to 5.30pm

During Examination days : 8.00am to 5.30pm

During Vacation : -

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

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

The advisory committee headed by the principal ensures the purchase and the use of reading materials

<i>Library holdings</i>	<i>2011-2012</i>		<i>2012-2013</i>		<i>2013-2014</i>		<i>2014-2015</i>	
	<i>Num ber</i>	<i>Total Cost</i>	<i>Num ber</i>	<i>Total Cost</i>	<i>Num ber</i>	<i>Total Cost</i>	<i>Num ber</i>	<i>Total Cost</i>
<i>Text books</i>	07	-	1244	505643	84	36000	479	180837
<i>Reference Books</i>	03	-	10050	45000	15	8003	45	20250
<i>Journals/Periodicals</i>		-	01	-	03	-	06	-
<i>e-resources</i>			INFLIBNET facility					
<i>Any other-Magazines</i>	08	-	14	-	18	-	25	-

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

- * OPAC

Grandha Software is used

- * Electronic Resource Management package for e-journals

e- resources are made available through INFLIBNET-NLIST Programme

- * Federated searching tools to search articles in multiple databases

- * Library Website www.sreeayyapcollege.ac.in/library

- * In-house/remote access to e-publications

Certain e-publications could be accessed directly and e-books and e-journals using INFLIBNET-NLIST

- * ***Library automation***

Semi- automated library management system

- * ***Total number of computers for public access***

3Nos.

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

1No.

- * ***Internet band width/ speed ;% 2mbps ;% 10 mbps ;% 1 gb (GB)***

2MBPS

- * ***Institutional Repository***

Repository facility is available

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

The library management system and website are designed in content management frame work.

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

Sree Ayyappa College has taken the membership in the INFLIBNET consortia.

4.2.5 Provide details on the following items:

- * ***Average number of walk-ins***

100/day

* *Average number of books issued/returned*

30/day

* *Ratio of library books to students enrolled*

20:1

* *Average number of books added during last three years*

1967Nos.

* *Average number of login to opac (OPAC)*

10

* *Average number of login to e-resources*

The institution has been registered into the INFLIBNET, only very recently

* *Average number of e-resources downloaded/printed*

The faculty and students have got the membership in accessing the e-resources very recently

* *Number of information literacy trainings organized*

Orientation Programme is arranged for the freshers. A training programme is also conducted, regarding the accessing of e-resources

* *Details of “weeding out” of books and other materials*

On the advice of the

committee, the librarian prepares the list of books to be weeded out. The list will be circulated to various departments to find out whether the volume are obsolete. The committee takes the final decision to remove the books from the collection.

4.2.6 Give details of the specialized services provided by the library

* ***Manuscripts***

Nil

* ***Reference***

Reference books are separately arranged

* ***Reprography***

Reprography facility is provided at the subsidized rate

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

The INFLIBNET-NLIST programme provides access to more than 3800 journals and 80000 e-books

* Information deployment and notification (Information Deployment and Notification)

* Download

* Printing

* Reading list/ Bibliography compilation

Available

* In-house/remote access to e-resources e-resources can be accessed by the INFLIBNET-NLIST Programme

* User Orientation and awareness

Orientation programme is conducted for freshers

* Assistance in searching Databases

The computers and their accessories are available for the use of staff and students.

* INFLIBNET/IUC facilities

INFLIBNET-NLIST facility is available

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

The students and teachers of the college get support from the library staff on need basis. The librarian gives a presentation on the various facilities available in the library at the time of induction.

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

In the College, as such, there is no need is felt for the special facilities. But its planned to incorporate software like INSIGHT.

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

A questionnaire is circulated to collect feedback. A suggestion register is also maintained in the library. The library advisory committee does frequent visit and performs necessary actions for improving the library services.

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)**

Configuration	Total
Acer i3/4GB/500GBHDD/KBD/	
Optical mouse/18.5'LED monitor	6

Acer i3/4 th gen./500GBHDD/KBD/	
Optical mouse/18.5'LED monitor	23
Acer i5/4 th gen./500GBHDD/KBD/	
Optical mouse/18.5'LED monitor	5
Acer Dual Core/2GB/500GBHDD/ KBD/	
Optical mouse/18.5'LED monitor	7
Palmtop-Atom Processor	1
Intel Pentium CPU@2.60GHz, 1.91GB RAM	2
Intel core Duo CPU@2.20GHz, 1.00GB RAM	1
i3 2120/3GB/18.5" LCD	5
Dell INSP 260S	6
Intel C2P 7500 2.93GHz/2GB	1
Intel CELERONE	4
Intel Core2 Duo	1
Compaq Presario(AMD Athlon)	5

◆ *Computer-student ratio*

1:4

◆ *Stand alone facility*

17

◆ *LAN facility*

65

♦ ***Licensed software***

C, COBOL, FORTRAN, dBase, Novel lan Netware 4.11, Lotus1-2-3, Windows 95, Windows 3.11, Windows 98, Multimedia Kit, Oracle 8, Wordsta7, Developer2000, Windows XP Home

♦ ***Number of nodes/ computers with Internet facility***

55Nos.

♦ ***Any other***

Internet with Wi-Fi facility is available

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

Computer and Internet facilities are available in all the Departments, Library and Office. The faculty and students are free to utilize these facilities.

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

Three common smart class rooms are available with ICT facilities. It is planned to setup more number smart classrooms in all departments. All departments have computers of their own. The strategies for the deployment and upgradation of the IT infrastructure is mainly to keep in line with the academic growth in the changing scenario with the help of different funding agencies.

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

Academic Year	Procurement	Upgradation & Maintenance	Total
2011-2012	Rs.7,09,860/-	Rs.31,345/-	Rs.7,41,205/-
2012-2013	-	Rs.26,660/-	Rs.26,660/-
2013-2014	Rs.5,08,850/-	Rs.24,233/-	Rs.5,33,083/-
2014-2015	Rs.8,28,400/-	Rs.42,000/-	Rs.8,70,400/-

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?

Computer aided teaching is deployed in all the Departments. The curriculum based on Choice Based Credit and Semester System(CBCSS) gives importance in student Projects and Seminars, as it is considered as core papers. All the Departments give emphasis in the Computer aided presentation of these papers. The Institution also offers access to A-VIEW (Amrita Virtual Interactive E learning World) which is a versatile E-learning tool for distance learning that provides a rich interactive social environment for E-Learning. It is simple, user friendly video conferencing software, which provides a great opportunity to a teacher to teach in a live interactive mode to various geographical locations across India. It provides opportunity to connect several universities together and creates virtual world for students. It also acts as a Knowledge Cafe where students can discuss/chat about the lecture after live class. Virtual lab facility can also be utilized.

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

There are smart class rooms. The seminar hall is also used to facilitate the downloaded learning resources. All the Departments deploy the free access of computer and Internet facilities to their students as part of their curriculum and also for their career opportunities. E-learning and Virtual labs are also provided in the college.

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

College has taken the initiatives to become a part of NMEICT Project

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)?*

Principal with the support of staff council ensures the optimal allocation and utilization of available financial resources for maintenance and upkeep of facilities in the institution.

A purchase committee is also constituted for its smooth functioning.

Academic year	Financial Resources	Total
2011-2012	Building (UGC)	Rs.5,45,350/-
	Furniture (UGC and Management)	Rs.1,85,000/-
	Equipment (UGC)	Rs.3,88,022/-
	Computers (UGC)	Rs.4,46,450/-
	Vehicles	-
	Any other	Rs.7,65,219/-
2012-2013	Building (UGC)	Rs.1,79,000/-
	Furniture	
	Equipment	
	Computers	
	Vehicles	
	Any other-	Rs. 10,781/-(EL)
	Consumables (PD)	Rs. 26,660/-(CS)
	Maintenance	

2013-2014	Building (Management)	Rs.20,00,000/-
	Furniture	
	Equipment	Rs.1,03,164/-(CS)
	Computers	Rs.5,08,850/-
	Vehicles	-
	Any other Consumables&repairing(PD)	Rs. 12,153/-(EL)
	Maintenance	Rs.24,233/-(CS)
2014-2015	Building	
	Furniture	Rs.1,00,000/-
	Equipment (UGC)	Rs.1,55,040/-(EL)+Rs..2,04,660/-(CS) +
	Computers (UGC)	Rs.8,28,,400/-
	Vehicles	-
	Any otherMaintenance	Rs.42,000/-(CS)

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

Internal verifications are done in each department and library every year to keep track of the available stock with inter department committee. Requirements of maintenance of furniture, equipments, computers and consumables of each Department, Library and office are collected every year. The principal with the support of staff council takes the decision accordingly. Annual Maintenance contract(AMC) is made available.

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

The servicing of equipments/ instruments is done annually during vacation , with the amount from the PD Account and with the help of College PTA. In-home mechanism for repair and maintenance is provided.

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

- * The KSEB ensures continuous supply of electricity except in rare occasion on monsoon failures. Even then it won't affect the college as the power cut is enforced during before 9.00am and after 6.00pm.
- * The management has taken initiatives to have a transformer nearby the college to get a steady supply of electricity.
- * Departments are also equipped with UPS and Stabiliser to avoid voltage fluctuations.
- * I inverters are used to avoid the disruption due to the power failure.
- * A generator is also kept as standby.
- * Well water is provided as a perennial source of water supply to the college.
- * Water purifier provides the safe drinking water.

Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

It is planned to incorporate more ICT learning resources in the college. The college also looks into the feasibility of water sports as the college is located on the banks of two rivers.

Criterion V: Student Support and Progression

5.1 Student mentoring and Support

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

- ◆ The institute publishes its updated prospectus annually which contains the list of courses offered, fee structure, eligibility criteria and the guidelines to fill the application.
- ◆ The College distributes an updated annual calendar at the beginning of every academic year with information about
 - vision and mission of the college,
 - Detailed information about various departments,
 - Courses being offered,
 - Admission procedures,
 - Names, Telephone numbers & email-ids of teaching and non teaching staff,
 - List of working days,
 - College rules, extracurricular and co-curricular activities,
 - Names of office bearers of various bodies,
 - The various financial assistance to students by the State & Central Government, and also by the college in the form of scholarships and endowments.

◆ The detailed information about the college, its departments and details of teaching and non teaching staff members is also available in the college website www.sreeayyappacollege.ac.in.

◆ There is an admission committee in the college to supervise the admission procedure.

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

Apart from the Government scholarships and fee concessions, we are providing SCHOLARSHIP TO FINANCIALLY WEAK & BRIGHT STUDENTS. Details of Scholarship Provided during 2008-2012

Scholarships instituted by PTA

Scholarships instituted by Teachers

SINo	Scholarship	No. of Beneficiaries	Amount spent (Rs.)
1	2008 - 2009		
2	2009 - 2010		
3	2010 - 2011	15	7500/-
4	2011 - 2012	15	7500/-
5	2012 - 2013		

- ◆ Well wishers of this college provide scholarships such as Steve Jobs Scholarship for best outgoing student in Computer Science
- ◆ Panini Scholarship for top scholar in the subject Malayalam among all disciplines.
- ◆ Alumni offered Scholarships for 25 meritorious students in each department.

- ◆ There is a scholarship committee in the college and this committee ensures transparency in the allocation and distribution of scholarships to the deserving students.

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

Sl No	Type of Financial Assistance	No. of beneficiaries	
		2010-2011	2011-2012
1	SC Category (Stipend/Lumpsum grant)	20	11
2	OEC Category (Stipend/Lumpsum grant)	6	6
3	OBC Category (Stipend/Lumpsum grant)	6	5
4	KPCR (Fee concession)	7	15
5	POST MATRIC Scholarship	2	2

DETAILS OF FINANCIAL ASSISTANCE

Year	Number of students who received financial assistance from State government	Number of students who received financial assistance from Central government	Number of students who received financial assistance from other National agencies
2010-11	39	2	-
2011-12	37	2	-

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

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

- ◆ Group insurance is instituted by the University for the benefit of the Students.

- ◆ All the scholarships instituted by the state government & central Govt are made available to the deserving learners.
- ◆ Departmental initiatives to help indigent students.

➤ **Students with physical disabilities**

- ◆ We haven't had any Students with physical disabilities till now. But if any such student is admitted to any course,
 - we will provide wheel chair for them
 - Help them in obtaining benefits by way of grants, aids etc from State and Central GOVT.
 - Arrange their class in the ground floor.
 - Provide ramp facilities

➤ **Overseas students**

We don't have any overseas students till now. But if any such student is admitted,

- ◆ We provide hostel facility, special attention and counseling etc to the students.
- ◆ Help them to obtain benefits from State and Central GOVT.

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

- ◆ There is a Literary and Debate club in our college which meets once in a week and the students get opportunity to participate in debates.
- ◆ Provide College fund to students those who are participating in the competitions(Sports / Arts)
- ◆ Arrange Railway concession to students & teachers for study tour and academic conferences.

- ◆ We conduct screening test for students in quiz programmes, arts fests and sports competitions before they are sent to participate in competitions conducted by various organizations.
- ◆ A faculty member who is in charge of the quiz and debate selects students for various inter collegiate and state level competitions.
- ◆ The College gives special training and practice to the students participating in the University Youth festivals.
- ◆ Fund necessary to train students in fine arts is met by the PTA
- ◆ We conduct a programme titled 'Thala laya Sangamam' every year which gives students a platform to express their artistic talents.

Sports

- ◆ Conducting sports day
- ◆ Giving financial assistance to students for participating in the sports meet
- ◆ The Department of Physical Education organizes special coaching camps to prepare students for sports and games both within and outside the state.

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

- o We have already made a tie up with the health centre to give mental and physical counseling to our students.
- o Providing free Medical checkup for the students once in a Semester
- o Providing free medicine and treatment to the students.
- o Providing free health insurance to all students in our college
- o Providing First – Aid facility in the college

➤ **Organizing coaching classes for competitive exams**

- We established a Career Guidance and Placement Cell to facilitate and support students for appearing and qualifying in various competitive examinations.
- The activities of the cell are:
 - ◆ Informing students about the details of various competitive examinations. Notifications will be published in the notice board.
 - ◆ Making available the study materials and journals for such examinations.
 - ◆ A good collection of reference material for competitive/entry level examinations are provided in the library.
 - ◆ Conducting seminars, workshops, Talent-scan programmes once in a Semester

➤ **Skill development (spoken English, Computer Literacy etc.)**

- ◆ A series of talks/ workshops are being organized on management, planning, formulating goals, decision-making
- ◆ As a part of the curriculum, students from other departments get a chance to learn only a single subject as their open course specified in the syllabus. But the Department of Computer Science with its infrastructure and human resources takes a leading role in imparting IT skills to the needy. Students who are interested can join the computer education programme at no extra cost.
- ◆ Special classes or seminars for spoken English, personality development etc are arranged for students by eminent professionals.

➤ **Support for slow learners**

Conducting Remedial Teaching & tutorial classes for slow learners.

A tutorial system has been functioning in each department in a very effective manner to uplift the weak students in each subject. The list of students who require extra coaching in each subject is collected from them and classes are scheduled before and after the normal working time of the college.

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

As part of the curriculum, final year students from Computer science, Electronics and Microbiology Departments are doing their Project works in reputed organizations. Computer Science and Electronics students do their project work in organizations such as Keltron, FACT, Titanium etc. Industrial Microbiology students do their projects in UniBios, one of the leading firms in the field of Microbiology and Molecular Biology. As part of their curriculum, for final year Industrial Microbiology students conduct Study Tour and Industrial Visit.

➤ **Publication of student magazine**

Literary / debate club help the students to improve their talents in writing and they are guiding and supporting students in the publishing of a college magazine. College magazines published annually and that give opportunities to students to express their literary skills and it reflects the creativity of students. The editorial board of the magazine committee is constituted by the Principal, who is the chief editor. A faculty member is nominated as the Staff editor and student editor is selected by the student. The decision of the Editorial board shall be final on magazine issues.

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

The institution has established good rapport with Industries Development Department, Govt. of Kerala for organizing a number of programmes like workshop for self employment & personality development and other programmes aimed at encouraging entrepreneurial skills among the students. Department of Industrial Micro Biology conducts training on mushroom cultivation methods. The learners are also encouraged to visit nearby industrial units and study management operations, accounting procedures, marketing strategies etc. as a part of their project work. Measures are also taken to educate the learners on various facilities like low interest loans and subsidies available to entrepreneurs. We conduct workshops to develop entrepreneur skills of the students.

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

The institution encourages the students to participate in extracurricular and co-curricular activities. Students of the entire college have segmented in to four houses to motivate and ensure participation in various co-curricular and extracurricular activities. The meeting of the house leader is frequently called for planning and organizing various activities. The physical education department identifies talented sportsmen/women and trains them in various sports items. The students are encouraged to participate in various cultural competitions such as poetry writing, essay competition, story writing, singing, dance competition, acting, paintings etc. The Literary and Debate club has the full responsibility to give training in quiz competition, poetry writing, essay competition, story writing etc and select students for various inter collegiate and state level competitions. College gives special attention to the students participating in the University Youth festivals. Two faculty members including one lady lecturer accompany the students to support the participants. The Department of Physical Education organizes special training camps to prepare students for

sports and games both within and outside the state. We got first prize in MIME in the University Youth Festival during the academic year 2009-2010 and second prize during the academic year 2010-2011. There is a film club in our college and our Students made a short film Directed by and acted by our students.

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

Our Career Guidance and Placement Cell facilitate and support students in appearing for various competitive examinations. The activities of the cell are

a) To equip students with such competencies as are necessary to appear for entry level exams

b) Inform students of the details of various competitive examinations, such as banking/ railway / defense

c) To make available the study materials and journals for such examinations. Individual departments support students in preparing for various competitive examinations by conducting orientation classes during the tutorial sessions. Students are also assisted in appearing for various PG entrance examinations. Interactions of students with meritorious alumni are also organized by the departments as motivational exercise.

For the first year Students we conduct Personal Effectiveness Enrichment Programme every year and this session is handled experienced Consultants. The class mainly focused on how to face an interview and also how to lead a competent academic life. We used to collect feedbacks from the students and rectify the defects while conducting it in the next year.

The final year students of our college used to attend the Campus Selection process of various leading organizations such as Cognizant Technology Solutions, Kochi, Tata Consultancy

Services, Wipro Ltd and HP. Majority of the students qualified in both written test and Interview and got placement in these organizations.

The list of major companies that conduct campus recruitments for our students through NIIT@ Eranakulam are:

1. **UST Global** is looking for fresher to work as Software Engineers
2. **Mobile Sportsbook Technology Pvt. Ltd.,Cochin.**
3. Nuware a Bangalore based IT services company
4. Quadra Software Solutions Pvt. Ltd headquartered in Bangalore

Details of students who participated in career guidance programmes:

Year	2008-2009	2009-2010	2010-2011	2011-2012
No. of students got career guidance	48	36	44	47
No. of students appeared for competitive exams	18	20	23	16
No. of students qualified	7	8	9	7

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

- ◆ The counselling cell in our college provides counselling to the students to discuss, and resolve academic and personal issues. The service of a professional counsellor is made available to acquaint the teachers with basic counselling techniques.
- ◆ The tutorial system of the college is the best avenue that serves a major purpose of academic and personal counselling.

Students in each department are divided into several groups and a Mentor is allotted to each group of students. The students are encouraged to feel free to share their personal problems with the teacher concerned. The faculty members have also helped the students in bringing out their talents. The Student Grievance Cell offers a platform for personal redressing grievance. If the students have any complaint regarding infrastructure facilities or academic matter she/he can give written complaint to grievance redressal cell. A complaint box is exhibited outside the grievance redressal cell so that the students can put the complaints in this box. Those who don't want to reveal their identity needn't write their name. The cell according to the merit of the grievance, takes immediate steps to rectify them and communicate to the aggrieved. The class PTA meetings are specially meant for addressing personal issues of students and interacting with their parents or guardians.

The students are counselled by the faculty regarding the job opportunities available to them in future. The students are furnished with details about post graduate courses and its admission procedure. The students are advised through counseling to choose the subjects on the basis of their aptitude and temperament and in future, this may help them in their professional career.

- ◆ Our National Service Scheme helps the students to participate in psycho-social activities and also to extend their service to society. So that students are trained to perform “normal reactions” in “abnormal situations”. Field visit to orphanage and rehabilitation centers by students and teachers of the college was an exercise aimed at inculcating social responsibility in students.

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

Our institution has a structured mechanism for career guidance and placement of our students. The Cell offers facilities for students to improve their job skills as well as to acquire employability factors. As part of career guidance, classes are conducted in personality development, communication skills, spoken English etc. Final year students are trained to face interviews and group discussion, availing of external professional support. The career guidance and placement Cell offers facilities such as

- ◆ Informing students about the details of various competitive examinations
- ◆ Training students for appearing in various competitive examinations.
- ◆ Making available the study materials and journals for such examinations.
- ◆ Making a list of reference materials for competitive/ entry level examinations provided in the library.
- ◆ Seminars, workshops, Talent-scan programmes are conducted once in a semester
- ◆ Motivating the students towards Self-employment.
- ◆ Making collaborations with organizations/industries to hold campus interviews for students.
- ◆ The Cell has organized several such drives during the last four years and 30 students were placed in multinational companies. IT majors like Infosys, TCS, Tata AIG, Wipro and ITC have recruited final year graduate students from the College through campus interviews and outside interviews.
- ◆ Educating the students who are interested in self employment and give them training on glass painting, fabric painting, mural painting and jewellery making etc and give information about low interest loans and schemes giving subsidies.
- ◆ The cell frequently conducts Mock interviews
- Proposal forwarded for Add -on courses at the degree level during the academic year 2012-13

List of various programs conducted by career guidance and placement cell:

Year	Program
2010	1. Conducted Personal Effectiveness Enrichment Programme handled by Mr. George Karunakkal, Consultant- HRD, PROSPECTS, Kochi on the topic “Script Your Success”.
	2. Conducted a one day workshop on Computer Networking in the Computer lab. The team headed by Mr. Anoop Sam Mathew (Technical Head) , Mr. Naveen .D. and Mr. Rajesh
	3. A Cyber Security Workshop was organized on 10-9-2010 under the leadership of Mr. A S A Krishnan, Director, Security Division, Department of IT, Govt. of India.
2011	1. Organized Students Personal Effectiveness Enrichment Programme on 10-08-2011. The session was handled by Mr. Prakash . P. Thomas, Chief Training Consultant, Mind Power Research Foundation on the topic “Have Big Dreams”.

The students who got placement in multinational companies & it majors

Year	Name of Student	Class	Company in which got placement
2009	Vineeth	Computer Science	IT
	Ajith	Computer Science	IT
	Reshmi	Computer Science	Bank
	Vysakh	Computer Science	ITI
	Rahul R Kurup	Computer Science	Defence
2010	Binu K B	Computer Science	IT
	Vishak Chandran	Computer Science	IT
	Arya B	Computer Science	Ground hostess
	Remya O	Computer Science	Teaching

	Sindu Omanakkuttan	Computer Science	IT
	Anish R	Computer Science	IT
	Smitha	ElectronicsComputer	Wipro
2011	Adarsh	Computer Science	Info Park
	Vinayak	Computer Science	Wipro
	Lekshmi	Computer Science	TCS
	Dhanesh	Computer Science	IT
2012	Kavya S	Electronics	Wipro
	Vishnu M Amboothiri	Electronics	BPL
	Balu C Pillai	Electronics	BPL
	Vishnu	Microbiology	

5.1.10 Does the institution have a grievance redressal cell? If yes, list (if any)

Grievances reported and redressed during the last four years.

Yes,

Our institution has a grievance redressal cell. Complaints regarding internal assessment, financial matters, health services, library, lack of infrastructure, transportation, accommodation, etc. are brought to the attention of the grievance redressal cell. Appropriate decisions are taken at the meeting and communicated to the Principal for necessary action. Student feed back about teachers and teaching is collected regularly and forms the basis for quality improvement. The committee sorts out their problems promptly and judiciously. The committee also redresses the grievances of the students as and when required. As a result of this mechanism, the College has pleasant ambience, atmosphere and good work culture with in-built goodwill and mutual understanding among the students.

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

Anti-Harassment Cell

The college has a statutory committee for resolving issues pertaining to sexual harassment of women students in the college. A lady faculty member is the Convener of the Committee and nominated faculty members assist the Convener. The cell attends to any specific complaints in this regard. The cell conducts seminars and invited talks on gender issues, women empowerment, women and law etc in association with women study centre. There has not been even a single incident in this direction till now.

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

- ◆ Yes, there is an anti-ragging committee in our college. Till now no instances have been reported.

This committee performs the following duties:

- ◆ Declaration of the university is get signed by parents and students at the time of admission.
- ◆ Conduct orientation sessions for the first year students regarding anti- ragging regulations.
- ◆ Action Contemplated against students for indulging in and abetting ragging in the college.

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

- ◆ Group insurances are instituted by the university for the benefit of the students.
- ◆ Alumni extend support to financially weak but meritorious students.

- ◆ All the scholarships instituted by the government are made available to the deserving learners. (Scholarship committee).
- ◆ Fee concession for the deserving students.
- ◆ Scholarships, free-ships and earn while you learn.
- ◆ Management provides scholarship for talented students.
- ◆ Admissions to the outstanding sports personals.
- ◆ Sickroom for students.
- ◆ The Women's Study Centre has organized functions aimed at the welfare of girl students. These included training in artificial flower making, life skills development, legal counseling and personality development.
- ◆ Students of the college are sent to participate in various competitions such as quiz programmes, debates and the like.
- ◆ Annual events of the NSS such as the Legal Literacy classes for graduate Students and the annual seven-day special camps are aimed at developing student personalities. Besides, volunteers get opportunities to attend state and national camps organized by the NSS.
- ◆ Various clubs and forums such as Bhoomithra club, Women's cell, sports club, literary club, film club, sukruithm charity club, drama club, music club, fine arts club, quize and debate forum, anti ragging committee and anti ragging squad, scholarship committee, career guidance, grievance redressal cell etc and associations such Computer Science association, Electronics association, Microbiology association and Mathematics association are functioning in the college for the welfare of the students.

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

Yes, The college has an alumni association called the **SREE AYYAPPA COLLEGE ALUMNI ASSOCIATION (SACAA) with a structured bylaw and with objectives**

A forum for the Alumni of the College, to engage in such academic and social activities as shall contribute towards promoting liaison between the Alumni and the College and to keep alive love, spirit, affection and gratitude for our alma mater.

Alumni association Office bearers:

Patron (Ex Officio)	–	Principal (SAC, Eramallikkara)
Faculty in Charge and Treasurer	–	Prof. S Suresh (SAC, Eramallikkara)
President	-	Chinchu C
Vice President	–	Aravind A
Secretary	–	Vysakh A
Joint Secretary	-	Anuroop

Alumni Association sponsored scholarships to 25 meritorious students in the college. Our alumni have an important role in the development of academic and infrastructure facilities of the institution.

Alumni contribute to the growth and development of the institution through generously supporting the various activities of the institution. Similarly alumni meets in the College also provide a platform for discussion of developmental issues of the institution. The office bearers of the alumni association have close links with the college administration in giving suggestions for reforms and volunteer support for developmental activities.

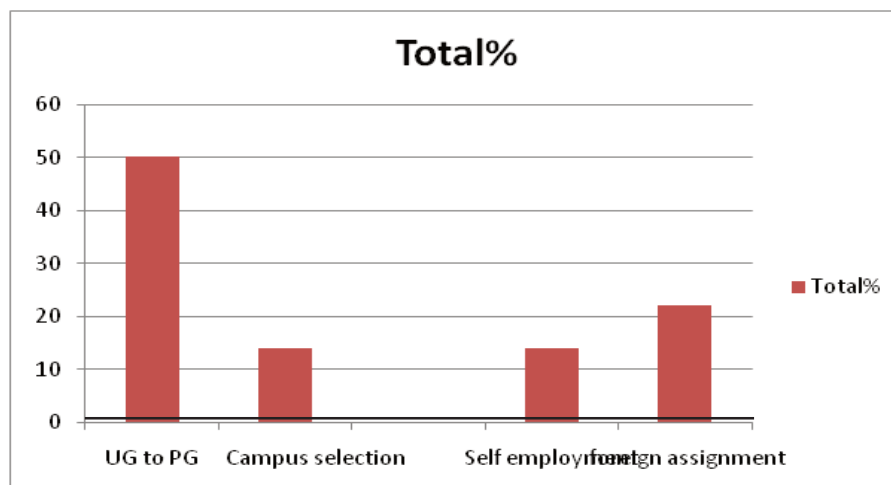
5.2 Student Progression

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

Students' Progression Report

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

Student progression	CS%	IMB%	EL	maths	Total%
UG to PG	55	44.78	50.12		50
PG to M.Phil.	-	-	-	-	
PG to Ph.D.	-	-	-	-	
Employed ·					
♦ Campus selection ·	15	12.5	13.25		14
♦ Other than campus recruitment					
Self-employment	10	18.25	15		14
foreign assignment	20	24.47	21.63		22



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

Academic performance of the students during last 4years

Subject	Year	Total enrolled	Output Pass %
Computer Science	2009	23	78.26
	2010	26	76.92
	2011	24	70.83
	2012	18	77.77

Subject	Year	Total enrolled	Output Pass %
Electronics	2009	17	71
	2010	22	59
	2011	14	71.42
	2012	15	27

The excellent teaching by expert teachers bring out the best of the students qualifying themselves to get admission to the institution, higher learning invariably from the last four batches more than 65% of the students go for PG studies.

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

A career guidance and Placement Cell functions in the college and assists students in appearing for job interviews and examinations by the private and multinational companies in India.

- ◆ The Cell also supports students by giving counseling and through personality development initiatives.
- ◆ Timely information about different job openings in different sectors is provided to students through circulars by the carrier guidance and Placement cell.
- ◆ Information regarding the selection procedures and entrance details of various higher level courses in different colleges and Universities are also provided to the students on time.

5.2.4 Enumerate the special support provided to students who are risk of failure and drop outs

The college has taken several steps to minimize the dropouts. The first step was to prepare the list of drop-outs in each class and identify the reason for the dropouts. So that it can be minimized. We have identified the following reasons for dropout.

1. Family problems
2. To join other professional courses such as BTech, nursing etc
3. Employment in Defence

With regard to slow learners, active support is rendered through remedial Coaching, tutorial classes and personal counseling. No student discontinues due to financial reasons as the college provides financial assistance to the needy.

5.3 Student Participation and Activities

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

The College has good facilities for extra curricular activities and sports. In games and sports the students are encouraged by the qualified Physical education teacher. A variety of games and sports are available to the students of our college. Indoor games like Table tennis, Chess, Carrom, Badminton and out door games like Volleyball, football, cricket, kabaddi, etc are available to the students. Apart from these activities aerobics, yoga and calisthenics activities are also available to the students and staffs of the college. Other than sports and games, special training is given to the students by the concerned experts in Mime, thiruvathira, barathnatiyam, etc. Faculty members encourage the students to participate in extracurricular activities. The various clubs like Nature club, Drama club, Film club and Weekly forums for student personality development provide avenues for extracurricular activities. The students are advised to participate in various cultural competitions such as poetry writing, essay competition, story writing, singing, dance competition, acting, paintings etc.

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

Students participated in various quiz competitions in university level competitions and we got first and second prize for the competition Mime in University youth festival. Students participated in state sports meets. Activities and achievements of sport for the last 4 years Inter Zone/District/State/National meets are given below:

Year	Name of the student	Class	Item to which participated	National level/ Inter National level /State/ University	Prize awarded
2008-2009					
2009-2010					
2010-2011					
2011-2012	1.Nikhil Kumar	II BSc	400 M	University Level	nil
	2. Ajith	II BScII	Cross Country	University Level	
	3. Sanju Satheeshan	II BSc	Long Jump	University Level	
	4.Vishnu Jayan	II Bsc	200 M	Do	
	5. Abhishek	II Bsc	Shot put	Do	
	6. Pradeep	I Bsc	100 M	Do	

Activities and achievements of cultural and other extracurricular activities for the last 4 years University youth festival

Year	Item	Prize	University Youth Festival
2008-09	Mime	First	
2009-10	Mime	Second	
2010-11			
2011-12			

5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

- ◆ Institution has a mechanism to seek and use the regular feedback from our alumni and other stakeholders with regard to the institutional growth and developments .
- ◆ We also have a prescribed format to receive authentic and systematic feedback from the employers, either as hard copy or as soft copies through e-mail
- ◆ The views expressed from time to time are discussed by the Principal and heads of Departments and the follow up action is taken by these teams in each department to improve the performance and quality of the institution.

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

College magazines published annually give opportunities to students to express their literary skills. A faculty member is given charge of guiding and supporting students in the publishing of a college magazine. A college magazine ‘THATWAMASI’ reflecting the creativity of students is published regularly every year. Wall magazines, news letter and manuscripts are also published in the college.

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

Yes,

The office bearers of the college union are elected from among the students. But in our college there is no election based on party politics. Instead, the students come to a

consensus and a list of office bearers is prepared. This is the one of the salient features of our college that other colleges may not have. The posts of Vice Chairman and Joint Secretary are reserved for women students. The principal nominates from among the teaching faculty, a Fine Arts Advisor to monitor the fine arts and cultural activities of the Union, and a Staff Editor, to supervise the editing work of the College magazine

The college union council consists of the following office bearers.

- President- Principal of the College- ex officio
- Staff Advisor- A representative from the Staff
- Chairman
- Vice chairman
- General Secretary
- Joint Secretary
- Fine Arts Secretary
- Student Editor
- One representative each from 1st, 2nd and 3rd year UG
- Secretary for Association in various subjects

Activities of the college union start with formal inauguration. The student's Union undertakes several activities concerned with the general uplift of the students like organizing talks/ debates on topics of current relevance, celebration of arts day and college day and co-ordinating the activities of various associations and clubs like film club, music club etc. It is the responsibility of the college union to bring out college magazine every year. College union receives funds for its various programmes from the donations from students and faculty as well as from the PTA.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

We give due representation to students in various academic and administrative bodies. Student representation is present in most of the bodies including the Discipline Committee, Anti Ragging cell, the Advisory Committee of the NSS and Women's Study Unit'. Student members are there in all the clubs and committees to coordinate curricular, co- curricular and extra-curricular activities. The college Union Chairman is a member of the Governing body of the college. University Union councilors are representative of the University union. The University act provides representation of students in Senate and Syndicate.

The details of academic and administrative having student representation:

- (a) Magazine Committee**
- (b) Music club**
- (c) Library Advisory Committee**
- d) Sukrutham Charity club**
- e) Debate club**
- f) Drama club**
- g) Film club**
- h) Health Club**
- i)The Science club**
- j) Women's study centre**
- k)Nature club (Bhoomithra)**

l) Nation service scheme

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

The college collaborates with the Alumni and former faculty members through the directory of Alumni, and Google group. The college formed an association of retired teachers and they meet once in a year.

Any other relevant information regarding Student Support and Progression which the college would like to include.

At present the college offers only undergraduate courses and we have the necessary research facilities and lab facilities as per the requirements of undergraduate course. Efforts are made to upgrade the research facilities. The institute provides general infrastructure for research and encourages faculty to take up research projects by way of granting leave for pursuing research.

An Extension Wing is functioning in the college with the aim of coordinating the extension activities of the college. It plans and charts out the extension activities at the beginning of the academic year.

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

Vision

Vision statement.

Transcending barriers through knowledge and service.

Sree Ayyappa college was started with the vision of being an instrument to create a scientifically developed, humanely rich, morally responsible community, ensuring equitable regional development through education; To participate in creating a future India, where narrow frontiers are erased through globally relevant and regionally sensitive quality education that aims at fostering a scientific attitude tempered with literary and artistic sensibility, sense of national integration and concern for fellow beings; To have a futuristic outlook while being rooted in our culture and heritage; To pursue knowledge with stress on humanitarian values.

Mission

Mission statement

To be an instrument for the rural youth to attain holistic development

Sree Ayyappa College was started with the mission of:

- ◆ Making ICT- based education accessible to educationally underprivileged areas, thereby attempting to bridge the digital divide.
- ◆ Providing quality education aimed at developing the full potential of youth, especially rural youth.

- ◆ Creating professionally competent young men and women who can answer to the needs of the day
- ◆ Promoting the responsible use of technology
- ◆ Developing the necessary life skills, integrity and character of the youth
- ◆ Creating manpower that is intellectually trained, professionally skilled, morally righteous, spiritually developed and value oriented responsible citizens committed to the service of the society, dedicated to the spirit of the constitution, and sensitive to the needs of the Environment.
- ◆ Enabling the youth of rural population, especially girls, to be instruments of change in the society by being academically brilliant, intellectually alive and socially sensitive individuals.
- ◆ Applying knowledge for the meaningful solution of human problems.

Objectives

Sree Ayyappa college was started in the year 1995 with the objective of providing the youth

- ◆ The opportunity to get quality education, irrespective of caste and creed.
- ◆ The chance to acquire technical education, while instilling in the students, a healthy respect for the environment and the need for sustainable development with minimum possible impact on the ecology and to increase employability.
- ◆ The chance for the girl students of this rural population to have technical education within their means and reach.
- ◆ The chance to develop themselves into genuine human beings who can think freely, and act courageously with integrity.
- ◆ The chance to become aware of the rich cultural heritage, develop interpersonal relationship.

- ◆ To make skills and creativity

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

Management have the overall control of the college. They are responsible for providing sufficient quality human resources and physical infrastructure facilities. Management takes the lead in imparting training on office automation to the members of the non teaching staff to streamline office administration. Head of the institution plays a vital role in the day-to-day institutional processes. Principal is the head of the institution. He enjoys total academic and administrative freedom in the day to day institutional process. The Principal acts as a link between the staff and academic bodies and stakeholders. He sees that power is not centered in his hand, instead, it is decentralized. There are committees to help him to monitor the curricular, co-curricular, extra-curricular and nonacademic activities of the institution. Teaching staff take a lead role in students' admission procedure. Staff involvement is ensured in the management of the library. Decision making is done in a democratic way after holding discussions with members of the staff at the meetings of the staff and staff council. Principal listens to the suggestions of the students in the institutional processes and holds discussions with them when disputes pop up. This stepping down from the traditional image of a Head of Office has gone a long way in improving the quality and standards of the institution. Being a College in the government aided sector, it has to function in conformity with the guidelines laid down by the Government Policy on Higher Education. Checks and balances envisaged by academic and administrative bodies like the College Council and management committee shall have a decisive role to play in the nature of functioning of the college. Management recruits teachers on merit, based on a systematic and rigorous process laid down by the university. Management provides all necessary infrastructure facilities for good teaching and learning process.

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 vision and mission are relevant to national development priorities. The vision and mission reflect the latest international trends in higher education.
- ◆ formulation of action plans for all operations and incorporation of the same into the institutional strategic plan
- ◆ Provide excellence in teaching, student learning, services to students, and scholarship by providing state of the art learning facilities, equipment, supplies and resources, and staffing. **(Teaching and Learning)**
- ◆ Increase recognition of Sree Ayyappa College as a premier institution of innovative higher education that prepares talented, competent, and engaged members of the community. **(Institutional Advancement)**
- ◆ Ensure the highest level of service to students and the community through continuous and purposeful evaluation of programs and services that situates student learning, community responsiveness, and employee engagement as the center of all we do. **(Accountability)**
- ◆ Offer cutting edge educational opportunities designed to accelerate the economic development of the region. **(Economic Development)**
- ◆ Provide excellence in the stewardship of the community's investment in Sree Ayyappa College and expand the institution's capacity to apply resources to meet the needs of students, staff, and faculty through strategic assessment and resource allocation. **(Resource Development and Allocation)**

- ◆ Commit to excellence in teaching, student learning, and scholarship by expanding professional development for all employees and nurturing the intellectualism within the campus culture. (**Academic and Professional Excellence**)
- ◆ Serve a diverse college community by maintaining and expanding an environment of accessibility, equality, and social justice. (**Diversity and Pluralism**)
- ◆ Craft a culture of collective responsibility through an enhancement of College processes and systems, reinforcing internal communication, integrating internal planning processes that promote coordination and accountability, and strengthening a sense of community and collaboration internally. (**Communication and Infrastructure**)
- ◆ Serve as a catalyst for enhanced community life through outreach, partnerships, services, and significant contributions to quality arts, cultural, wellness and vitality experiences and activities in the region. (**Community Life**)
- ◆ Engage in sustainable stewardship and community leadership as an institution through our use of products and technology, our practices and curriculum, our policies, and our philosophy as represented through institutional culture and leadership. (**Sustainability**)

The strategic plan for the accademic year 2012-13

1. Organization of Seminar/Workshop
2. Resource mobilization drive.
3. Extension of plantation for one acre of land.
4. Computerization of Departments (Phase wise)
5. Infrastructural facilities for NSS.

6. Career Counseling to the students at regular intervals for the students of all classes.
7. Group discussions among the students of various classes on the following topics(Topics on Current Affairs (National, inter national).
8. Value education based on the teaching of Gandhi, Vivekananda etc.
9. Environmental degradation in the peripheral areas and the means to control it.
10. Importance of English language learning- Vocabulary building and principles of English grammar.
11. Micro teaching.
12. Introduction of Vocational Course.
13. Basic information based on phonetics and pronunciation.
14. Career Guidance and Counseling at regular intervals to Bsc III year students regarding higher education, job, competitive Exams and enterprise building spirits.
15. Organization of debating and extempore speech competition.
16. Wall magazines department wise.
17. Souvenir.
18. College magazine.
19. Field study.
20. Educational tours.
21. Introduction of Yoga classes.
22. Health and Hygiene
23. Physical fitness programme

Interaction with Stakeholders

The vision and mission are made known to all stakeholders. The college always collect feedback from

- * Consultative committees (made up of business and industry personnel);
- * Alumni Association meeting with clear agenda programmes for the growth and development of the College
- * Collaboration with Business and industry for extension and contract programme;
- * Community at-large;
- * Schools (feeder);
- * Parents;
- * Prospective students;
- * Regional employers;
- * Residents of the college service area;
- * State and federal legislators;
- * Linkages with other colleges and universities

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

The feedback from Alumni, industries, research organizations are collected and these feedbacks are discussed in the college council and appropriate bodies. Which helps the college for framing the policy and for improvement from time to time..

- ◆ Reinforcing the culture of excellence

The management, through the Principal ensures that academic and non-academic excellence is maintained in every aspect of the college and the various departments. The employees interact with the stakeholders and address their issues and grievances from time to time, and this in turn helps to maintain a culture of excellence which is implied in the quality policy statement. Sree ayyappa College reinforces our culture of excellence in many different ways. We analyze opportunities for improvement ideas and projects and priorities in the monthly meeting and conduct peer analysis in the form of cross assessment of our social skills to aid our personal development.

Champion organizational change

The major steps in champion organizational change are Initiating; Facilitating; and Implementing. Change champions particularly need to develop skills in working with teams. This could include learning to facilitate a variety of activities such as building change teams into high performance teams, guiding brainstorming, problem solving, planning, and conflict resolution meetings, and helping teams design and implement successful changes. Facilitating also requires skills in networking and getting the right people together. Networking and building relationships with key people makes it possible to pave the way for change. Sree Ayyappa College always keeps on organizational change adopted and acclimatizes to the new changes in a faster manner.

6.1.3 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?

The plans and policies of the college are subjected to a regular monitoring and revision on the basis of feedback from the various stakeholders like students, parents, community, Alumni, industry etc. By carefully evaluating the feedback from all the stakeholders the institution makes necessary modifications and improvements from

time to time especially for up gradation of the syllabus, introducing new programmes, add on courses and certificate courses.

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

The principal of the college plays a lead role in the governance and leadership of the institution. His pivotal role as academician, administrator, mentor, and an ardent supporter of co curricular and extracurricular activities is highly crucial and appreciable as far as the progress of this institution is concerned. His flexibility to act as a link between the staff and the management, the University, IQAC, the general public, the alumni, and other stakeholders of our institution prompted our growth. He also involves in various committees like IQAC, academic bodies of the University, management governing body etc.

6.1.6 How does the college groom leadership at various levels?

Leadership is decentralized and decisions are taken after participative deliberation. The Principal is advised by the college council in decision making. Teachers also act as leaders in various co curricular and extra curricular activities of the college. The National service scheme with the help of programme officers develops leadership quality among students. The students' union has a positive role in the affairs of the college, and this give the students a chance to participate in decision making process and lead the management of the college, subject to the approval from the principal. The fact that the students are given a chance to participate in the democratic process itself gives them a chance to be groomed into being future leaders of the society. The parliamentary system of election at the class level and college level give them an understanding of the democratic process. College Union council, college magazine editorial board, representation in various committees, NSS leadership camp, involvement in extension activities give opportunities to groom them as responsible citizens and leaders.

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 has a fully decentralized administrative system. This decentralized system greatly improves the Total Quality Management of the academic, co curricular, and extra curricular and administrative activities of the institution. Important decisions relating to the academic administrative matters, taken by the principal, in consultation with the college council, and are executed accordingly. The process of allotment of work in various dept is done by respective heads of depts. The depts.also help in the admission process of students. The activities of all the departments are conducted under department level monitoring committeeand college level monitoring committee.

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

Yes,

The entire functioning of the college is done by participative strategic planning. All the teachers and non teaching staff are working with great team spirit and are actively involved in the total functioning of the college. The work in the college office is distributed evenly by the office order. An air of cooperation built and maintained among the faculty of various departments of Sree Ayyappa College. The management prompts the creation of a conducive ambience for cooperation.

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?

Quality Policy Statement

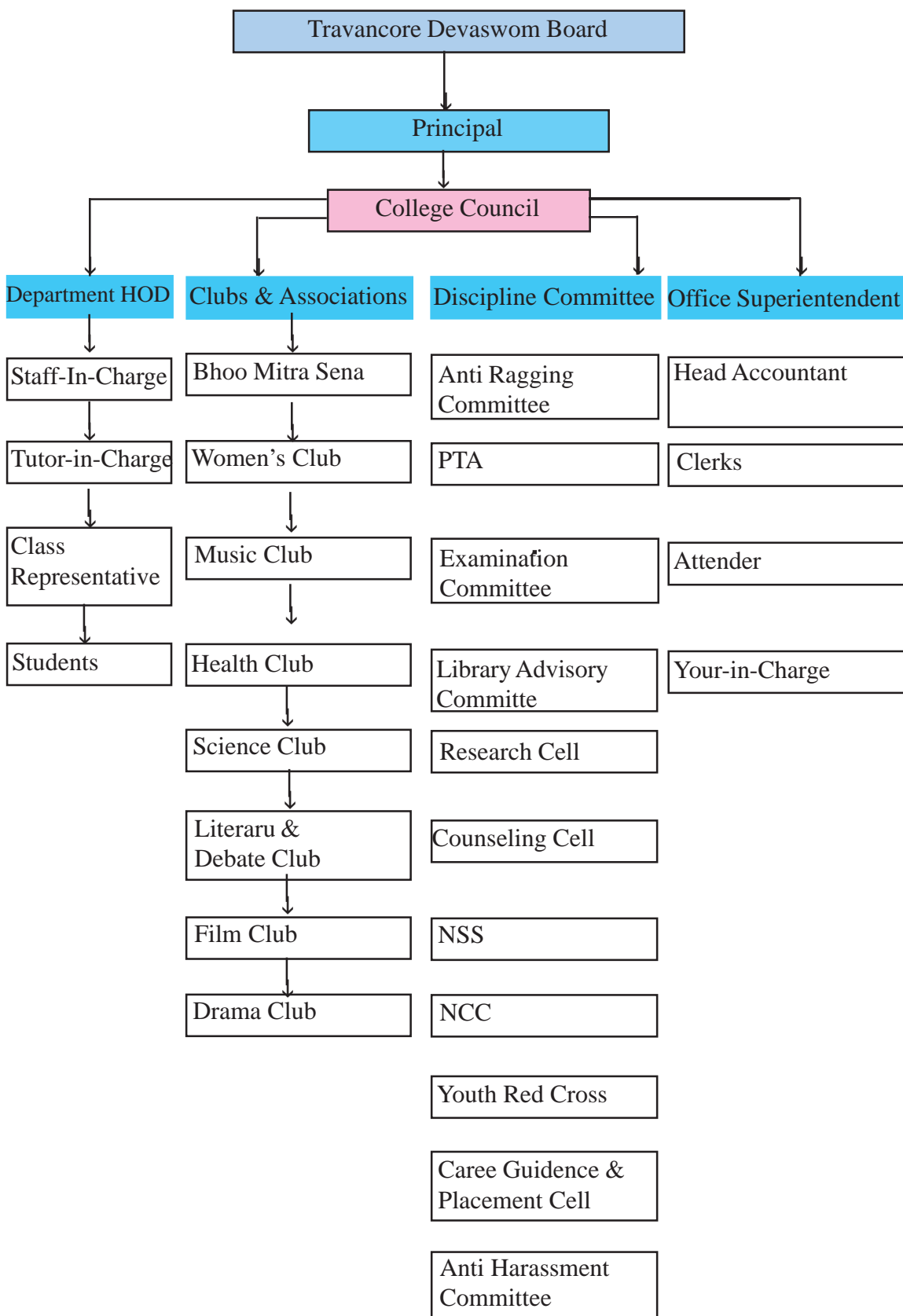
The stated objective of our institution is to become a centre of excellence in teaching, research, co curricular and extra curricular activities. To provide the students an environment that enables them to reach their academic and all-round potential, to make worthwhile contributions to the society and to have a solid foundation to pursue further study or employment.

The employees are made familiar with this quality policy and their efforts are geared towards realizing this policy in its true spirit. IQAC effectively monitors the activities of the college. The feedback mechanism effectively monitors the curricular and extracurricular activities of the college at different levels- department, college level and at the level of the top management. The principal and the various departments chart out policies and programmes in accordance with the quality policy. The teaching –learning process is subjected to periodic assessment and revamping on the basis of the feedback collected from the students about individual teachers, college administration and infrastructure facilities.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

The college does have a perspective plan for development. The college has a lucid mission and vision statement spelling out its cherished goals and objectives. The realization of these goals and objectives are the spring board from which the perspective institutional plan is developed. The institutional plan sprouts as a result of interaction between the various stakeholders of the institution. viz. the management, the principal, teaching faculty, non teaching staff, students, parents, well wishers, etc. The College has a healthy participator system wherein the stakeholders contribute towards a perspective institutional plan. These plans are discussed in the appropriate bodies for feasible changes and for final approval and implementation by the institution. Our College aims at becoming a centre of

excellence for undergraduate courses and post graduate courses if allotted. It also have plan to make the department of Computer Science as a research centre.



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

♦ Teaching & Learning

Sree Ayyappa College use all new technologies in teaching and learning.

Seminars

Considering the need for creating a platform for faculty members, researchers and various graduate students to be acquainted with the new trends and developments in various disciplines, a Seminar Series titled “Infofest Seminar Series” was organized in the College, in which resource persons in five disciplines were invited to present papers. viz Computer Science, Electronics, Micro biology, Mathematics and Physical Education. There were many papers from all the disciplines. Teachers and students got opportunity to present papers.

Inter Disciplinary lectures

Students of the Sree Ayyappa College often excel in University examinations and bag several ranks, but they miss opportunities to have discussions on current events of importance, especially on recent scientific developments and socially relevant themes. To overcome this, a committee, ‘Interdisciplinary Lecture Series Committee’, was constituted to take the initiative to organize lectures by eminent speakers from various fields. This endeavour enables to create opportunities to interact students with renowned personalities.

Remedial teaching

Apart from these, a committee is also formed and assigned to make necessary arrangements to utilize the free times of students (due to the leave availed by the teacher concerned as per the time table) fruitfully. For this

purpose, the committee has prepared a list of faculty members who are ready to serve along these lines and deployed them as and when required. This is an innovative practice in which students will be exposed to topics other than their subject of study. Practice on the use of computers, training to improve the communications skills and performance in group discussions, mock interviews and coaching classes for aptitude tests are programmes offered along this direction.

Exhibition and Workshops

We organize work shops, seminars and exhibitions regular intervals. Last year we have organized a UGC state level seminar in Electronics. An info-fest seminar series is being organized every year by the college in which all the departments get opportunity to participate. The students and teachers are also getting chances to present papers apart from the invited talk and brain storming sessions from the invited resource persons

Examination

As per the direction of the University a college level monitoring committee is constituted . They monitor and coordinate all the activities in connection with all the examinations. Under the leadership of CLMC an examination Committee is constituted in the college for the conduct of examination

Career Guidance

All most all the courses of our college are professional in nature and the students are being guided by the institution in selecting future career. A career guidance cell in functioning in the college so as to guide them. Effectiveness Enrichment Programme, personality enrichment programmes, personality training programme, Spoken English classes etc are being organized by the

career guidance cell. They also inform the students about the competitive examinations to faced in building their career.

Add on Course

Applied for 5 add on courses in different disciplines.

Apart from this we have interactive classes; IT enabled teaching, Systematic evaluation of the students. Completion of the syllabus on time, peer teaching for slow learners, Project visit to advanced lab to advance learners.

◆ Research & Development

A Research Promotion Council (RPC) is functioning in the College. Major activities of the RPC include evaluation of research project proposals for external funding, developing research methodology tools necessary for students to undertake project work and encourage teachers to embark on research projects. RPC organizes interactive workshops to motivate teachers to undertake minor and major projects with social orientation. It is a practice of the institution to present the abstracts of the papers presented in various journals/ seminars for appreciation and comments before the members of the staff. Project works being a part of curriculum, classes were organized to inform the students on research methodology tools. We use INFLIBNET facility for downloading research papers. We have linkage with University departments, research institutions and industries.

◆ Community engagement

Cyber Crime Awareness Programme

An educational institution is a part of society and depends on the society for its resources. It *follows* that an institution of higher education cannot neglect commitment to the society and should take every possible means to give back to the society what it takes from it. The Sree Ayyappa College is well aware of its social

responsibility and we have translated our mission of “giving society its due”, into meaningful projects of social relevance. ‘Cyber- Literate- Cyber Crime Devoid Campus Project’ organised jointly by Kerala State IT Mission(KSITM) and Kerala State Legal Services Authority (KELSA) is a project which we have implemented with this objective in view. This project has been designed with maximum participation from the society and is truly a need of the hour.

Adoption of a ward by the NSS

NSS unit of Sree Ayyappa College has adopted a ward of Thiruvandoor Gramapanchayathu which is socially, economically and educationally poor. NSS has formulated many plans for development of the panchayath, particularly the adopted ward

Waste Management

Dept of Electronics, in association with Bhoomitha club and NSS submitted a proposal to the Panchayath for E- waste management.

Quality checking of the Drinking Water source of the panchayathu

A proposal was submitted to the panchaythu by the Dept of Microbiology and Biochemistry for the checking of the quality of drinking water source of the panchayathu. As the panchayathu is situated in an area which is surrounded by rivers, during rainy season water borne diseases are common in this area. The suggestions and findings of the dept will have a major impact on the health of the public.

◆ Human resource management

The college has a self appraisal system to evaluate the performance of the faculty. The feedback from the students is collected on annual basis. One feedback is collected directly by the principal and another is collected by teachers individually. Corrective

measures are taken based on the assessment. The parents are invited for meeting with faculty and their feedback guides our course of action.

Annual professional improvement programmes, skill up gradation and training programmes are conducted for members of the non teaching staff.

All members of the Staff are recruited according to the norms set by the University, the UGC, and the government. The manager appoints the person selected and the appointment is later ratified by the University and the government.

The following are the facilities and programmes for the staff members.

Staff club

Sree Ayyappa College has launched a staff club for the welfare of teaching and other supporting staff in this college. The club arranges programmes to develop synergy, teamwork, research oriented mind etc in the motivated and talented group of faculty members. Annual get together of the family members of staff is organized in the college Auditorium on second Saturday of April every year

Staff Tour/ Study tour

At least two South Indian Tour programs are arranged to the famous tourist places in every year.

Each department conducts study tour every year, most of the department teachers accompany the students.

Free Internet facility for the staff

Free internet facility is available to the staff members

◆ Industry interaction

All the students from the Department of Computer science, Electronics and Microbiology and biochemistry go for their project work as a part of their

curriculum to different industries for their projects works. They gets chance for interacting with different industries and experts. They undertakes projects under the supervision of the faculty in charge of the college and expert in the industry.

An memorandum of understanding was signed between our college and boots camp India limited

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 institution makes wholehearted constant efforts for the improvement of its performance, through healthy feedback and evaluation process. We take feedback and evaluation from all our stakeholders. The management, principal, and staff take proactive steps to use the feedback data in decision making and performance improvement.

The evaluation involves three steps viz

1. From the students directly by the teacher concerned in the prescribed Performa
2. A confidential evaluation of every teacher by the Principal, and
3. Finally, through the feedback from parents and also from students at the time of their farewell programme. The information is analyzed and the required changes are recommended for better performance of the faculty.

We collect feedback from the alumni, industry and also from the panel of interviewers at the time of campus recruitment, regarding the performance of our students. Feedback is collected from the parents regarding the difficulties faced by new entrants and every attempt is made redress their reverences, if any.

The public response is seriously take care of regarding the management, administrative and academic process of the institution at several occasions and meetings, which also imparts ample opportunity and scope for 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 has given the enough freedom to act any curriculum related activities. They also promote higher education of faculties by giving them no objection certificates. They also provide duty leaves and permission to attend the workshops, seminars and symposia inside and outside the country, which enables the faculties to enrich themselves and effectively transform knowledge to students.

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

There were no appointments to the existing vacancies to many disciplines in the College since 1998 due to bar on recruitment by the government. All the classes out of these vacancies were managed by Guest lectures. However, due to the sincere effort of the Management, the appointments to existing vacancies were able to complete substantially. The management also has taken keen interest in the starting of MSc computer science and B Com with computer application courses. Our college is a small college when compared to other colleges under the management of Travancore Devaswom Board. Even then the management is allotting every year substantially a good amount for the activities of Sree Ayyappa College in Travancore Devaswom Baord Budget.

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 analyse the nature of grievances for promoting better stakeholder relationship?

There is a redressal grievance cell functioning in the College, with the principal as its convener and all the Head of the Departments, and the office superintendent as its members. The grievances related to student amenities are discussed in the college council and if possible, necessary provision is made to redress the grievance. Grievances related to teaching- learning process are communicated to the relevant departments and the matter is discussed and resolved at department –level meetings. The students are also given a chance to air their grievances related to office administration, since they are given a chance to bring it to the notice of the concerned authorities and the grievance are given a speedy redressal as far as possible. The grievances related to internal assessment are taken up by the CLMC. There is a three tier system for the redressal of grievances related to internal grades. At the first level they can complain to the teacher concerned, if the matter is not resolved satisfactorily, the student can complain to the CLMC, and at a higher level, if needed, to the University also.

6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute ? Provide details on the issues and decisions of the courts on these?

No.

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, every year feed back from the students in structured questionnaire are collected on institutional performance. The institution diligently uses the data information collected from feedback in decision making and performance improvement. We

collect feedback from parents and other stakeholders on a regular annual basis. These feedbacks are discussed in the college council and other appropriate bodies and consensus is reached for performance improvement.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?

All the facilities extended by the Govt. Departments, Universities and other agencies are open to the members of the staff. Teachers desirous of joining Faculty improvement programme are granted leave on request. Resources from the management and PTA are made available to finance the conduct of seminars, conferences, workshops, special programmes for teachers. Teachers are motivated to join in Subject Associations, to attend science congress and to take up minor and major projects. Special training was imparted to members of the non teaching staff on accounting, office procedure, IT literacy and on public relation. Teachers are allowed to attend orientation courses, refresher courses, workshops, seminars and short term training etc.

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 teachers have to attend in-service training programmes mandatorily as part of the requirements of their promotion. They also are given chance to attend seminars, workshops and symposia on their area of research, and pedagogy on a regular basis. The teachers are given duty leave as per the directions of the regulatory agencies. The college has conducted teaching-learning workshops in the institution itself, to provide information about the latest pedagogy. The non teaching staff are sent to training in administration and finance, they are motivated to help the students

in academic matters. Both the teaching and non teaching staff are supported by the management in all necessary service matters

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 institution follows student based evaluation system using a tool devolved by NAAC for assessing the performance of faculty members.. The responses to the questions recorded by the students in the four point scale are considered to award a grade to the teacher. Those who obtain lower grades are confidentially conveyed information regarding the weaker areas of their performance, limitation of their methodology and are advised to take corrective measures to strengthen their capacities.

Self appraisal is another strategy by which teachers analyze their weakness and strengths. The feed back received help teachers to refine his/her competencies. Students are given the freedom to make judgment on teachers' Performance when a new methodology is introduced in the class..

6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

The promotion of all the teaching staff and non teaching staff are recommended by the management only after verifying the appraisal report of each staff. The information which require corrective measures will be communicated to the teachers confidentially by the principal. The management take appropriate disciplinary actions if any of the staff member fails in his/her duties.

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

A cooperative credit society is registered and started functioning in the college. All the teaching and non teaching staff are members of the society. . The teachers and non teachers are benefited from group accident insurance scheme, state level insurance scheme and person accident insurance scheme and provident fund scheme pension scheme. All the teaching and Non teaching staff are benefited from these schemes.

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

Our institution being an aided college affiliated to the University of Kerala , we are guided by the rules and regulations issued by the University and the government with regard to the recruitment of faculty. The management offers all the opportunities for the faculties for their career development under the rules. Teachers are motivated by the institution to do minor, major and post doctoral fellow ships as when they wish to do the same. The teachers are motivated by giving best teacher award and felicitation for outstanding achievement.

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?

Sree Ayyappa college's mechanism for efficient use of financial resources are based on value for money policy. Value for Money is the term used to assess whether or not an organisation has obtained the maximum benefit from the goods and services it acquires and/ or provides, within the resources available to it. It not only measures the cost of goods and services, but also takes account of the mix of quality, cost, resource use, fitness for purpose, timeliness and convenience to judge whether or not, when taken together, they constitute good value. Achieving value

for money may be described in terms of the ‘three Es’ - economy, efficiency and effectiveness:

For value for money to be achieved, the College needs to be as effective as it can in its use of public and other money. Sree Ayyappa College is committed to delivering value for money as an integral part of its corporate and academic strategy. While it has a specific responsibility to achieve value for money from its use of public funds, this principle extends to all sources of funding. Similarly, the responsibility for pursuing value for money lies with all staff, and not just those with financial duties.

To meet its commitment to achieving value for money the College has set itself the following aims: To integrate value for money principles within the College’s existing management, planning, review and decision-making processes, particularly in regard to projects or activities with significant financial implications.

To adopt recognized good practice where appropriate.

To benchmark the College’s activities against other similar activities and organizations where this is considered useful, to respond to opportunities to enhance the economy, efficiency and effectiveness of the College’s activities, to ensure that all staff recognize their continuing obligation to seek value for money as part of their routine activities. The college takes sincere effort to disburse the stipend and scholarship to students on time. The management has keen on the utilization and developmental grant under the UGC XIth plan for the purpose for which it is given. The college was able submit the audit report and utilization certificate on time to UGC. Every financial year the college submits an annual anticipatory budget to the management for consideration stating all the necessary anticipatory income and expenditure.

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.

1. Internal auditing is done by qualified Chartered accountants authorized by the management
2. The deputy director of collegiate education, Govt. of Kerala conducts local audit
3. Audit by the office of Audit General, Govt. of Kerala

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

The main budgetary resource to fulfill the mission of the institution is the funds received from UGC for various developmental activities. The fee collected from the students, PTA fund and the college development fund from parents, the donation of OSA and well wishers, the funds allotted through MLA or MP also help the institution. The management, of course due to its commitment, also allots funds to fulfill the cherished goals and mission of the institution. The following table shows the budgetary allocation of the institution during the academic year 2011-

Grants received					
SL No	Heads of Income	2008	2009	2010	2011
		2009	2010	2011	2012
	Salary Teaching staff	6229896	6075703	8152538	6793384
	Salary Non Teaching Staff	1797587	1682309	1920131	2694101
	Stipend to SC	87384	nil	9406	13262
	Stipend to OEC	11981	2460	3822	
	Stipend to ST	nil	nil	nil	nil
	Scholarship toward tuition fee		132220	19780	
	Scholarship toward special fee		31535	32880	

Scholarship toward examination fee		18330	4793	
Scholarship for fishermen	nil	nil	nil	nil
Scholarship for Physically challenged	nil	nil	nil	nil
Kerala state suvarna jubilee scholarship	Nil	Nil	Nil	nil
State merit scholarship	Nil	Nil	Nil	nil
KPCR/ SC/PMEC SEBC student scholarship	Nil	NIL	9700	NIL
UGC Xi plan	NA	NA	335000	NIL
Minor research	NA	NA	394500	NIL
Major research	NA	NA	385000	NIL

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 institution receives donations from the parents, old students association and well wishers, towards the general development of the institution. . The following table shows such amounts received by the institution.

Sl no	Source	Purpose	Amount 2008-2009	2009-10	2010-2011	2011-2012
1	Parents	PTA fund				362350

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, Sree Ayyappa College is open to all students irrespective of cast and creed. The secret of success of this institution is a community of teachers, who are committed to their vocation, professionally competent, morally upright, just and humane in dealings, and who grow in the true vision of education.

Sree Ayyappa college , having a history of seventeen years of providing education to the rural masses. Over the past years, it has made considerable progress striving to achieve the goals and objectives of its founders and bringing in a marked difference in the socio-economic status of the locality.

The College has also been active in strengthening the overall development of students and tapping the potential of rural youth by providing training in physical education and other co-curricular activities. Social service has been a mission of the institution. The College has been inculcating the spirit of commitment among the students to the society by exposing them to the services provided in its sister institutions set up for the deprived, poor and disabled people.

As a quality sustenance activity in accredited institutions and as per the “Guidelines” for the creation of the Internal Quality Assurance Cell (IQAC) from the NAAC, Principal, had constituted the IQAC on 20th November, 2010, as part of institution’s quality assurance and maintenance system to work towards realizing the goals of quality enhancement and sustenance. The IQAC of the academic year 2012-13 of the College consisted of the following members:

INTERNAL QUALITY ASSURANCE CELL (IQAC)

1. Prof. R Jayachandran, Principal - Chairman
2. Dr..K.S. Anil Kumar, Assistant professor in Computer Science - Coordinator
3. Mr. P. Devanad, Assoictae professor, Dept of Chemistry
4. Mrs P. K. Shoba, Assistant professor, Dept of Computer Science
5. Dr. S. Gopalakrishanan Unnithan, Assistant professor, Dept of Mathematics
6. Mrs. K L Ushakumari, Assistant professor, Dept of Electronics
7. Dr. N. Madhavan, Assistant professor, Dept of Physical Education
8. Mr. Pushpagathan Pillai, PTA Vice President
9. Mr—————, Secretary, old students association
10. Mr. Padmanabha Iyyar, office head of accountant

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

All the suggestion by the IQAC has been considered by the management and many suggestions are in the process of implementation.

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

Yes, the Vice President of the PTA is a member in IQAC, he took keen interest in all the activities of the college. As a local man from Eramallikkara, his contribution to the college is exemplary. The secretary of college alumini association is also a member of the IQAC.

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

The alumni of this college used to give their views as well as their feed back of the college for effective functioning. Every year the an annual general body meeting is held and the he aluminizes used to give their suggestion and feedback about the institution. There will be at least two or three executive committee meeting of the association before the general body meeting to discuss about the overall development of the college. The college also give gets the suggestion from the alumni as well as the students as an when required. The college union also give its support for effective functioning of the college.

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

Being a small college it is easy for the IQAC to communicate with the each and entire staff members of the institution.

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.

Yes, the IQAC collects feed back

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.

The University has conducted many short-term programs for up-gradation of the skills and training of the non-teaching staff based on performance appraisalreports. For example, the computer center has arranged a number of programs to train the non-teaching staff in effective utilization of the software packages like MS-Office.

The University has conducted special training programs, orientation courses, refresher courses for teachers for enhancing personal effectiveness.

6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

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

6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

The institution has taken initiative for promoting cooperation showing of knowledge, innovation and empowerment of the faculty. The meetings are regularly held with the incharges of the departments, to know what the problem the faculty members have. The teachers from the Science stream meet together for sharing their ideas on the improvement of Science education. In the same way teachers from the Faculty of Arts communicate with each other to share their ideas on different issues. For example, the teachers of language and literature share their ideas on different topics which are of common interest such as modernity, post modernity, feminism etc. The environment is very conducive for teaching and learning.

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

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

The institution adopts a few best practices in governance and leadership. The management of the institution has its full commitment to the development of the quality of teaching. The management is always encouraging and supporting the

involvement of the staff in several academic and administrative bodies. The meeting of the management and the staff along with the principal of the institution creates an amicable atmosphere for work. The institution is always ready to redress the grievances of teachers as well as employees. The institution forms different committees for the management of different institutional activities. This practice is quite effective for smooth running of college affairs. There is also the practice of looking towards the well form schemes for the staff and faculty for their well being . The teachers and employees get their dues on time such as arrears etc. There is also practice of providing infrastructure facilities to the staff and faculty for providing research facilities and office stationary.

CRITERIA VII : INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Sree Ayyappa College (SAC), Eramallikkara announced it was going green on June 2010. This declaration coincided with the release of the new NAAC accreditation criteria, which identifies the values and operating principles of our campuses. Sustainability is included on this list and as such SAC is committed to conducting its "...operations in an environmentally responsible manner and include sound resource practices such as waste reduction, water harvesting, energy conservation etc."

Having announced going *Green*, we made a strategic plan for the implementation. A Green committee was formed to study the existing initiatives and based on their recommendations the implementation strategies were planned. The committee conducted a *Green Audit* based on the following components.

- ◆ Facility information such as number of users (staff, students, visitors) and amenities (i.e.cafeteria, computer lab etc, electronics lab).
- ◆ Existing green initiatives that are prevalent in the campus
- ◆ Feedback from facility users encountered during the audit on needs and opportunities for reducing the campus ecological footprint
- ◆ Collection service profile for waste materials, recycled materials, composted materials, and re-usable items (profile includes location of bins, frequency of pick-up, number and size of containers, materials collected, destination of materials in bins, % full at time of pickup)
- ◆ Energy and Transportation system (heating, cooling, building power, people and cargo transit to and from college)

- ◆ Water Usage and Conservation Strategies
- ◆ Purchasing practices
- ◆ Green Committee - membership, goals, effectiveness
- ◆ Integration of sustainability principles and practices into curriculum
- ◆ Community linkages
- ◆ Communication opportunities for community mentoring on sustainability

Key Findings of campus Green Audit

- ◆ Firm commitment to reducing toxic cleaners and pesticides in the campus
- ◆ Universal recycling collection program for paper and plastic containers.
- ◆ Limited signs and information about what can be recycled and what happens to materials when containers are emptied (conversely, limited signs and information about what materials are still “acceptable” to put into a garbage disposal bin and where the garbage goes when containers are emptied).
- ◆ Openness to partnerships and promotion of environmental and social initiatives not directly linked to college operation.
- ◆ The E-Waste (computer lab/Electronics lab) are not properly disposed.
- ◆ Some computer monitors, hard drives, and lights, fans left switched on in empty rooms (although very low number observed).
- ◆ The waste from the Microbiology lab is not properly disposed.
- ◆ Garbage bins are less in number and students are not using it effectively.
- ◆ No formal composting programs observed but SAC can lead worm composting workshops; can easily have a worm composter in kitchen areas.

- ◆ No water harvesting pits found in the campus.
- ◆ Green purchasing program is wonderful - love the process of asking “do you really need this” and then seeing if there is a way to meet the need with the smallest footprint possible.
- ◆ More secure and sheltered areas for bicycles, bikes and cars are needed.
- ◆ Website can be used more effectively to promote Green Initiatives - suggestions include adding details on green living on campus under Admission and Registration, and adding link to Green Portal under Resources and Links of Interest.
- ◆ No renewable energy projects observed or discussed.

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

Actions taken for a Green and Clean Campus

Based on the green audit report, for a short term results, some quick fixes are designed for early adopters and moderately motivated individuals. However for long term results initiatives are taken targeting long term behavioural change. The era of optional participation in environmentally sustainable practices has now passed and community-based social marketing has become the best practice for designing environmental initiatives involving a mandatory behavioural change.

Energy conservation

At present 100% of electricity consumption is from national grid and no energy is generated within the campus. We set a target of generating 10% of our energy needed within a period of 2 years. We have a bio-gas plant which is used for the college women’s hostel for cooking. We are planning to use solar photovoltaic systems to generate electricity for our labs. As a beginning

100W will be generated this year and in an incremental way with in a period of 3 years we are planning to generate 2 KW.

We have implemented several stringent measures to cut down the consumption of electricity.

- ◆ All computers have activated power management software to minimize energy consumption
- ◆ All the electrical wiring connections were checked on a regular basis and repaired/changed as and when required
- ◆ In order to rectify the power shortage a new transformer is installed in the college premises by the Kerala State Electricity Board and the entire expense was met by the college.

As a result of continuous effort our monthly electricity bill has come down from Rs 20000/ (Rupees twenty thousand only) to Rs 3000/ (rupees three thousand only). As a state with acute energy scarcity, this step is a momentous one towards energy conservation and sustainable development. We owe this fantastic result to the collective effort of our staff, students and our management.

Extending this fantastic result for a social transformation we initiated a project entitled “*Energy Literacy*” for the local community. This was to make the people aware of Energy Conservation and we teach them different methods and strategies to reduce their monthly electricity bill and train them in ways of efficient usage of other energy resources such as Bio-gas, Solar energy etc.

Use of renewable energy

Renewable energy is derived from natural processes that are replenished constantly. In its various forms, it derives directly from the sun, or from heat generated deep within the earth. Included in the definition is electricity and heat generated from solar, wind, ocean,

hydropower, biomass, geothermal resources, and biofuels and hydrogen derived from renewable resources.

Understanding the need and importance of green energy we have a bio gas plant for our college hostel and we are planning to set up a solar photovoltaic power generation. We also encourage our staff and students to use and spread the message of renewable energy resources. As part of the E-waste awareness and management project for the local community we conducted a survey on the usage of bio gas and solar power for their energy needs.

Key Findings of the survey

1 Less than 10% of population have bio-gas plants, but 80% are willing to construct with subsidy

2 Nobody uses solar power for any purpose. They are ignorant about this but are interested. Financial investment is the major hurdle.

3 Cattle is the main source of income among the lower middle class and middle class, so there is the possibility of cattle dung to be used for bio-gas.

Water harvesting

Sree Ayyappa College, Eramallikkara, located on the confluence of the twin rivers Pampa and Manimala, is blessed with fertile soil and is an ideal locality for cultivation. We understand the importance of fresh water conservation. Being a low lying land and blessed with south west monsoon, water scarcity will seldom occur and hence no expensive rain water harvesting tanks need to be constructed. But we do have inexpensive rain water collecting pits and on a regular basis we plant trees in the campus and preserve existing ones.

The NSS and Bhoomithra Club of our college conducts various programs on water harvesting, soil erosion, water quality testing etc. We undertake a project “Water quality testing for the local community” which examines the presence of coli form bacteria and

other possible contaminations of the water collected from the wells of Ward 1 of Thiruvandoor Grama Panchayath.

Jalashri Hairthasala Water Quality Analysis Project

Getting our domestic drinking water samples tested for purity is a time consuming and costly affair if we are to depend on the Regional Analytical Lab.

But a recent initiative by the **Water Resources Department , CCDU & Department of Environment & Climate change of the State government** seems to be making this task relatively easier and less expensive. The water testing labs are being set up at selected educational institutes in districts. As an initial step two colleges from each district were selected for setting up Water Quality Analysis Lab. The lab is named 'Jalashree Harithasala Lab' with financial aid from the state government through the Water Resources Department. This lab is open to the public.

The testing will be carried out with the kit provided by the Water Resources Department & CCDU .

Two colleges have been selected from Alappuzha district for setting up the water quality analysis lab . Our college , which is one among the two selected colleges for the purpose, has taken up some water testing assignment for the residents of ward 12 & ward 13 of Thiruvandoor Grama Panchayat in its neighbourhood.

The members of the '**BhooMitra Club**' of the college, has undertaken the task of testing the water samples from these wards for analyzing its drinking water using the water testing kits given free to the college by the Water Resources Department.

Our students have already completed testing of 66 samples collected from the these wards and the results were given to the elected ward members of this panchayat. Our plan is to give the residents ' Water Cards' .The basic water test comprises testing of the

presence of fluoride, chloride, nitrate, iron, bacteria including coliform contamination in the water, besides its pH Value.

We have received an initial amount of Rs.25,000 from the State Government for setting up the lab.

Results

CHLORIDE - All the samples are within the desired limit prescribed for well water

NITRATE - 64 samples are within the desired limit, 2 samples beyond the limit

IRON - All the samples are within the desired limit

FLUORIDE - All the samples are within the desired limit

PH - 46 samples are within the desired limit and 20 samples beyond the limit

Bacterial Contamination – Out of 66 samples , 21.21% of samples are safe / potable , 24.24% samples are bacterial contaminated, but after water treatment(recommended to boil water) it can be used. Remaining 54.54% samples are unsafe /unfit for drinking

Check dam construction

Being a low lying and plane land soil erosion is not a major concern to us. In fact during the south west monsoon fertile soil deposition (Ekkal) occurs on the banks of our rivers which enhances the cultivation of the local community. With the lush green campus we are able to preserve rain water and prevent soil erosion.

Recently on a survey conducted by the Bhoomithra Club we identified the soil erosion at some places on the banks of the river Pampa and Manimala due to excessive sand mining in the river bed. An awareness campaign is organized by NSS and Bhoomithra Club among the local community and representations were given to Local self Government and Pollution control Board.

Efforts for Carbon Neutrality

SAC is committed to reducing paper use and purchasing requirements. Paper consumption is reduced by printing only when necessary, using document layouts and report guidelines to minimize number of pages, and printing double-sided or on one-side used paper. We adopted a unique purchasing policy that specifies that at least 50% of paper purchased must be FSC certified or tree-free and that printing service jobs and contracts follow this specification. We propagate this message through our website.

Plantation

Sree Ayyappa College, Eramallikkara is blessed with a lush green campus. We have a herbal garden “*Poonkavanam*” which is taken care by the Bhoomithra club. Every year we celebrate world environment day on June 5 through various activities such as planting trees, conducting quiz competition. These activities are organised by college NSS unit and Bhoomithra club.

Hazardous waste management

A Hazardous waste is waste that poses substantial or potential threats to public health or the environment.

Objective :

Effective management of hazardous waste, so as to avoid environmental pollution and adverse health effects due to its improper handling & disposal.

Various actions have been taken for environmentally sound management of hazardous wastes in the college. These include establishing regulatory and institutional framework, preparation of technical guidelines, development of individual & common facilities for recycle/recovery/reuse, treatment and disposal of hazardous wastes, inventory of hazardous wastes generation, identification & assessment of dump sites for the purpose

of preparing remediation plans, and creating awareness amongst various stakeholders. However, these activities need to be expanded, reinforced and strengthened.

The overarching objective of this strategy is to reach the goal of “Zero Disposal of Hazardous Waste”, adopting a holistic approach encompassing reduction at source, reuse, recycle and recovery- in that order through infusion of cost-effective innovative technologies, processes, and practices. Further, the management of ‘end of life’ consumer products, having hazardous constituents, such as used lead acid batteries, waste electrical & electronic equipment etc., must give primacy to reuse, recycling and recovery. Hazardous waste which is not amenable to reuse, recycling and recovery has to be subjected to physical-chemical/biological treatment, incineration or disposal in the secured landfill. We are planning to buy an incinerator in the near future.

E-Waste Management

“Electronic waste” may be defined as discarded computers, office electronic equipment, entertainment device electronics, mobile phones, television sets and refrigerators. Rapid changes in technology, changes in media (tapes, software, MP3), falling prices, and planned obsolescence have resulted in a fast-growing surplus of electronic waste around the globe. E-wastes are considered dangerous, as certain components of some electronic products contain materials that are hazardous, depending on their condition and density. The hazardous content of these materials pose a threat to human health and environment. Discarded computers, televisions, VCRs, stereos, copiers, fax machines, electric lamps, cell phones, audio equipment and batteries if improperly disposed can leach lead and other substances into soil and groundwater. Many of these products can be reused, refurbished, or recycled in an environmentally sound manner so that they are less harmful to the ecosystem.

Being an applied science college conducting courses like BSc computer science, Electronics etc we have to deal with a lot of E-waste. As of today there is no agency in Kerala which collects and recycles E-waste. But on June 2012 the Kerala Pollution Control Board urged the Local Self Governments to initiate mechanisms to collect the E-waste

from their locality and transport it to the recycling plants outside Kerala. Keeping this in our mind we have kept all our E-waste in a safer closed rooms for further safe disposal.

To spread the message of E-waste, the Department of Electronics has launched a project E-Waste Awareness and Management Program in the Ward I of Thiruvananthapuram Panchayath.

The objective was to make the people aware of the possible health hazards and environment pollution causing due to the E-WASTE and train them the environmentally sound options for E-WASTE management. Detailed report attached.

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 measure of innovation at the organizational level relates to individuals, team-level assessments, and private companies from the smallest to the largest. These innovations are the result of vision and courage. Someone – an individual or a team – had the ability to look beyond the obvious and the courage to do something most people would have found silly

Energy Consumption : Model approach towards efficient and optimum usage

Energy conservation refers to efforts made to reduce energy consumption. Energy conservation can be achieved through increased efficient energy use, in conjunction with decreased energy consumption and/or reduced consumption from conventional energy sources. Energy conservation can result in increased financial capital, environmental quality, national security, personal security, and human comfort. Individuals and organizations that are direct consumers of energy choose to conserve energy to reduce energy costs and promote **economic security**

Electric motors consume more than 60% of all electrical energy generated and are responsible for the loss of 10 to 20% of all electricity converted into mechanical

energy. Four years ago during an audit we found that our power consumption was exorbitantly high and we are paying huge amount (2 lakhs/annum) which is many times higher than bigger colleges. This made us to think and we made some quick fixes and then adopt a policy for a long term behavioural change and set a target of fifty thousand/ annum (50,000/annum). The team SAC inspected every nook and corner of the building on a regular basis, replaced faulty items at the earliest, motors are cleaned and maintained regularly, all computers have activated with power management softwares and all electrical wirings are checked and optimized. As a result of this fantastic team effort our annual consumption of electricity have reduced significantly and at present our annual expenditure is reduced to forty thousand (40,000/-) /annum. The development of the country and energy demand are directly proportional and hence this kind of an effort, if implemented in all organizations, can significantly contribute to meet the scarcity of energy demand and supply.

7.3 Best Practices

7.3.1 Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college

A practice qualifies to be a 'best practice' status if it resulted in high-value impact on any aspect of educational activity in an institution. Sree Ayyappa College, Eramallikkara focused on two objectives Literacy and Environmental sustainability as the two areas to be qualified as best practices.

1. Literacy: An Eramallikkara approach

Goal

Literacy refers to the ability to read for knowledge and write coherently and think critically about the written word. Visual literacy includes in

addition the ability to understand all forms of communication, be it body language, pictures, maps, or video. Literacy encompasses a complex set of abilities to understand and use the dominant symbol systems of a culture for personal and community development. These abilities vary in different social and cultural contexts according to need and demand.

In the context of fundamental definition of literacy KERALA stands at the top of the table among other states of the country. There for we are defining Literacy in a different perspective and in a different approach.

To give an awareness about cyber crimes, energy usage, e-waste management and healthy food practices among the students and local population.

The Context

Cyber literate cyber crime devoid campus :The aim of the programme is to give awareness to the students community on how to use the cyber space effectively & safely, pros and cons of using Mobile Phones, highlight the threats and abuse to the technology, pose, different types of Cyber crime in Campus, Cyber law and the IT Act 2000/2008.

Energy literacy: Impart awareness of energy conservation among all the people in Thiruvandoor Grama Panchayath and implement measures for conservation

E-waste awareness and management: Rapid changes in technology, changes in media (tapes, software, MP3), falling prices, and planned obsolescence have resulted in a fast-growing surplus of electronic waste around the globe. The developing countries have become toxic dump yards of e-waste and India is no exception with Kerala one among the most affected state.

Library for the Eramalikkara Village:Public library provides services to the general public and usually makes at least some of its books available for borrowing. It also serve as community organizations that provide free services and events to the public, such as reading groups and toddler story time.

The Practice

Cyber literate cyber crime devoid campus:

- ◆ A preliminary survey was carried out among the students of selected Higher Secondary Schools and High Schools in Chengannur Taluk, in urban and regional locations, in connection with the Cyber Crime Awareness Programme. The survey questionnaire consisted of 25 questions for analyzing the level of knowledge in Cyber security and Cyber safety measures. The surveys were primarily aimed at identifying student cyber/internet practices as well as perceptions of what represents risky behavior within the context of mobile/internet/social networking. The survey report was prepared and the major findings were reported in the media.
- ◆ Training and a workshop is provided for Selected faculties and students of all schools and colleges of the thaluk.
- ◆ Cyber club is formed in all schools and colleges for continuous monitoring and intervention of cyber related crimes.
- ◆ A specially decked up mobile van with poster presentation, short film, leaflets, books etc was arranged to spread the message of cyber related activities. The campaign focused at 26 High Schools, 13 Higher Secondary Schools and 6 Colleges, covering around 30,000 students across the Taluks.

Energy literacy :

Phase I

Survey among households for the assessment of current status of energy Consumption by a group of three students and one Kudumbasree volunteer with questionnaire notices and booklets published by EMC. Verification of facts with electricity bill.

- ◆ Inculcate the energy conservation means like use of CFL, Solar energy, Bio gas plant, quality wiring etc and get their assurance of implementing the same.

Phase II

Selection of NSS volunteers with good academic performance and motivation for self less service.

- ◆ Training of selected volunteers as trainers by expert resource persons in the field.
- ◆ Conducting awareness classes by trained volunteers at various institutions , Govt. offices, Kudumbasree groups, Grama sabhas etc. covering all the wards.
- ◆ Distribution of booklets, stickers and posters to all the shops, institutions, offices etc.
- ◆ Practicing of street play by talented volunteers on theme ‘save energy ‘.
- ◆ Organise “ Kala jaadha’ and perform Street plays at selected spots in the

Panchayath.

- ◆ Announcement of evaluation and prizes. Evaluation is in such away that two previous bills and a bill after this programme will be taken into account for the consideration of prizes. Prize will be five nos. of CFLs.

Phase III

- ◆ Evaluation procedure by visiting each house in the Panchayath. It will be assessed whether they had implemented energy conservation measures. Two previous bills and a bill after implementing the measures will be taken for assessment. Genuine consumers who had saved electricity to a great extent will be found out.
- ◆ Distribution of one CFL to each house other than SC/ST families

(Where it has already been supplied by the Govt.)

Food security

E-waste awareness and management:

- ◆ A preliminary survey was carried out among people of a selected ward of our Panchayath. The survey questionnaire consisted of 24 questions for analyzing the level of knowledge in e-Waste .The surveys were primarily aimed at identifying the know how and the current practice of managing the e-Waste.
- ◆ A poster presentation and a seminar is organized in the college for the awareness of our students.The survey report was prepared and the major findings were reported in the media.

Evidence of Success

Cyber literate Cyber crime devoid campus :

- ◆ The final results indicate that there is a need of awareness of using cyber space effectively and efficiently by students.
- ◆ The use of mobile phone is up among girl students. Sixty percent of girl students were found to be using mobile phones without the knowledge of their parents and teachers.
- ◆ This project identified a need to examine whether school students were aware of these risks and what their attitudes and responses to these risks might be. It was therefore necessary to design and undertake a large scale survey, to canvass the range of attitudes across different schools in the state, covering public and private schools, and urban and regional locations

Energy literacy:

- ◆ It is found that the average consumption per day in this Panchayath is 18,000 units.

- ◆ A preliminary analysis of the data shows that the group had an excellent knowledge on the methods of optimizing utilization of energy as well as conservation. But some constraints like lack of adequate finance might have prevented them from using the available resources for energy conservation optimally.
- ◆ The region surveyed is rural in nature and hence faces a number of problems in electric supply like low voltage, frequent power failures etc .
- ◆ The concept of alternate energy sources is not yet popular among rural kerala. But the usage of CFL instead of incandescent bulbs is seen to increase in proportional to financial status. This can be attributed to an increase in awareness and affordability among more financially stable group
- ◆ Majority was of the opinion that energy conservation means conservation of all types of fuel, be it Electricity, Cooking gas or Motor fuel. Most also agreed that they take into consideration both quality and affordability while making a purchase of electronic/electrical goods.
- ◆ The following %age of population accepted to make the given changes within a period of 6 months and a resurvey will let us obtain a concrete idea in the extent of usefulness of the survey already conducted.
- ◆ The state of art electrical appliances are becoming popularized among village people.
- ◆ More no. of private vehicles.
- ◆ Invertors are quite common

Majority of the households are using incandescent bulbs for light. People belonging to low financial status are reluctant to buy CFL because of the unaffordable cost. CFLs are to be made available at affordable costs.

E-waste awareness and management:

- ♦ Majority of the population were unaware of the major health hazards posed by e-Waste and our campaign paved the path in recognizing and managing the e-Waste.
- ♦ Sadly to state that no mechanism is prevailing in the state to collect and recycle/reuse the e-Waste. The Kerala Pollution Control Board is taking initiatives in this regard to collect the e-Waste through local self government for further disposal at a safer place/recycle/reuse.

Library for Eramallikkara Village:

- ♦ Set up and registered a model village library for the rural population and about one thousand (1000) books were donated by the college with necessary furniture.
- ♦ A committee is formed from the public and the library is transferred to the people Eramallikkara.

Problems Encountered and Resources Required

- ♦ Cyber Crime cyber devoid campus programme was a massive programme encompassing 26 High Schools, 13 Higher Secondary Schools and 6 Colleges, covering around 30,000 students across the Taluk. While executing the project we faced many hurdles like shortage of available faculties, time, finance etc yet we sailed through.
- ♦ All the projects were executed through our selfless, motivated students without compromising their academic responsibilities.
- ♦ While executing the energy literacy project many people were reluctant to share their energy usage out of fear and possible governmental control
- ♦ Most of the populations were unaware of e-waste and its possible environmental threats and in many cases not even heard of it.

Notes

Cyber Crime cyber devoid campus programme was implemented by Sree Ayyappa College, Eramallikkara in association with , Kerala State IT Mission and Kerala State Legal Services Authority. Faculties from CDIT, CDAC Hyderabad, IITKM also associated with this venture. This project has the unique distinction of being the first of its kind in our country.

Literacy has been defined in a new perspective by team Eramallikkara diverging from fundamental literacy to multidimensional literacy encompassing diversified areas of applied science. At most importance is given to reach the programmes from students' community to the common man for the benefit of the society and future generations and thereby enabling to build a strong nation.

2. Environmental sustainability

Goal

To foster environmental protection among the students community as well as to the common man and cultivate a habit of eco-friendly living.

The Context

Environmental sustainability is about making responsible decisions that will reduce your business' negative impact on the environment. Currently, environmental sustainability is a topical issue that receives plenty of attention from the media and from different governmental departments. Businesses can potentially cause damage to all areas of the environment. Some of the common environmental concerns include:

- ◆ damaging rainforests and woodlands through logging and agricultural clearing
- ◆ polluting and over-fishing of oceans, rivers and lakes
- ◆ polluting the atmosphere through the burning of fossil fuels

- ◆ damaging prime agricultural and cultivated land through the use of unsustainable farming practices
- ◆ Uncontrolled sand mining of the river bed

The Practice

Water quality testing: Good quality drinking water is free from disease-causing organisms, harmful chemical substances and radioactive matter, tastes good, is aesthetically appealing and is free from objectionable colour or odour. It should be emphasized that there is a difference between “pure water” and “safe drinking water”. Pure water, often defined as water containing no minerals or chemicals, does not exist naturally in the environment. Safe drinking water, on the other hand, may retain naturally occurring minerals and chemicals such as calcium, potassium, sodium or fluoride which are actually beneficial to human health. These will impart a taste to the water that may take some getting used to.

- ◆ Water samples are collected from wells
- ◆ Its chemical and biological contents are tested
- ◆ Results will be informed to the local self government for necessary action

Plastic free campus: Plastic is a global threat to mother earth and its use should be restricted and disposal should be safe.

- ◆ Organised an awareness program
- ◆ Mass drive for a plastic free campus
- ◆ Eco friendly cloths are used instead of flux banners and posters

Bio gas plant: Biogas typically refers to a gas produced by breakdown of organic matter in the absence of oxygen. Organic waste such as dead plant and animal material, animal feces, and kitchen waste can be converted into a gaseous fuel called biogas. The

kitchen waste from the college women's hostel is used to generate biogas for cooking purpose which reduces their LPG consumption.

Association with WWF: We are associated with WWF with whom we organize nature camps, trekking, seminars etc.

Evidence of success

Water quality testing: The basic water test comprises testing of the presence of fluoride, chloride, nitrate, iron, bacteria including coliform contamination in the water, besides its pH Value. Coliform bacteria detect both non-pathogenic and disease-producing bacteria. Since the identification of specific disease-producing micro-organisms is difficult, total coliform is often used as an indicator of the water possibly containing disease-producing organisms that normally live in the intestinal tracts of man and warm-blooded animals

Bacterial Contamination – 21.21% of samples are safe /potable , 24.24% samples are bacterial contaminated, but after water treatment(recommended to boil water) it can be used. Remaining 54.54% samples are unsafe /unfit for drinking. The Ph value was in the safest region.

Plastic free campus: Our motto was to make a plastic free campus. People were hesitant in avoiding plastic from their daily life but we create an impact on their mind by projecting the darker side of plastic and now its usage is greatly reduced. Though not a fully plastic free campus, it's a plastic reduced campus now.

Bio gas Plant: Constructed cost effectively and using it regularly. We are able to spread the message of energy conservation and environmental cleanliness. Our motto 'energy from the waste' generated a public interest and many students and local house holds followed our path.

Association with WWF: This helped our students to know more about our natural resources and they got a chance to have a smell of our forest. The tragedy of deforestation,

to be extincting wild animals, the pathetic situation of underprivileged scheduled tribes etc is all shockingly recognized.

Problems Encountered and Resources Required

As the local self government were reluctant in providing fund for water quality testing, funding for the project was minimal. While doing the survey on sand mining of the river bed there were threats from the sand mafia.

Notes

Sand mining is a big threat to our rivers and the ground water level is dipping at an alarming rate. Kerala, being a coastal region, in the near future will face the scarcity of fresh drinking water unless some stringent measures are not taken by the State as well as local self governments. Our campuses can take up this issue as every revolution has its bud growing from the young hot blooded minds.

Contact Details

Name of the Principal : Prof. S. Lekha
Name of the Institution : SREE AYYAPPA COLLEGE,
ERAMALLIKKARA
City : CHENGANNUR, KERALA

PART III
EVALUATION REPORT OF DEPARTMENTS

III - Evaluative Report of the Departments

1.Department of Computer Science

1. Name of the department **COMPUTER SCIENCE**
2. Year of Establishment **1995**
3. Names of Programmes /Courses offered (UG, PG, M.Phil., Ph.D.,
IntegratedMasters; Integrated Ph.D., etc.)

1 B.Sc Computer Science

2 M.Sc Computer Science

3 Certificate Course in Web development (Add on Course)

4. Names of Interdisciplinary courses and the departments/units involved

1. Open Courses (CBCSS)

-Internet Technologies

-Linux Environment

- Business Informatics

Dept. Involved- **Mathematics, Computer Science, Bio-Chemistry & Industrial
Microbiology**

2. Certificate Course in Web development (Add on Course)

Dept. Involved- **Mathematics, Computer Science, Bio-Chemistry & Industrial
Microbiology, Commerce**

5. Annual/ semester/choice based credit system (programme wise)

1. B.Sc Computer Science : Choice based Credit System

2. M.Sc Computer Science : Semester System

3. Certificate Course in Web development (Add on Course) : Annual System

6. Participation of the department in the courses offered by other departments

1. **B.Com with Computer Application : 6 Core Subjects & Project**

2. **B.Sc Electronics : Computer Programming Lab**

3.

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Student Projects- Technopark, KSITM, Infopark, CDIT

8. Details of courses/programmes discontinued (if any) with reasons

Nil

9. Number of Teaching posts

Designation	Sanctioned	Filled
Professors	-	-
Associate Professors	4	4
Asst. Professors	1	-

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

Sl. No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1	Dr. K S Anil Kumar	M.Tech, Ph.D	Associate Professor & Head	Information Security, e-Governance	17	Nil
2	Smt. P K Sobha	MCA	Associate Professor	Bio-informatics	17	Nil
3	Smt. B J Jisha Nair	M.Sc	Associate Professor	Cryptography	17	Nil
4	Smt. S Sreedevi	MCA	Associate Professor	Image Processing	17	Nil
5	Smt. Nisha R	MCA	Substitute Lecturer	-	1	Nil
6	Sri. A Sivaprasad	M.Tech	Substitute Lecturer	-	1	Nil
7	Smt. Dhanaya G Krishnan	MCA	Guest Lecturer	-	1	Nil
8	Smt. Reshmi K P Pillai	MCA	Guest Lecturer	-	1	Nil
9	Smt. S Sindhu	MCA	Guest Lecturer	-	1	Nil
10	Anitha Mary M O Chacko	M.Tech	Guest Lecturer	-	1	Nil

11. List of senior visiting faculty

Nil

12. Percentage of lectures delivered and practical classes handled(programme wise)
by temporary faculty

1. B.Sc Computer Science - 50%

2. M.Sc Computer Science - 0%

13. Student -Teacher Ratio (programme wise)

1 B.Sc Computer Science - 12 : 1

2 M.Sc Computer Science - 5 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned
and filled

Technical Staff :1

Administered Staff : Nil

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

Sl. No.	Name	Qualification
1	Dr. K S Anil Kumar	M.Tech; Ph.D
2	Smt. P K Sobha	MCA
3	Smt. B J Jisha Nair	M.Sc
4	Smt. S Sreedevi	MCA
5	Smt. Nisha R	MCA
6	Sri. A Sivaprasad	M.Tech

7	Smt. Dhanaya G Krishnan	MCA
8	Smt. Reshmi K P Pillai	MCA
9	Smt. S Sindhu	MCA
10	Anitha Mary M O Chacko	M.Tech

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

UGC funded Minor Project-1No-Rs.1,50,000

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

Sl. No.	Name	Funding Agency	Grants Received
1.	Dr. K S Anil Kumar	Kerala State IT Mission, Kerala Legal Services Authority & MLA Fund UGC	2,20,000/- 1,15,000/-
2.	Prof. Jisha Nair B J	UGC	1,50,000/-
3.	Prof. S Sreedevi	UGC	1,15,000/-
Total Grants Received:			Rs.6, 00,000/-

18. Research Centre /facility recognized by the University

Nil

19. Publications:

♦ a) Publication per faculty

Name of the faculty	Number of Publication	National	International	Presentation seminar
Dr.K S Anil Kumar	11	9	2	12
Jisha Nair B J	1	1	-	1
S Sreedevi	2	2	-	3
Anitha Mary MO Chacko	4	2	2	3

♦ Number of papers published in peer reviewed journals (national / international) by faculty and students : **18**

♦ Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): **5**

- ♦ Monographs
- ♦ Chapter in Books
- ♦ Books Edited
- ♦ Books with ISBN/ISSN numbers with details of publishers
- ♦ Citation Index
- ♦ SNIP
- ♦ SJR
- ♦ Impact factor
- ♦ h-index

20. Areas of consultancy and income generated

1. Software implementation
2. Computer Networking
3. Project Report Preparation(SRS)
– Free consultancy services

23. Awards / Recognitions received by faculty and students

1. Dr. K S Anil Kumar – Best Research Paper award in UGC sponsored National Conference.
2. Cyber Literate Cyber Crime Devoid Campus Project – a Social Awareness Project was Implemented first time in the State and recognized by Kerala State IT Mission and Kerala State Legal Services Authority and media

Students Achievements:

1. Anver Sainu, S2 B.Sc Computer Science student, has represented Sree Ayyappa College in Kerala University Kanoing kayaking Championship and got selection in Kerala University team. The Kerala University team got third place in all India Inter University Kanoing Kayaking championship in 2015.
 2. Students won the First Position in the Kerala University Youth Festival, 2010 for the “Mime” competition and Second Position in 2011.
 3. Students actively participate in the NSS programmes and also in Sports and Games
 4. Students actively participated in the Blood Donation Camps and other Social Service Activities
24. List of eminent academicians and scientists / visitors to the department
1. **Dr. A S A Krishnan**, Director, Security Division, DIT, GOI
 2. **Dr. V Ajaya Kumar**, Director, Computer Centre, University of Kerala
 3. **Dr. M. Wilscy**, Prof. & Head, Dept. of Computer Science, University of Kerala
 4. **Dr. Manjiaiah D H (Professor, Dept. of CS, Mangalore University)**
 5. **Dr. Elizabeth Sherly (Professor, Dept. of CS, IIITMK)**
 6. **Dr.C. Kannan (Professor, Dept. of Computer Applications, CUSAT)**

- 7. Dr.M V Rajeesh (Principal, IIST, Muvattupuzha)**
- 8. Dr. Rajeev Kannan (Professor, Dept. of CS, KSR Engineering College, Chennai)**
- 9. Er. N.M Kumar(Chairman, IETE Kochi Centre)**
- 10. Dr.A.Unnikrishnan(Vice Chairman, IETE Kochi Centre)**
- 11. Mr.John Mathew(Hon.Secretary,IETE Kochi Centre)**
- 12. Dr. Jayamohan M (Head, Dept. of CS, College of Applied Science, Adoor)**
- 13. Adv.M.P.Govindan Nair (Hon.President,T.D.B)**
- 14. Sri. P.K.Kumaran Ex-M.L.A (Hon.Member,T.D.B)**
- 15. Sri.P.R.Balachandran Nair(Secretary, T.D.B)**
- 16. Dr. N. Veeramanikandan, Pro Vice Chancellor, University of Kerala**
- 17. Adv. Sathyasree Priya, Advocate, High Court of Kerala**
- 18. Adv. Sreelal Warriar, Advocate, High Court of Kerala**
- 19. Dr. K.M. Shajahan, Team leader, C-DIT**
- 20. Justice C.N.Ramachandran Nair, Judge, High Court of Kerala and Executive Chairman, KELSA**
- 21. Justice Sirijagan, Judge, High Court of Kerala**
- 22. Adv. M. Rajagopalan Nair, President, Travancore Devaswom Board.**
- 23. Sri. K. Jaya Kumar I A S, Addl. Chief Secretary, Govt. of Kerala**
- 24. Sri. P. Mohandas, District Judge & Member Secretary, KELSA**

25. Dr. Rathan U. Kelkar I A S, Director, Kerala State IT Mission & C-DIT

26. Dr. N. Krishnan, Director, CERT- Kerala

27. Sri. P C Vishnunath MLA

28. Dr. JyothiJohn, Principal, College of Engineering, Adoor

29. Dr. Smitha Dharan, HOD, Department of Computer Science, College of Engineering, Chengannur

30. Dr. Moorthi, Scientist, C-DAC, Hyderabad

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

a) **National Conference:** UGC Sponsored two day National Conference on “Recent Trends in Information Technology” (NCRTIT) was organized on 7th & 8th March 2014 in association with the Institution of Electronics & Telecommunication Engineers(IETE) , Kochi Centre. Conference Proceedings was published and reported in all leading dailies.

b) National Workshop: Cyber Security Workshop was organized at Sree Ayyappa College on 10-9-2010 under the leadership of Mr. A S A Krishnan, Director, Security Division, Department of IT, Government. of India.

26. Student profile programme/course wise:

Name of the Course/ programme (refer question no. 4)	Applications received	Selected	Pass percentage
B.Sc Computer Science			
2010-11	118	26	76.92
2011-12	124	24	70.83
2012-13	126	18	77.77
2013-14	142	22	95.5

*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 Computer Science	100%	-	-
M.Sc Computer Science	100%	-	-

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

1. **10 students selected Defense Services, BSRB and Railways.**
2. **42 students selected in Multi National Companies(MNC) like SAP, TCS, Wipro, Oracle, Infosys, Reliance and R&D departments**
3. **Serving as Research Scholar and Faculty in Computer Science/IT in reputed Institutes in the National and International level.**

29. Student progression

Student progression	Against % enrolled
UG to PG	55
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed	
• Campus selection	5
• Other than campus recruitment	30
Entrepreneurship/Self-employment	10

30. Details of Infrastructural facilities

a) Library

1. A department library with 200 Books.

- 2. Reference and preparation of Project report.**
- 3. Library covers advance topics in Computer Science/IT.**
- 4. Magazines: Digit, Computer Today, Information Technology, Linux for You, Chip, PC Quest.**
- 5. Maintained all the project reports of previous students.**
- 6. Previous Year University Question papers**
- 7. A faculty member as the coordinator of Department Library.**

b) Internet facilities for Staff & Students

- 1. Centralised Lab - 60 computers with internet facility for Staff and Students.**
- 2. Broadband and wifi enabled for internet facility.**

c) Class rooms with ICT facility

- 1. PG class rooms with ICT facility.**
- 2. UG students utilize the central system.**

d) Laboratories

- 1. Centralized Computer Lab with 70 computers**
- 2. Networked with broadband internet connection**
- 3. High end PCs**
- 4. Student Machine Ratio 1:1**

31. Number of students receiving financial assistance from college, university, government or other agencies

Ten

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

1. Organized Special invited lectures on relevant topics through Computer Science Association(CASAC)
2. As part of the collaborative outreach programme with MACFAST, a pioneer institute in Kerala, two day workshop on Trends in Technology was organized every year.
3. National Workshop on Cyber Security was organized under the leadership of Dr. ASA Krishnan, Director, Security Division, DIT, Government of India.
4. Students actively involved the Survey and Training to School Students in connection with 'Cyber Literate-Cyber Crime Devoid Campus Project @ Chengannur Taluk
5. Arranged a workshop on computer Networking
6. Students were presented papers in the Seminar Series –INFOFEST- conducted every year in the College.
7. Organized UGC sponsored National Conference in association with IETE by well-known personalities from various Universities, Colleges and R& D Institutions.
8. Students Projects were carried out with the interaction of various industries.
9. Department faculties have got minor projects funded by UGC which helps the students to enrich their knowledge.

10. Students are encouraged to participate in all extra curricular activities including NSS, Sports and games and Blood donation Camps.

33. Teaching methods adopted to improve student learning

- ◆ ICT enabled teaching with the help of smart class room , audio-video aids and Multimedia.
- ◆ Feedback from students on curriculum.
- ◆ The tutorial system caters to the individual needs of the learners.
- ◆ The department promotes introduction of ICT in the PG class rooms
- ◆ Remedial coaching and Book Bank facilities are made available to the needy,
- ◆ Walk with a Scholar programme (WWS)
- ◆ Scholar Support Programme (SSP)
- ◆ In order to attain a healthy feedback and implement remedial measures , each student individually subjected to the mentor system
- ◆ Individual counseling is given to students those who are in need.
- ◆ The grievance redressal mechanism is very effective in the department.
- ◆ Feed back system is made highly effective in the department and evaluate the teaching learning process.
- ◆ Students' assessment of teachers is carried out on a regular basis.
- ◆ Innovative Teaching Learning Methodologies.
- ◆ Interaction with experts of excellent institution.
- ◆ Techniques to create critical thinking

34. Participation in Institutional Social Responsibility (ISR) and Extension activities
1. **Cyber- Literate- Cyber Crime Devoid Campus Project:** This Project was implemented in schools and colleges of Chengannur Taluk with the support of Kerala State IT Mission (KSITM) and Kerala State Legal Services Authority (KELSA). Aims to give awareness to the student community regarding the pros and cons of using Mobile Phones, highlight the threats and abuse, different types of Cyber crime in Campus. This project was very popular in the District due to media attention and had maximum participation from the society.
 2. **Social and Environmental Awareness Program:** An awareness program was conducted to keep students of applied science and technical courses in touch with the realities and basic needs of the society and environment.
 3. **IT Literate Campus Program:** A computer literacy program was conducted to familiarize the staff and the students of other departments of our college with basic skills and knowledge in computer. This is the first step towards declaring our campus as IT Literate Campus. Since ICT skills are a basic necessity for any profession, we hope that our extension activity will make them capable of facing the demands of employment more efficiently.
 4. **IT Literate ward :**The department has conducted a survey among the residents of Ward II of Thiruvuvandoor panchayat to list out the people who are not aware of the facilities and application of Information Technology. Based on that survey a program was conducted to impart them fundamental knowledge to operate computer and use internet facilities.

35. SWOC analysis of the department and Future plans

SWOC Analysis

Strengths

- ◆ Adequate latest Books are provided by department library
- ◆ State of art Centralized Lab facility with student computer ratio is 1:1
- ◆ P.G. Programme is first provided by this Department
- ◆ Well qualified and experienced faculty members.
- ◆ Add on Course is provided by the department for students of all departments
- ◆ Introduced Inter Disciplinary Courses
- ◆ Student centric Teaching & Learning
- ◆ Facilities for ICT based teaching & learning
- ◆ Internet facility with INFLIBNET and BSNL-WiFi Connection
- ◆ Student Support Programme & Walk With a Scholar programmes are provided to students of our department.
- ◆ Tutorial System is provided by our department for slow learners.
- ◆ Association Activities
- ◆ Functioning of Alumni activities
- ◆ Merit Scholarship are given to bright students
- ◆ National conferences are conducted by our department
- ◆ Most of the students who have passed out from our department are now well placed.

Weakness

- ◆ During admission process, large number of applications demanding the courses is increasing but only limited seats are available in the department.

Opportunities

- ◆ Student get opportunity to do PG programme in our department itself.
- ◆ The teaching faculty has ample opportunities to pursue minor and major research projects with financial assistance from UGC, DST, CSIR etc. which can also be helpful in developing the research facilities in the department.
- ◆ The teachers can make use of their research experience to guide the students and develop a research outlook in them.
- ◆ The teachers can establish collaborative research projects with National and International research institutes.

Challenges

- ◆ Limited transportation facility
- ◆ Need to improve research activities
- ◆ Lack of collaboration and consultancy services

Future Plans

- ◆ The teachers holding PhD degree will get Research Guideship from the University and enroll students for PhD.
- ◆ The teachers will apply for Major Research Projects and improve the research facilities in the Department
- ◆ Development of a research centre in the department.
- ◆ Expanding consultancy services would be the future plan

Dr. K S Anil Kumar

Head, Dpt. Of Computer Science

Principal

2. Department of Electronics

1. Name of the department : **Electronics**
2. Year of Establishment : **1995**
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., and Integrated Masters; Integrated Ph.D., etc.)

:UG-B.Sc Electronics

PG-M.Sc Electronics was sanctioned earlier as an unaided course. Proposal for M.Sc Electronics is given in this Academic Year 2014-2015

4. Names of Interdisciplinary courses and the departments/units involved

: Open Courses (CBCSS)

-Principles of Electronic Communication

-Management Information Systems

Dept. Involved- **Mathematics, Computer Science, Bio-Chemistry & Industrial Microbiology**

5. Annual/ semester/choice based credit system (programme wise)

Choice Based Credit and Semester System (CBCSS)

-B. Sc Electronics

6. Participation of the department in the courses offered by other departments

:Microprocessor Lab of M.Sc Computer Science

:Digital Electronics Lab of B. Sc Computer Science

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

:Student Projects- KELTRON, VSSC, CDIT

8. Details of courses/programmes discontinued (if any) with reasons: **Nil**

9. Number of Teaching posts

	Sanctioned	Filled
Professors	-	-
Associate Professors	4	4
Assistant Professors	-	-

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

Name	Qualification	Specialization	Designation	No. of Years of Experience (both R&D and Teaching)	No. of Ph.D Students guided
Ushakumary. K. L	BE		Head, Dept of Electronics	21 Years	
	M.Tech	Applied Electronics & Instrumentation Engg.			
Mr.K.C Prakash (on FDP leave)	M.Sc	Microwave Electronics-	Associate Professor	20 ½ years	-
Mr. Suresh. S (on FDP leave)	M.Sc	Artificial Intelligence	Associate Professor	19 ½ years	-
Mr. Deepu. G. P - study	BE		Associate Professor	15 1/2 years +	leave 1 year
	M.Tech	Microwave			
	MBA	& Radar Engg. Marketing and Human Resource Management			

Mr. Jithin. P	M.Sc, NET	Microwave Electronics	Assistant Professor	2 years	
Miss. Sajitha. K	M.Sc, NET	Electronics	Assistant Professor	5 ½ years	-
Mrs. Remya Balakrishnan	M. Sc , PGDCA MBA-IT, PhD completed	Electronics	Guest Lecturer	31/2years	-
Mr. Jinesh. G	Diploma	Electronics	Technical Assistant	On leave	-

11. List of senior visiting faculty : Nil

12. Percentage of lectures delivered and practical classes handled(programme wise)

by temporary faculty : 20%

13. Student -Teacher Ratio (programme wise) : 10:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

Technical Staff : 1 (on leave)

Administered Staff : Nil

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

M.Tech in Applied Electronics & Instrumentation Engg.

M.Tech in Microwave Engg.

M. Sc Electronics

MBA in Marketing & Human Resource Management

3No. of faculty members are doing Ph.D

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

:UGC funded Minor Project-1No-Rs.1,90,000

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

:3Nos- Total: Rs.4,17,500/- funded by UGC

18. Research Centre /facility recognized by the University:**No**

19. Publications:

a) Publication per faculty:

:1No. in the Proceedings of the UGC sponsored National Seminar ,2011

:2Nos. -1 No. each in the Proceedings of Kerala Science Congress 2000 and 2011

- ◆ Number of papers published in peer reviewed journals (national / international) by faculty and students

Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.

Monographs

Chapter in Books

Books Edited

Books with ISBN/ISSN numbers with details of publishers

Citation Index

SNIP

SJR

Impact factor

h-index

20.Areas of consultancy and income generated: -

21. Faculty as members in

a)National committees b) International Committees c) Editorial Boards...

Institute of Electronics and Telecommunication Engineering(IETE) members

22.Student projects

a)Percentage of students who have done in-house projects including inter departmental/
programme : **50%**

b) Percentage of students placed for projects in organizations outside the institution
i.e.in Research laboratories/Industry/ other agencies : **50%**

23.Awards / Recognitions received by faculty and students:

a) Faculty: i)**Best NSS Programme Officer from University of Kerala in 2005& 2008**
ii) **Best Poster presentation award in the National Science Congress 2015** iii)**Activities of Nature Club POONKAVANAM were reported in the Dooradarsan Channel in 2004. They themselves have shown interest in the activities conducted by the Nature Club in the college and outside. They have telecasted the report more than twice.**

b) Outstanding Academic Performance of students :

University Rank/Gold Medal:

University Rank	Year
2nd	2008-2009
1st & 3rd	2007-2008
3rd	2000-2001

University Merit Scholarship:

University Merit Scholarship in Electronics during 2011-2012 was awarded to the student of Dept. of Electronics, Sree Ayyappa College

Extracurricular Activities:

- i) Students won the First Position in the Kerala University Youth Festival, 2010 for the “Mime” competition
- ii) Students actively participate in the NSS programmes and also in Sports and Games
- iii) Students actively participate in the Blood Donation Camps and other Social Service Activities

24. List of eminent academicians and scientists / visitors to the department

- i) Dr. Balakrishna Warriar, Retd. Professor & Govt. Astrologer
- ii) **Shri. Ayyappan**, Engineer, KELTRON
- iii) **Dr. S. Rajendran**, HOD, Computer Science Engg., TKM College of Engg., Kollam
- iv) **Dr. Susamma Chacko**, Professor, Electronics & Commn. Engg., College of Engg. , Chengannur
- v) **Shri. C. Sasidharan**, Gen. Manager, BSNL, Pathanamtitta

- vi) **Ms.Nisha Kuruvila**, Sr. Lecturer, Electronics & Commn., College of Engg. ,
Chengannur
- vii) **Mr. Liju Philip** , Lecturer in Electronics & Commn, Engg., College of Engg.
Chengannur
- viii) **Mrs. Sreelatha. A**, Scientist/ Engineer ‘SF’, Vikram sarabhai Space Centre,
Thiruvananthapuram.
- ix) **Mr. C. V. Anilkumar**, Asst. Professor, Electronics & Commn. Engg., College of
Engg. , Chengannur.
- x) **Adv. M. Rajagopalan Nair**, President, Travancore Devaswom Board
- xi) **Dr. A . Jayakrishnan**, Vice- Chancellor,University of Kerala
- xii) **Dr. M. Wilsy**, Prof. & Head, Dept. of Computer Science, University of Kerala
- xiii) **Dr. Deepa. P. Gopinath**, Asst. Professor, College of Engg. , Thiruvananthapuram
- xiv) **Dr. V. P. Devassia**, Principal, College of Engg., Chengannur
- xv) **Mr. Shibu. R. M**, Scientist’D’, C-DAC, Thiruvananthapuram
- xvi) **Dr. R. Gopikakumari**, Division of Electronics Engg., Cochin University of
Science & Technology, Kochi
- xvii) **Dr. Gopakumar**, Asst. Professor,College of Engg. , Chengannur
- xviii)**Mr. Prakash Narayanan**, Scientist’E’, NPOL, Trikkakkara, Kochi
- xix) **Mr. Sreejith. M**, Infographic Technical Traing & Services, Kottayam.
- xx) **Shri. P.K. Kumaran**, Hon. Member , Travancore Devaswom Board
- xxi) **Dr. K Vasudevan**,Professor, SDept. Of Electronics,Cochin University of Science &
Technology.
- xxii) **Dr. M. V. Rajesh**, Principal Ilahia school of Science & Technology, Muvattupuzha.
- xxiii)**Mr.Jiby.C. George**,SMEC Automation Pvt. Ltd., Kallor, Kochi.
- xxiv)**Dr. Jobin. K Antony**, Asso. Professor, Dept. of Electronics, Rajagiri School of
Engg. & Tech.
- xxvi)**Dr. Praveen. N**, Asso. Professor, Dept. of Electronics, NSS College of Rajakumary.
- xxvii)**Dr. Saritha. M**, Asso. Professor, Dept. of Electronics, NSS College, Rajakumary.

xxviii)**Dr. Binsu. J. Kailath**, IIITDVM, Kanchipuram, Chennai.

xxix)**Dr. M. Sathyanarayana**, Former Scientist, VSSC, ISRO, Trivandrum

xxx)**Prof. V. N Rajasekharan Pillai**, Former Chairman, UGC & Vice- Chancellor of MG University & IGNOU, Principal Secretary, Science & Technology Department, Govt. of Kerala.

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

a) **State Level Seminar** : UGC Sponsored two day State Level Seminar on “ Modern Trends in Digital Signal Processing” in association with Centre for Development of Advanced Computing(C-DAC) , Thiruvananthapuram was organized. Report of the seminar conducted is published both in the leading dailies of Malayalam and English like Mathrubhumi, Malayala Manorama, Hindu and Indian Express. It is also reported in the periodical “University News” published by the Association of Indian Universities, New Delhi.

b) **National Level Seminar**: UGC Sponsored two day National Level Seminar on “ Recent in Electronic Communication And Signal Processing” in association with the Institution of Electronics & Telecommunication Engineers(IETE) , Kochi Centre was organized. Report of the seminar conducted is published in the leading dailies.

c) International:-

26. Student profile :

Name of the Course/programme	Applications received	Selected	Enrolled		Pass percentage
			Male	Female	
B. Sc Electronics					
2007-2010		23	13	09	59.09
2008-2011	230	22	07	07	92.86
2009-2012	159	20	09	06	53.33
2010-2013	114	17	10	03	46.86
2011-2014	120	16	13	03	56.25

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 Electronics	100%	-	-

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

i) **Defense Services , State competitive examinations such as, Kerala Public Service Commission, BSRB, Railways.**

ii) **Selected in the Multi National Companies(MNC) like L&TLtd. TCS, CTS, Infosis, Reliance, Ashok Leyland Ltd. and R&D departments**

iii) **Working as faculty in Electronics in reputed Colleges in the National and International level.**

29. Student progression:

Student Progression	Academic Year 2007-2010 (Against % enrolled)	Academic Year 2008-2011 (Against % enrolled)	Academic Year 2009-2012 (Against % enrolled)	Academic Year 2010-2013 (Against % enrolled)	Academic Year 2011-2014 (Against % enrolled)
UG to PG	45	60	45	37	35
PG to M. Phil	-	-	-	-	-
PG to Ph. D	-	-	-	-	-
Ph. D to Post					
Doctoral		-	-	-	- -
Employed					
Campus Selection	45	25	40	48	50
Other than Campus selection	-	-	-	-	-
Entrepreneurship/ Self-employment	45 10	25 15	40 15	45 15	50 15

30. Details of Infrastructural facilities

a) Library

:A portion of the Electronics Lab is maintained as the Dept. Library

Magazines :Electronics For You, Competition Success Review, GK Today

Periodical: University News

Computer:4Nos with Internet facility.

CDs received along with the magazines are available

Previous Year University Question papers

Dept. copies of Seminar &Project Reports

b)Internet facilities for staff and students

: Both the staff and students within the Department and outside get the advantage of Internet facility available in the department

c)Class rooms with ICT facility

:The department faculty utilizes the ICT facility in the Seminar hall for teaching as well as other programmes.

d) Laboratories

:i) Electronics Circuits Lab

(Basic Electronics/Electronics Circuits Lab/Integrated Circuits/ Communication Systems Lab)

ii) Digital Electronics Lab

(Digital Electronics & Microprocessor Lab/ Software Lab)

iii)Department Laboratory facility is utilized in the Student Projects & other R&D activities.

31. Number of students receiving financial assistance from college, university,government or other agencies :10

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

i)Arranged Special invited lectures on relevant topics through Electronics Association

ii) Six (6Nos.) students from the Department were made to select as student Volunteers in various committees of the 97th Indian Science Congress held at University of Kerala, Karyavattom Campus, Thiruvananthapuram

iii) Arrangements were done for the remaining students to attend the 97th Indian Science Congress.

iv) Arranged a workshop on computer Networking

v)Students were encouraged to present papers in the Seminar Series conducted in the College

vi) Industrial visits are arranged

vii)Conducted UGC sponsored State Level and National Seminars in association with different reputed organizations, by arranging series of Lectures by eminent personalities from various Universities, Engineering Colleges, Applied Science Colleges and R& D Institutions.

viii)Students Projects were carried out with the interaction of various industries

ix)75% of the Department faculty has got minor projects funded by UGC which intern help the students to enrich their knowledge.

x) Students are encouraged to participate in all extra curricular activities including NSS, Sports and games and Blood donation Camps

xi) Students are supported to participate in the 'Run Kerala Run' as a unique support to the National Games held at Kerala

33. Teaching methods adopted to improve student learning

- i) Black board teaching, OHP presentation, Power point Presentations (ICT facility)
- ii) Remedial Teaching is conducted to help the weak students to improve their learning
- iii) Tutorial system is also incorporated to get the opportunity for the faculty to have a close contact with the student
- iv) Department gives support to the financially weak students

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Participation of Department in the socially relevant activities through the

Faculty as

a) Guided the project to design and test magnetic vehicle detector for ambulance bridges. The work is reported in the Malayamanorama daily and published in their website YUVA ONLINE .

b) NSS Programme officer

- i) Construction of a house to a poor student
- ii) Total Energy literacy in Thiruvandoor Grama panchayath
- iii) Conducted various health related camps, awareness programmes and blood donation camps
- iv) Participated the legal literacy in Cheriyanadu Gramapanchayath.

c) Nature Club Co-ordinator

i) Arranged social awareness programme on protection of environment and prohibition of plastic carry bags

ii) Initiated to implement water harvesting through planting trees. The work has got a wide coverage by the leading Malayalam dailies and telecasted the event by the Asianet Channel about two or three times.

iii) Conducted Nature Education Camps

d) Delivered a talk on “Methods to improve the nutritional value of food” arranged by ICDS, Govt. of Kerala.

e) Awareness programmes were conducted in the e-waste management

f) Importance is given to solar powered projects.

35. SWOC analysis of the department and Future plans:

Strength:

i) Well qualified faculty members

ii) 75% faculty members have got UGC funded minor projects

iii) 75% of faculty members are doing Ph.D

iv) Produced University rank holders

v) Department students have got well appreciation in their higher studies

vi) Department student has become a University rank holder in the

M. Sc Electronics

Weakness:

i) Shortage of Technical assistant who is on leave for the past 11 years

ii) Shortage of financial assistance to the department

Opportunities:

One and only one aided college with B. Sc Electronics under the University of Kerala. It is understood that M. Sc Electronics is recommended by the team inspected the college recently. Students are to be encouraged to involve variety of projects which are beneficial to the society.

Challenges:

In the online admission, as an aided college, this is the only one college with B. Sc Electronics which is included in the online procedure with other colleges with conventional courses, under the University of Kerala. All the other colleges (unaided colleges with B.Sc Electronics) are exempted from the online admission procedure. These unaided institutions are free to do their admission procedures. So the students who are very much interested to study B. Sc Electronics in this college are not able to get admission here.

Ushakumary.K. L

Head, Dept. of Electronics

PRINCIPAL

3. Department of Bio Chemistry & Industrial Micro Biology

1. Name of the department : Biochemistry and Industrial Microbiology
2. Year of Establishment : 1999
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.) :

Under Graduate Course in Biochemistry and Industrial Microbiology

4. Names of Interdisciplinary courses and the departments/units involved:

SL NO	NAME OF THE COURSE	DEPARTMENTS INVOLVED
1	Life Style Diseases (Open Course)	Department of computer Science Department of Electronics Department of Mathematics
2	Environmental Studies	Bcom with Computer Application

5. Annual/ semester/choice based credit system (programme wise)

Biochemistry and Industrial Microbiology- Choice based credit and semester system

6. Participation of the department in the courses offered by other departments

SL NO	COURSE	DEPARTMENT
1	Internet technology	Computer Science
2	Web development	Computer Science
3	Electronics and mobile communication	Electronics
4	Management Information System	Electronics
5	Health and Physical Fitness	Physical Education

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

Details of courses/programmes discontinued (if any) with reasons

Nil

9. Number of Teaching posts

	Sanctioned	Filled
Professors	Nil	nil
Associate Professors	One	One
Asst. Professors	Four	Four

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt.

/Ph.D. / M. Phil. etc.)

Name	Qualifi- cation	Specia- lization	Desig- nation	No. of Years of Experience	No. of Ph.D Students guided
Prof. P. Devanand	MSc	Associate Professor	Chemistry	28	Nil
Dr.Nitha.B	PhD	Assistant Professor	Microbiology	3	Nil
Dr.Ganga.G	PhD	Assistant Professor	Microbiology	3	Nil
Dr. Chithra.K.R	PhD	Assistant Professor	Biochemistry	3	Nil
Dr. Rejiya C.S	Mphil, PhD	Assistant Professor	Biochemistry	3	Nil

11. List of senior visiting faculty: Nil
12. Percentage of lectures delivered and practical classes handled (programme wise)
by temporary faculty : Nil
13. Student -Teacher Ratio (programme wise): 1: 18
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil
15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

SL NO	NAME	QUALIFICATION
1.	Prof. P.Devanand	PG
2	Dr. Nith.B	Ph D
3.	Dr. Ganga.G	Ph D
4.	Dr. Chithra.K.R	Ph D
5	Dr.Rejiya. C.S	M phil, Ph D

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

SL NO	NAME	PROJEECT TITLE	FUNDING AGENCY
1.	Dr. Nith.B	Evaluation of Antioxidant, anti-inflammatory and antimicrobial properties of cultured mycelium of different species of oyster mushroom - Pleurotus	UGC
2.	Dr. Ganga.G	Isolation and detection of Chlamydia in female population of Kerala	UGC

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received

SL NO	NAME	FUNDING AGENCY	FUND RECEIVED
1.	Dr. Nith.B	UGC	1,30,000
2.	Dr. Ganga.G	UGC	1,02,500

18. Research Centre /facility recognized by the University: Nil

19. Publications:

Name of the faculty	Number of Publication	National	International	Presentation seminar
Dr.B.Nitha	15	10	5	5
Dr.G.Ganga	11	4	7	14
Dr.Rejiya.C.S	9	1	8	4
Dr.Chithra.K.R	4	4		3

- a) Publication per faculty

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

- Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

- Citation Index

- SNIP

- SJR

- Impact factor :

☐ h-index

20. Areas of consultancy and income generated: Nil

21. Faculty as members in

a) National committees b) International Committees c)

Editorial Boards....

One Faculty have,

Life membership in All India Science congress

Life membership in Association of Biochemist

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/programme

75%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

25%

23. Awards / Recognitions received by faculty and students

National and International awards received by the faculties of the department as a token appreciation for their research.

Students have received prizes for poster presentation in State level Seminars.

24. List of eminent academicians and scientists / visitors to the department

Manual for Self-study Report Affiliated/Constituent Colleges

- Dr.Geetha S Pillai, - Scientist Centre For Medicinal Plants Research, Arya Vaidya Sala Kottakkal
- Dr.Girish - Scientist , Rubber Board, Kottayam, Kerala
- Dr. Raji - Assistant Professor in Biochemistry, School of Biosciences, M.G.University
- Dr.Latha - Assistant Professor, Zoology, M.S.M college Kayankulam
- Dr.Vijayan - Assistant Professor in Microbiology Govt Womens College Thiruvananthapuram
- Dr.Padmakumar - Assistant Professor in Biochemistry N.S.S.College Panthalam
- Dr.Subhash.S - Assistant Professor in Microbiology S.N.Womens Kolla

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

- a) National: Nil
- b) International: Nil

26.Student profile programme/course wise:

Name of the Course/programme	Year	Applications received	Selected	Enrolled		Pass percentage
				*M	*F	
Biochemistry and Industrial	2008-11	128	16	7	9	71.42
	2009-12	154	15	3	12	64.28
Microbiology	2010-13	140	17	2	15	85.71
	2011-14	110	18	2	16	87.5

*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
Biochemistry	98.07%	1.93%	
and Industrial			
Microbiology			

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	63
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed	
• Campus selection	7
• Other than campus recruitment	10
Entrepreneurship/Self-employment	20

30. Details of Infrastructural facilities
- a) Library : College library have around 400 Books . Apart from that the department have a library from where books are issued to students.
 - b) Internet facilities for Staff & Students : YES
 - c) Class rooms with ICT facility : One
 - d) Laboratories : The department has three laboratories.
Microbiology, Biochemistry and Chemistry laboratory.
31. Number of students receiving financial assistance from college, university, Government or other agencies
- 10
32. Details on student enrichment programmes (special lectures / workshops / Seminar) with external experts
- Department in association with science club and NSS carried out lectures/ workshops with external experts on
- 1. Awareness on HIV-AIDS and Blood donation.
 - 2. Genetically modified crops
 - 3. Life Style Diseases.
 - 4. Single cell Protein.
 - 5. Mushroom cultivation.
 - 6. Student's wer given chance to do vocational training in various reputed laboratories and research Centre in the state.

7. Students were given chance to visit various state, national and international laboratories, Research Centres and Industries.

33. Teaching methods adopted to improve student learning

1. Power Point Presentation

2. Audio-Visual Methods (Videos on subject and related topics)

3. Seminars and Group Discussions

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

Students of the Department participate in various extension Activities such as

1. Water quality analysis of the houses of ward 2 and 13 of the Panchayath.

2. Blood Group detection in Ward 13 of the Panchayath.

3. Detection of Mastitis Disease in Cows in Cheriyanad Panchayath in association with Veterinary Hospital Cheriyanadu.

35. SWOC analysis of the department and Future plans

Strengths :

1. The department offeres a career related two main course.

2. Highly qualified faculty members.

3. The department have enough equipment to run UG course.

4. Faculty with Minor research projects

5. Internet facility is available in the department.

Weaknesses:

1. Inadequate space in laboratories.
2. Smart class room in the department.
3. Air condition in the culture room.

Opportunities:

1. Projects for external funding- National / International
2. Research consultancy
3. Institutional / Inter Departmental collaboration

Challenges

1. Centralized Instrumentation Lab facility

Future plans of the department.

- Applied for Post Graduate course in Microbiology
- A mushroom cultivation unit is planned to be set up by the department.
- To conduct National and International seminars.
- To elaborate the departmental library.
- To set up an air conditioned culture room.
- To set up centralized instrumentation Room.
- To encourage students for internship training programme.
- To conduct blood group detection campaign, health survey and water quality analysis in all the wards of the Panchayath.

Dr. Nitha

HOD, Dept. of BC & IMB

PRINCIPAL

DECLARATION BY THE HEAD OF THE INSTITUTION

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the Institution after internal discussion and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Prof. S Lekaha

Principal

Place: Eramallikkara

Date: 07-04-2015

