

Internal Quality Assurance Report

Submitted to

National Assessment and Accreditation Council

By

Internal Quality Assurance Cell

MAHATMA GANDHI COLLEGE

Pattom, Thiruvananthapuram, Kerala

2011

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Preface

Mahatma Gandhi College proudly presents the Self-Appraisal Report of the college for the academic year 2010-2011. The year is an important land mark in the history of the institution in terms of the structural changes the institution effected in the teaching – learning process and in the general administration through the incorporation of the new IT tools. The institution in its efforts to prepare for reaccreditation went through a thorough introspection of the post accreditation activities and made earnest attempts to realize its strengths and weakness.

Our strengths we realize are the practices incorporated into our system through tradition. The commitment to provide quality education to all with special emphasis to socially and economically backward sections of the society was the tradition instituted into our system by our founder Bharathakesari Sri Mannathu Padmanabhan. Education offered should aim at the social, economic and intellectual improvement of the individual and so should have components that cater to the betterment of these aspects of an individual.

Principal

Foreword

Mahatma Gandhi College, a torch bearing institution of higher learning in the state of Kerala proudly presents the annual report for the year 2010 – 11 as a prelude to reaccreditation. The institution in its long march from the middle of the twentieth century to the present has enriched the society with a galaxy of intellectuals, professionals, artists and politicians, most of whom had their origin from socially and economically weaker sections of the society. This unique achievement is the result of the policies of the Nair service Society, the guidelines of which were formulated by its founder in the early 1940's. Restricting itself to the limits set up by the said frame work, the march towards excellence was perpetuated by the dedicated faculty which has been one of the strong pillars upon which the edifice is built.

Convener

Principal

PART A

The IQAC in the context of approaching reaccreditation decided to implement ICT tools in a large way to strengthen the teaching learning process. Taking into account the strong research potential of the institution the research infrastructure also demands augmentation. The areas of extension and skill up gradation also received the attention of the IQAC.

1 Curricular aspects

The introduction of choice based credit and semester system for degree courses was a welcome change in the undergraduate education scenario. The new concepts like open course, where a student has to choose a course of study that is different from his optional was an innovative idea. In addition to this the compulsory involvement of all students in social activities through different clubs that were to be setup in all institutions was also a challenging innovation. Thirteen clubs were set up in the institution for this purpose.

2 Teaching learning and evaluation

The teaching, learning and evaluation processes require some fine tuning for compatibility with the new CBCSS program. The student has to complete the learning of five to six papers within a period of 90 days during which he has to appear for two internal examinations and do a project assignment. The teaching practices also have to change to fit into the new time schedule. Time is a big factor and for developing a procedure for making the maximum use of the limited time available extensive incorporation of ICT tools in teaching and learning process is essential. Not only the teachers but also students should have ample opportunity to use these tools in the learning process. The evaluation process is important because internal evaluation is an important

component in the new program. There should be a perfect program for regular continuous evaluation.

3 Research Consultancy and extension

The institution has a very strong research potential. It has to be utilized effectively and programs should be envisaged to transfer the generated knowledge to the students. Not only post graduate students but undergraduate students also should have the opportunity to get associated with research. This could be accomplished to some extent by judicious programming of the projects which each of the student has to do in all semesters. Teachers may be encouraged to take up consultancy services even if it is not income generating. Each department may be encouraged to involve in at least one extension activity in addition to the general extension programs executed by agencies like NSS and NCC.

4 Infrastructure and learning resources

The institution is in demand of more laboratory, class room and library space. At the time when the institution was started in the 1940's, the demands on infrastructure were different and the construction was planned accordingly. At present the institution has 13 UG, 9 PG and 7 research programs and the old infrastructure faces a challenging task in meeting the demands of the existing programs. The institution proposes to address this situation by the following two strategies.

- 1) Initiate efforts for construction of a new block
- 2) Judicious planning and reallocation of existing space for optimum utilization of available space.

In addition to this PG teaching and research are demanding more sophisticated instruments and techniques. ICT techniques are planned to be incorporated to a high degree in all areas of teaching and learning.

5 Student support and progression

Majority of the students of this college are coming from economically backward sections of the society. The institution proposes to provide maximum help to these students. New economic support programs in addition to the existing ones are planned for this year. The parent teacher association (PTA) has proposed new programs in this direction.

6 Governance and leadership

The institution has an organizational set up where the Principal has to take a leading role in all the areas of functioning. He is helped by the policy decisions made by the Management, University and Government. Within the institution the college council and the various committees provide a strong hand in implementing the programs and carrying out the day to day activities.

7 Innovative practices

1. The institution has a strong research tradition and takes special care to transfer the research knowledge to the undergraduate students
2. We take special care to see that economically backward students receive all type of support for completing their course successfully.
3. Special programs to foster the self-respect of students.

Achievements at the end of the academic year

The institution succeeded in accomplishing most of the objectives it had planned originally.

The new choice based credit and semester system for degree courses was implemented successfully. The parallel existence of the annual and semester streams was a difficult situation, but the institution rose to meet the challenges successfully. The internal examination mechanism was strengthened to undertake the task of organizing two internal examinations per semester for each program. Thirteen new clubs were initiated to provide opportunity to all the CBCSS students to participate in social and group activities. The institution also developed 15 open courses for the V semester students under CBCSS.

The use of ICT tools in teaching and learning increased substantially. Thirteen digital class rooms, one for each department was set up. These rooms had permanent facility for computer aided teaching. The entire campus was covered by Wi-Fi and student computer ratio increased to 1:15 from the previous ratio of 1:30. In addition to the main computer lab 6 more computer labs were set up in the different departments. A language lab was set up and smart class facilities were introduced. The overall teaching learning process underwent substantial changes due to these innovations.

With a strong team of 22 research guides and 80 research students the institution reached an all-time high level in research activity. All the seven research departments had good output in the form of publications, PhD produced and projects sanctioned. The institution brought out about 30 publications this year, produced 5 PhD's and involved in 6 major and 7 minor projects. The involvement of the students in research was censured by the programs where the PhD works were presented before an audience of students, fellow researchers and teachers.

The institution submitted a proposal to the management for the construction of a new research block. The management has agreed to consider the proposal favorably.

The laboratories of all the science departments were renovated with the sole aim of maximum utilization of the available space. Cabins were set up in the laboratories of Physics, Chemistry, Mathematics and Botany for providing separate space for research activities. Modifications were carried out in thirteen class rooms one in each department for setting up digital class rooms. The rooms have internet connectivity and facility for computer projection. Wi-Fi capability was instituted for the college and the library was also renovated with a new software.

A new scholarship scheme was instituted by the Parent Teacher Association for the benefit of the economically backward but meritorious students. The PTA instituted another program of free midday meals to deserving students. One student per class was selected for the scholarship program and all applicants were considered for the latter program. A new service centre was instituted for providing reprographic and DTP services.

Innovative steps were introduced in the governance of the institution. The introduction of the management software has enabled the effective management of student and staff data. Fee and scholarships of the students and salary claims of the staff are now operated through special computer programs. The college council and various committees gave strong support in the planning and implementation of programs. The academic committee formulated the academic plan for the whole year. Separate committees for UGC plan implementation, NAAC reaccreditation, purchase, discipline, attendance etc. functioned effectively during this period.

The research activities acquired an all-time high position in terms of number of research scholars and research guides, research projects and research funding. Two new scholarship schemes were introduced, one with UGC assistance and another by the parent teacher association. A program of free lunch for needy students was also introduced by PTA. The most appreciated activity was the implementation of a no sales man sales counter near the PTA office. The counter has a stock of essential student stationary. Students can take the materials there and deposit the price in a cash box kept open. We are proud to say that all transactions occurred normally and in the evening we were able to observe a collection exactly equal to the materials that were sold.

PART B

40. Activities reflecting the goals and objectives of the institution

Mahatma Gandhi College and the N S S group of institutions function on the goals and objectives that were read out to them by their legendary founder Bharatha Kesari Sri Mannathu Padmanabhan. The institutions instituted during the 1940's were set up with the specific aim of social and economic emancipation of the underprivileged through education. True to this objective Mahatma Gandhi College functions with the motto 'SA VIDYA YA VIMUKTHAYE' which may be translated to read that education is the means for freedom, freedom from ignorance, poverty, social discriminations and oppression. Education should be free and fair and should be available to all who seeks it. It should be capable of providing means for satisfying not only the physical needs of man but also should manure his development into a socially responsible holistic individual. We have the following activities for satiating this objective.

- 1 We provide quality education.
- 2 Economic demands from students are kept at a minimum.
- 3 Economically weaker students are given financial support.
- 4 Special care is taken for maintaining high moral standards among students.
- 5 Programs supplementing curriculum are incorporated to keep quality benchmarks high.
- 6 Providing placement support to students.

41. New academic programs initiated (UG and PG)

Even though no new courses were started during 2010-11 a lot of new programs were introduced at the UG level as a part of the newly introduced semester stream. Since club

activity is an integral part of the program, thirteen club activities were officially recognized for accommodating the interests of all the students.

Table 1:- New clubs started during 2010-11

Sr No	Club
1	Health Education Mental Health Club
2	Debate Club
3	Environmental Activities
4	Community Health Activity Swanthanam
5	Performing Arts Club-Folklore
6	NSS
7	NCC
8	Sports Club
9	Science Club
10	Nature Club/Eco Club
11	Literary Club
12	Women's study Unit
13	Anti-Ragging Cell

In addition to this the institution started 15 open courses. Students are given the opportunity to choose from any of these 15 courses. Necessary adjustments were made in the general time table for accommodating these changes.

In the PG level students were provided with more opportunities for using the ICT tools in the learning process. Internet usage was made free for the Departments and the facilities for browsing were extended to the students also.

42. Innovations in curricular design and transaction

Curriculum design comes under the preview of the University and the freedom of the institution in this area is limited to developing suitable curriculum supplements. However in the area of curriculum transaction the institution has greater freedom. Mahatma Gandhi College make maximum use of these facilities for providing the best teaching experience to its students. Free computer training, seminars and invited talks organized by all Departments, student seminars, presentations by research students, peer teaching and remedial teaching are some of our curriculum supplements. In the area of transaction we are making extensive use of the ICT tools. Each department has a digital class room which has facilities for the use of internet and multimedia projection. The entire campus is provided with Wi-Fi facility and students are given all facilities to use internet at their choice.

43. Inter disciplinary programs started

We have collaborative research programs associated with the departments of Physics, Chemistry and Botany. Phytochemistry, one of the thrust areas of research in the Department of chemistry has extensive collaborations with the Departments of Botany and Zoology. The botany part of the phytochemical studies is carried out with the help of the Botany department. For biological evaluation of phytochemicals the department

collaborates with the Department of zoology. Another important area of research is crystal study which is a collaborative project of the Departments of physics and chemistry.

The new CBCSS program demands a collaborative environment among different departments. We have started fifteen programs on by each of the fifteen departments. The program offered by one department can be taken by any student except the students of that department. The programs offered are listed in appendix 1.

44. Examination reforms implemented

The new semester program demands at least two internal examinations as a component of continuous evaluation. This demands the existence of a permanent mechanism for examinations. We have entrusted the duty for conduct of each of the examinations to the respective group tutors. The question papers and answer booklets are supplied by the college. The mark secured by each student is communicated to the parent during the class PTS meeting.

The college is also experimenting with online examinations. The teachers provide question banks which the students can access online and submit the answers. The teachers value this at their convenience and give the result. At present this program is working as a boost to bright students. We are thinking of using this facility of conducting internal examinations also.

45. Candidates Qualified: NET/SLET/GATE etc.

The college offer free coaching for NET examinations. As a result almost all the PG students appear for this examination.

Table II :- Students qualified for NET during 2010-11

Sr No	Department	Student
1	Chemistry	Layana S R
2	Chemistry	Soumya

46. Initiative towards faculty development program

The institution fully supports the faculty development activities of the staff. The FIP activities of last year are listed below.

1 Deputation of teachers for PhD under FIP of the UGC.

One teacher from the Department of English was deputed for PhD. This is in addition to the four teachers already deputed from the Departments of Mathematics and Economics.

2 Deputation of teachers for orientation and refresher programs.

Six teachers were deputed for orientation program conducted by the academic staff colleges.

3 Deputation of teachers for attending seminars.

Fourteen teachers from different departments were given duty leaves for attending seminars and for paper presentations.

47. Total number of seminars of workshops conducted :

The institution hosted eighteen seminars and one workshop during the academic year.

The notable among them is the 'SAMAGRA' seminar series involving all departments of the institution. This program was inaugurated by the famous space scientist G Madhavan Nair

Table III:-Seminars conducted during 2010 - 11

Sr No	Department	Program	Date	Topic	Remarks/Resource person
1	NSS	Seminar	24-6-11	Narcotics	Antinarcotics day
2	Malayalam	Seminar	15-7- 11	Kovilan Anusmaranam	
3	Women's Study Unit	Orientation Program	27-7-11	Introducing college	Dr K Girish, Clinical Psychologist
4	Malayalam	Seminar	16-8-11	Ramayana Masam	Ezhacherry Ramachandran
5	Career guidance Cell	Seminar	28-9-11	Career opportunities	Dr Babu Paul
6	Mental Health club	Seminar	27-8-11	Adolescent problems	Swami Aswathi Thirunal
7	Mental	Seminar	10-10-		

	Health club		11		
8	Malayalam	Workshop	24,25- 10-11	Creative writing	Hon. Speaker Vice-Chancellor
9	Chemistry	Quiz program	16-11- 11	Quiz for high school students	Prof.T.N.Manoharan
10	Mathematics	Seminar	23-11- 11	History of mathematics	Prof E Krishnan Uty College
11	Physics	Seminar	23-11- 11	Physics of the sky	Prof . Prabhakaran Nair, Uty of kerala
12	Chemistry	Seminar	24-11- 11	Claisen rearrangement and RCM based strategy to sesquiterpenes containing vicinal quaternary C atom	Prof A Sreekrishna Indian Institute of Science, Bangalore
13	Botany	Seminar	25-11- 11	Green Insecticide for a green Environment	Dr CA Jayaprakash Scientist, CTCRI

14	Zoology	Seminar	25-11-11	African Wilderness	Prof.Kunhikrishnan Uty College
15	English	Seminar	24-11-12	English Literature	Prof Hridaya kumari
16	Hindi	Seminar	22-11-11	Modern stories of Hindi	Prof Jayamohan, Uty. College
17	Malayalam	Seminar			
18	Economics	Seminar	22-11-11	Indian Economy, Growth of service sector	Dr D Narayan CDS, Trivandrum
19	Sociology	Seminar	24-11-11	Recent trends in family and marriage	Prof A Devan,NSS College, Pandalam
20	History	Seminar	24-11-11	Learning History through Internet	Dr P Sadasivan Uty of Calicut
21	Psychology	Seminar	23-11-11	Youth Psychology and Bhagavat geetha	Swamy Aswathy Thirunal
22	Commerce	Seminar	21-11-2011	Careers in Commerce	Careers in Commerce
23	College	Seminar	23-11-	Indian Science	Dr G Madhavan

	Union		11		Nair Chairman, ISRO
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48. Research projects

- a. Newly implemented
- b. Completed

The institution has a strong research infrastructure contributed by twenty three research guides of the seven research departments and seventy five research students. Twenty seven retired teachers who have served in the faculty of various departments are also guiding research in some departments. Faculty research through projects is also strong.

a) Newly implemented projects

Two major projects were implemented during 2010-11, one in the Department of Physics and another one in the Department of Botany.

Table IV :- New projects started during 2010 -11

No	Name of Project	Major/ Minor	Funding agency	Outlay	Period	Dept	Name of PI &CI
1	Photothermal studies of Rare Earth Nano samples	Major	KSCSTE	16,00,000	3 year	Physics	Dr.K.C.Ajith Prasad
2	Ecological studies of Aruvikkara Reservoir	Major	KSCSTE	10,87,900/-	2010-11	Botany	Dr.K.G.Ajit Kumar

(DAM) with special Reference to Associated Micro and Macro Flora							
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The following table presents the data regarding the completed and ongoing projects. The details of the projects are presented in appendix 2.

Table V:- Number of completed and ongoing projects in the institution

Completed projects		Ongoing projects	
Major projects	Minor projects	Major projects	Minor projects
16	41	7	13

49. Patents generated , if any :

No patents were generated during 2010-11

50. New collaborative research programme

The new project in the Department of Botany is done in collaboration with the department of chemistry. Part of the project involves chemical analysis of water and soil samples and for this the expertise of the department of chemistry is made use of.

The project on photothermal studies of rare earth nano samples by Dr K C Ajith Prasad of the department of physics also collaborates with the department of chemistry in the preparation of nano samples.

51. Research grants received from various agencies

The institution receives research assistance from the four agencies UGC, DST, KSCSTE and University of Kerala. UGC assistance is availed through programs under CPE and BSR. Three FIST programs are operating in the institution. Kerala State Council for Science Technology and Environment (KSCSTE) support research through projects. University also provides research assistance to different departments on an annual basis. The following funds were received by the institution last year through these agencies.

Table VI:- Research funds received during 2010 - 11

Sr. No.	Agency	Fund received(lakhs)	Remarks
1	UGC	35	1) Special assistance of 10 lakhs
		25	2) Additional grant under BSR
		11	3) Research fund under CPE
		33	4)Projects
2	DST	63	FIST program for science Departments
3	KSCSTE	38.5	Projects
4	University	0.5	Research grant
5	MOEF	23.5	Project

Total = 194.4 lakhs

52. Details of research scholars

The institution has seven research departments and twenty three research guides. Seventy five research students are working for their PhD in these departments. The institution provides all possible support to research activities. No fee except an initial caution deposit is collected from students. Facilities like extended library and laboratory hours, facilities like free internet etc are given to research students. Number of research students working in different departments is given in the table. Even though Mathematics, Economics and Politics are not research departments there are students working under the research guides of the department.

Table VII :- Number of research students in different Departments

Sr.No	Department	No. of research students
1	Physics	14
2	Chemistry	22
3	Botany	4
4	Zoology	7
5	Malayalam	9
6	Hindi	5
7	Commerce	10
8	Mathematics	1
9	Economics	3
10	Politics	3

53. Citation index of faculty members and impact factor

The faculty members publish research articles in journals of high impact factor and have many citations to their credit. A perusal through the publications shows that the publications have come in some of the top class journals in their respective fields and the impact factor of some of the journals is highly impressive.

Table VIII :- Citation index and impact factors

There are about 320 publications from the faculty so far. The citation index of the abstracted journals are listed. The detailed list of the number of publications from the faculty is appended.[Appendix 3]

Sl.No.	Name of Faculty member	No. of publications	No. of citations	Highest impact factor of journal	Impact factor of other journals
1	Dr.C.J.Mohanakumar	1	17	Molecular Cancer Therapeutics 5.225	-
2	Dr.G.Jayakumar	19	111	Phytochemistry 3.150	0.904,0.643,0.562,0.413
3	Dr.M.D. Ajitha Bai	19	88	Phytochemistry 3.150	1.247,0.904,0.643,0.562,0.413
4	Dr.M.R.Sudarsanakumar	19	85	Polyhedron 2.21	1.770,1.752,1.737,1.599,0.948,0.944,0.920
5	Dr.S.Balachandran	10	15	Spectrochimica Acta a 1.770	1.602,0.777,0.562,0.247
6	Smt.Jalajamony.S	3	25	Colloids and Surfaces A 2.130	2.071,1.111
7	Dr.K.Rajendra Babu	15	85	Journal of Materials	1.737,0.948,0.944,0.511,

				Science 1.859	
8	Dr. V.M. Anandakumar	3	12	Materials Science and engineering 2.101	1.472,0.948,
9	Dr.K.C.Ajith Prasad	2	9	Bulletin of Materials Science 0.944	0.408
10	Dr.K.Madhukumar	3	9	Bulletin of Materials Science 0.944	0.408
11	Dr.R.G. Bindu	6	25	Materials Science and Engineering A 2.101	1.472,0.946,0.561,
12	Dr. M. Jayasree	3		Journal of Phytological Research 0.899	
13	Dr.Prasannakumar	2		Fitotherapia 1.899	
14	Dr.P.R. Geetha	7		Indian Journal of experimental Biology 0.702	
15	Dr.K. Radhakrishnan	3		Physical review E 2.352	1.572,0.442
16	Dr.Vineetha	4		Annals of Operations Research 0.675	0.419
17	Dr. V. Anoopkumar	1		Indian Journal of Pure and Applied Physics 0.511	
18	Dr. C.G. Radhakrishnan	4		Asian Journal of Chemistry	

	Namboori			0.247	
19	Dr.R.Sudha Devi	2		Asian Journal of Chemistry 0.247	
20	Dr.K.Sankar	2		Asian Journal of Chemistry 0.247	

54. Honors/Awards to the faculty

Table IX :- Honors and awards received by the faculty during 2010-11

Sr No	Name of teacher	Department	Award
1	Dr Anilkumar	Economics	Best teacher ,Bangalore Garden City College
2	Dr K Manikandan nair	Hindi	SBT award for research Publication
3	Dr Jyothish Kumar	Malayalam	Member Kerala Sahithya Academy

55. Internal resources generated

Mahatma Gandhi college is an aided institution and is not expected to earn revenue through its operations. The salary is paid by the Government and a good quantum of funds for operational expenses are availed through Governmental agencies like the UGC, The Parent Teacher Association rises some funds through donations which is mainly used for providing better facilities to students and for organizing academic support programs. The details of income and expenditure during 2011-12 is tabulated

Table X. Internal resources generated by the institution

Total Fund Generated	Heads of Expenditure	Amount
(PTA) 210000	Salary to guest teachers Repair and maintenance, cleaning etc Seminars, workshops Scholarship to students Meetings, Examination, stationary	100000 1200000 50000 50000 200000
(Computer club) Membership - Rs 80000 Fee for services - Rs 20000	Payment to staff Stationary Internet charges Repair	40000 30000 10000 20000
(Projects) 45 lakhs	Instruments, Books, journals	45 lakhs

Another revenue earning venture is the computer club which collects a membership fee of Rs 100 from students. DTP and internet services also fetch some revenue. The generated income is utilized for the operational expenses.

The projects operated by different teachers have fetched revenue of Rs 45 lakhs during this period.

56. Details of departments getting SAO , COSIST(ASSIST)/DST.FIST, etc. assistance/
recognition

Department of Chemistry was selected for FIST award of Rs 23 lakhs during 2007-8.

Department of Physics received FIST award of Rs 37 lakhs during 2009-10. The Science Departments of the college with special thrust to life science and mathematics was considered for FIST award of Rs 63.3 lakhs during 2010-11. The institution received Rs 63 lakhs from this fund during 2012.

Table XI :- Funds received from DST under FIST schemes.

Sr No	Department	Funds received	Year
1	Chemistry	23 lakhs	2008
2	Physics	37 lakhs	2009
3	Science Departments	53 lakhs	2011

57. Community Services

Community services are operated by three agencies, National Service Scheme, Mental health club and college union.

Community service activities by N S S

Blood donation

A blood grouping and donation program was organized on 20-10-2011. The program was organized by the National Service Scheme. Fifty girl students donated blood. Blood grouping was done for 128 students.

Community service activities by Mental health Club

The mental health club offer counseling services and also organizes service activities.

The club collaborates with the nearby schools in organizing counseling services.

Adolescent problems and examination related stress in students are the usual problems addressed.

The club is also engaged in providing counseling services and cleaning activities in prison, mental hospital and medical college hospital.

Community service activities by college union.

The college union has two programs under the community service activity. One is blood donation. The college union keeps a record of the blood group of students and any request for blood is received with positive response. Another service activity is the collaboration with other agencies for providing mid-day meal to patients in the medical college. The college union collects donations of rice from students and hand it over to agencies engaged in providing food to patients.

58. Teachers and officers newly recruited

Mahatma Gandhi College is one among the fourteen arts and science college managed by the Nair Service Society (NSS). The vacancies arising in these colleges are filled by transfer or fresh appointments and these are decided by the management. Last year five new teachers were appointed and one vacancy in the Department of English was filled by transfer.

Table XII:- List of staff newly appointed during 2010-11

Sr No	Name of staff	Department	Remarks
1	Dr B Anil Kunar	Economics	Fresh appointment
2	Mis Sreeja Muraleedharan Nambiar	Economics	Fresh appointment
3	Divya V	Mathematics	Fresh appointment
4	Vinod P	Zoology	Fresh appointment
5	Suresh K K	Zoology	Fresh appointment
6	Dr Asha K Nair	English	Transfer

59. Teaching and non teaching staff ratio

The College has 104 permanent members and two guest lecturers in the teaching staff and 45 members in the non-teaching staff. The ratio of teaching staff to non- teaching staff is 7 :3.

60. Improvements in the library services

The existing library software was replaced by a new one. The new software which is more user friendly permits the issue and return using barcodes in the book and the student membership cards.

The college has a central library and separate department libraries. Issue, return and book search can be carried out from the central library as well as the department libraries.

The browsing facility in the library is enhanced through a system of 10 computers.

Students can search for books and also surf the net from these terminals.

The reprographic facility available in the library is enhanced by appointing a full time staff to manage the machine.

61. New books/ journals subscribed and their value

Books for Rs 1079215 and journals worth 111366 were purchased by the different departments. UGC funds were the main source for the purchase. The details are given in table XIII.

Table XIII :- Amount spend on books and journals by different departments

Department	Amount spend for Books	Amount spend for Journals
Mathematics	173411	14980
Physics	64131	15000
Chemistry	62310	24040
Botany	87046	16700
Zoology	1.21018	14675
Economics	239862	14675
Malayalam	0.59946	
Hindi	156330	3856
Commerce	75161	7440

History	10000	
English	10000	
Sociology	10000	
Psychology	10000	

62. Courses in which student assessment of teachers is introduced and action taken on student feedback

Student assessment of teachers is done for all courses. All teachers are directed to collect feedback from students. Most of the teachers are of the opinion that the feedback has helped them to improve a lot in the teaching career. Teachers are expected to use the feedback data for self-improvement. The institution collects feedback on different Departments and of the college in general. The data is consolidated and the findings are discussed in different bodies of the college. The findings of the feedback are given due consideration during the formulation of the annual plan of the institution. The formats used for the collection of feedback are given in appendix 4

63. Unit cost of education

The expenditure incurred under different heads are listed in the table. Different types of fee collected from the students are deposited in Government or University accounts. The Government is paying the salary of the staff. The funds made available by UGC, DST, KSCSTE etc are utilised under the appropriate heads by the institution. These are also considered for computing the unit cost of education.

Table XIV :- Unit Cost of Education

Sr No	Head of expenditure	Amount	Class	No. of students	Unit cost
1	Salary, plan/project funds, Scholarships, fee, Establishment etc	8553214	IDC	619	46220
2	Fee	2533685	IIDC	507	
3	PTA	190000	IIIDC	462	
4	Computer club	70000	IPG	130	
5	College union	400000	IIPG	121	
			Research	80	
	Total	88696899		1919	

64. Computerization of administration and the process of admission and examination results, issue of certificate

The institution functions with the support of a total management software which has the components of admission, examination, attendance monitoring, office administration and accounts. The library runs on separate software. The post- graduate admission process is controlled by the university and the role of the college is limited to admitting of the students allotted by the University. The UG admission is managed by admission software possessed by the institution.

65. Increase in infrastructural facilities

2010-11 witnessed a lot of infrastructure additions in the institution.

Digital class rooms

Thirteen digital class rooms, one for each of the thirteen departments were set up. The digital class rooms have the capability of using multimedia projection for teaching.

Internet is also available in these classrooms.

Computer labs

Separate computer labs were set up in the departments of Mathematics, Chemistry, Physics, Commerce and Zoology.

Lan and Wi-fi

Internet through wireless as well as wired LAN is made available to all Departments. The LAN is enabled to function as a medium for data transfer also.

Smart class

A smart class room with networked computers and interactive board is set up. This is expected to promote the use of advanced teaching tools in the institution. A smart board is installed in the seminar hall also.

Language lab

A language lab with 10 consoles is set up for facilitating language teaching.

Solar power tapping

An effort for tapping of solar energy for cutting down power cost was initiated. The solar panels setup for this purpose is now meeting all the power needs of the Principals cabin.

Biogas unit

The canteen waste is now utilized for meeting a part of the fuel needs of the college canteen. The bio-gas plant set up for this purpose is performing satisfactorily.

New PA system and audio systems

A new PA system covering all rooms in the institution is set up. The audio systems of the auditorium and seminar halls were modified.

Instruments

A lot of new instruments and computers were added to the existing infrastructure

Table XIV:- Instruments acquired during 2010-11

Sr No	Instrument	Department	Number	Source
1	Laptops	All Departments	14	CPE
2	Computers	All Departments		CPE & UGC
3	LCD Projectors	All Departments	14	CPE
4	Botany	PCR	1	CPE
5	Smart board	Smart class & Seminar hall	2	UGC
6	Display board	Main Office	1	UGC
7	LCR meter	Physics	1	FIST

66. Technology up gradation

Existing methods have been modified by advanced technologies in the following areas.

Teaching- learning

ICT tools are incorporated to a high degree. All departments are provided with separate facilities to use computer and internet in class room teaching. Teachers use this for class room teaching and students use this for seminars.

Evaluation

In addition to the conventional system a system for online examinations is developed. The students can attend online examinations using the facilities available with the computer labs. These are evaluated by teachers and the results are communicated to students

Net usage

Wi-Fi and LAN systems installed have increased the facility for net usage for students. More and more students are now using this service for their learning purpose.

Laboratory experiments

The smart class room has provided the opportunity for better demonstration of experiments. Biological dissections can now be performed without using animal specimens.

Research

Advanced instruments like PCR acquired through the funds received through the schemes under CPE have generated new areas of research.

Administration

New total management software has brought about many changes in office administration. Salary bills, PF credits etc. are now made through software. Student services and accounting etc. are being progressively brought under the software.

67. Computer and internet access and training to teachers and students

(1) Computer and internet access

All departments are provided with laptops which the teachers can use for class room teaching. In addition to this all departments have desktops and the Departments of Mathematics, chemistry, Physics, Commerce, Zoology, Economics and Hindi have separate computer labs. The computers of the general computer lab are also available to all teachers. The campus has Wi- Fi facility and the use is unrestricted to teachers.

The computers in the computer labs are available to the students of the respective departments. In addition to this the general computer lab is available to all students. The central library has a browsing centre which is also available to all students. Students can use all these computers for internet access also.

Table XV:- Computer availability in different Departments

Sr No	Department	PC	Lap top	Printer
1	Computer lab	15	.	.2 ,1
2	Server room	2		
3	Mathematics	12	1	1
4	Physics	9	1	2
5	Chemistry	11	1	3
6	Botany	2	1	1
7	Zoology	4	1	2
8	English		1	1
9	Hindi	3	1	1
10	Malayalam	3	1	
11	Economics	3	2	1
12	Sociology		1	1
13	History		1	1
14	Psychology		1	1
15	Commerce	3	1	1
16	Library	12		1
17	Seminar hall	1		
18	Physical Education	1	1	1
19	NSS	1		
20	Office	10		2
21	PTA office	1		
22	Principal	1		1
	Total	94	15	24

(2) Training

Teachers are given training on the use of new software and new instruments as and when they are acquired. The services of the suppliers are used for this purpose.

The computer lab has a regular program to train students on the use of computer and internet.

68. Financial aid to students

N S S group of institutions were established with the objective of providing quality education to economically and socially backward sections of the society. In total agreement with the objectives of our founder, the institution take special care to see that economically backward students receive all possible help for completing their education successfully. The institution has been providing the following support programs to the students during the past years.

1 The fee collected from students is kept at a minimum.

2 Financial support by management.

3 Scholarship schemes provided by the University and Government.

2010-1 witnessed two new scholarship schemes introduced specifically for the benefit of economically backward students. One was the UGC funded scheme meant for institutions having a majority of SC/ST, minority and economically backward students. An amount of Rs 1.15 lakhs was distributed among such students through this scheme.

The Parent Teacher Association (PTA) also introduced a new scholarship scheme this year. The most economically backward meritorious student of each class was given an award of Rs 500.

The PTA launched another scheme for providing free midday meals to all needy students. About 60 students use this facility regularly.

69. Activities and support from the alumni association

The alumni of the institution are organized on a department basis. Almost all departments have a history of more than sixty years and consequently institution alumni bonds extend to people in different age groups in almost all walks of life. Some departments have more than one such association through the formation of groups who were students during a particular period of time. All department alumni meet at least once in a year usually with their families and the occasions disseminate expressions of homecoming among all participants and the institution. The college has deputed one staff member for coordinating their activities and provide them with sufficient facilities for hosting meetings and other functions. The institution is in receipt of two types of direct support from alumni.

1 Placement services to the outgoing students.

2 Financial support for infrastructure development.

The institution has a number of well-placed alumni who often play the role of prospective employer to our outgoing students. Many have expressed their willingness to function as resource persons for career development activities. The institution was financially supported by alumni during the construction of Mannam block. The institution has now developed plans for the construction of a new research block and alumni is expected to play leading role in the realization of that dream.

70. Activities and supports from the Parents teachers association

The Parent Teacher Association (PTA) plays a very important role in the day to day functioning of the institution. The broad spectrum of activities undertaken by the PTA may be summarized under the following heads.

(a) Student amenities

This is the important area of activity and the role starts from providing uninterrupted power and water supply to clean campus program. All the minor repair and maintenance works are undertaken by the PTA. It contributes to the provision of necessary security to the campus and is the main role player in the campus beautification program.

(b) Academic activities

PTA pays for the appointment of temporary teachers whenever teachers are on long leave or when regular appointments could not be made due to various reasons. All parents of each class assemble two to three times a year for evaluating the academic performance of their wards. This meeting which we call parent – teacher – student meeting is an important activity that contributes to the academic betterment of the students. The parents are given full details of the academic performance of the students during these meetings.

(c) Campus discipline

Whenever there are problems due to student indiscipline the PTA take an active role in finding solutions to the problems.

(d) Student support activities

PTA is taking an active role in supporting the economically backward students in their studies. The most economically backward but meritorious student of each class is given scholarship. A program of free mid-day meal was instituted this year. About sixty students are using this facility now.

(e) Infrastructure

All the bathrooms were renovated by PTA this year.

71. Health services

The service of a lady attendant is made available in the girls' rest room. She provides all the essential first aid services when needed. Any student who is in need of medical help is immediately taken to the nearby medical college. The PTA provides all the help for this activity.

72. Performance on sports activities

The college has a distinguished position among the 147 colleges in the University in this arena. We are more recognized in game events than in athletics. Two of our students had representation in Asian Games in cycling and swimming. We have been the University champions in cricket, football and swimming for a number of years and our students have representation in almost all university teams. Some of the notable achievements during the year are listed.

Table XVI:- Performance highlights of the institution in sports during 2010 -11

Sl.No.	Discipline	Position secured	No. of players selected to the University team	Selected to the State team
01	Cricket	Champions	04	03
02	Swimming	Champions	04+04	03
03	Softball	Champions	02	01
04	Weight Lifting &Power Lifting	Runners up	01	01
05	Waterpolo	Runners-up	04	02
06	Boxing	Runners up	02	-
07	Cycling	Runners-up	01	
08	Tennis	Runners-up	02	-
09	Football	Semifinalist	04	01

73. Incentives to outstanding sports persons

Students are given special leave to take part in sports events. The college gives special attention to compensate for the lost academic hours. The sports achievements are

felicitated by the college in public functions. The PTA of the college participates in the felicitation by offering cash incentives to the winners.

A good part of the plan fund is set apart for improving sports infrastructure. The college is provisionally selected for the award of a grant of Rs 45 lakhs for the construction of a stadium.

We take special attention in providing expert coaching the meritorious sportsmen.

This year coaching was arranged for swimming, football, cricket and softball.

74. Activities of the guidance and counseling unit

The institution has a career and placement cell which looks after the career and placement prospects of students. Counseling services are carried out by the mental health club associated with the department of Psychology.

Career and placement cell

The career and placement cell under the guidance of Prof.K.R. Madhusoodanan Pillai, Dept. of English was actively engaged in promoting the career prospects of the students. The programs has financial support from UGC.

The activities of the cell concentrated on two areas.

- 1 Training for attending competitive examinations and interviews
- 2 Campus placement activities

Training programs

The training programs concentrated on developing language skills, numerical ability, test for reasoning skill and general knowledge which are the usual components of any competitive examinations. Faculty includes teachers from the college as well as experts from job training institutes. The program included class room teaching as well as mock examinations. Another component was mock interviews through which the students gained sufficient communication skills to come out of job interviews successfully.

Table XVI :-Training programs arranged by the career and placement cell during 2010-2011

Sr No	Date	Programme	Agency	Participants
1	25-10-2010	Career guidance	TIME	Final year students
2	3-12-2010	Training on artificial Jewellery making	Women study unit	Girl students
3	20-1-2011	Career guidance	NIIT	Final year students
4	1-12-2010 to	Coaching classes for Bank	Career	Final year

	12-3-2011 (25 hours)	and PSC examinations	guidance cell	students
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Counseling services

The mental health club functioning under the department of Psychology organized counseling services in the institution. All the four members on the staff of this department are professional counselors and their services were mainly utilized for organizing the counseling activities. The mental health club has a team of counselors who are senior students of the department and their services were utilized for providing counseling to needy students. The club was very active during pre-examination days and a lot of students have derived the help of the club. The club is also actively engaged in organizing counseling activities in the nearby schools.

75. Placement services provided to students

The career and placement cell in addition to its efforts for providing training to students also organized placement drives in the institution. Many prospective employers were invited to the institution for placement activities

Table XVII :-Campus placement programs conducted during 2010-2011

Sr No	Agency	Placement	Date	Target group
1	TIME	Career program		Degree students

2	SEBLOG	22 students	26-1-11	Final year degree and PG
3	Sincere group	12 students	21-1-11	Final year degree
4	NIIT	Career program	20-1-11	Final year degree and PG

Table XVIII:- student who got selected for employment through campus placement

Sr No	Name of student	Department	Organisation
1	Amal Krushnan	Mathematics	Wipro
2	Gopi Krishna	Mathematics	Wipro
3	Arunkumar K G	Mathematics	Wipro
4	Ambika Devi	Mathematics	Wipro
5	Jubaina Beevi	Mathematics	Wipro
6	Saranya Devi.T.G	Chemistry	Wipro
7	Athira	Chemistry	Wipro
8	Suparna R	Chemistry	Wipro
9	Mukesh	Zoology	Wipro

76. Development programs for non-teaching staff

The computer lab offer free computer training to non- teaching staff. Almost all members have utilized this facility to improve their computer skills. The non-teaching staff are frequently deputed to attend the training programs organized by University and

Government. All the sections of the office is provided with computers and the officers are given intensive training on the use of computers.

77. Healthy practices of the institution

(1) The policy of the institution to provide quality education to economically weaker sections of the society.

(2) Keep the economic burden on the students a minimum.

(3) High thrust on research and policy of the institution to communicate the research findings among the staff and students. Through this we aim at cultivating a research interest among students.

(4) Strong determination among the staff and students to keep the campus smoke and liquor free.

78. Linkage developed with national / international , academic/research bodies

The institution has strong research linkages with many national and international agencies.

Table XIX :- International linkages in research,

Department	Name of faculty	Institution / academy	Nature of linkage
Chemistry	Dr. M D Ajithabai	Sultans Quaboos University, Oman	Utilization of instrumental facilities

	Dr G Jayakumar	Plant Environment Division, Honam Agricultural Research Institute (HARI) National Institute of Crop Science (NICS), Rural Development Administration (RDA), #381 Songhak- dong, Iksan, Chonbuck, 570-080, Republic of Korea	Collaborative work
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Table XX :- National linkages in Research

Department	Name of faculty	Institution / academy	Nature of linkage
Chemistry	Dr.M.D.Ajith Bai	KSCSTE Govt. of Kerala NIIST TVM, TBGRI TVM, RGCB TVM, SCT MST TVM , IIT Madras, IISC Bangalore	Project From Utilization of instrumental facilities
Chemistry	Dr M R Sudarsana Kumar	CUSAT, Ernakulam	Instrumental facilities
Physics	Dr K Rajendra	V S S C, Trivandrum	Instrumental facilities,

	babu		Library, Consultancy
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79. Any other relevant information the institution wishes to add

Man is a social animal and a healthy society is essential for the progress of any community. Students should have the opportunities to interact with the society .The institution should be capable of developing in them a positive attitude towards social service. This year we set up thirteen clubs to accommodate students of different tastes into coherent groups and entrusted each with different program schedules of which social service is a common activity. All the students of one batch were brought under this program. By the nest two years all the students of the college will be brought under this program.

Part C: Detail the plans of the institution for the next year.

1 Teaching learning process

Ensure incorporation of the newly introduced ICT tools in the actual teaching learning process.

Not only teachers but also students should be trained to the use of the new tools and techniques.

Internet should become a component of teaching in the case of teachers and it should have greater role in the learning process of all students.

2 Research

Even though research is not a regular program of the institution a large number of students are engaged in research activities. Hence the research infrastructure need strengthening. Scientific research should progress into new areas. Advanced instruments are needed for this. More fund will be diverted to this area.

The lack of space is a problem that is holding back the research activities of the different departments. A separate building need be constructed for this. If a separate building is available centralized library and laboratory facilities can be achieved.

3 Definite programs for extension need to be chalked out.

The National Service Scheme (N.S. S.) is playing the major role in organizing extension activities. The College union and the mental health club are the other prominent agencies involved in this activity. The college propose to involve all of its students and staff in social service activities. Thirteen clubs were organized last year [appendix 5] in connection with the newly introduced (Choice based Credit and Semester system) CBCSS program for the UG. It is proposed to incorporate social service as a common activity for all these clubs.

4 Greater automation in the different areas of functioning is essential for progress.

Teaching, learning, research and general administration should be modified to incorporate ICT tools to higher extend. The infrastructure in the form of Wi-Fi campus, digital class rooms, new library and office automation software are installed. The next step is to rovide suitable training and continued expert support to imbibe these changes in the system of the institution.

Appendix 1

Open courses started by the institution

Sr No	Department	Title of the open course offered
1	English	English for Communication and Career
2	Hindi	Translation
3	Malayalam	Chalachithra padanam
4	Economics	Human Resource Management
5	History	History of Indian National Movement
6	Sociology	Life Skill Education
7	Psychology	General Psychology
8	Chemistry	Essentials of Chemistry
9	Mathematics	Business Mathematics
10	Physics	Energy Physics
11	Botany	Horticulture
12	Zoology	Human diseases and their management
13	Commerce	Fundamental of Financial accounting
14	Physical Education	Health and Fitness Indicators
15	Russian	Basic course in Russian

Appendix 2

List of Projects Undertaken by the Faculty

No	Name of Project	Major/Minor	Funding agency	outlay	Period	Status	Dept
1	Development of cost effective TL dosimeters	Major	KSCST E	11,63,000	2009-12	Ongoing	Physics
	A study of Thermoluminescence dosimetry in rare earth doped phosphorous	Minor	UGC	35000	2 years	Completed	Physics

2	Growth and Characterization of Non-linear Crystals for Device Applications	Major	KSCST E	4,45,500	2 years 2003-05	Completed	Physics
3	Preparation and characterization of nano particles	Minor	UGC	70,000	2 years	Completed	Physics
4	.Studies on Nonlinear Dynamics in Discharge Plasma	Major	UGC	7,40,000	3 year	Ongoing	Physics
5	Photothermal studies of Rare Earth Nano samples	Major	KCSTE	16,00,000	3 year	Ongoing	Physics
6	Preparation and Characterisation of Low Resistance CdS thin films	Minor	UGC			Completed	Physics
7	Variation of room temperature photoconductivity of CuInS ₂ thin films with [Cu]/[In] and [S]/[Cu] ratio	Minor	UGC			Ongoing	Physics
8	Synthesis and characterization nanocrystalline lead tungstate and strontium tungstate	Minor	UGC	48,000/-	2009-2011	Ongoing	Physics
9	Edge Measurable Graphs	Minor	UGC	40,000	2 years	Completed	Mathe matics
10	Study of Chaotic Dynamics	Minor	UGC	1,60,000	2011-2012	On going	Mathe matics
11	Analysis of Inventory Systems and Their Reliability	Major	DST	6,00,000	2006-2009	Completed	Mathe matics
12	Bio and Radiation Induced Transformations of Meleacean Triterpenes with a view to Synthesise bio-active molecules	Major	KSCST E, Govt Of Kerala	6,00,000	3 years	Completed In 2007	Chemis try
13	Systematic study into the Phytochemical aspects of ethno-botanical practices in Kerala & Microwave enhancement of Organic and Inorganic reactions	Major	KSCST E, Govt Of Kerala	14,00,000	3 years	Completed In 2008	Chemis try

15	Phytochemical studies on the ethenic medicines used in the treatment of diabetes	Minor	UGC	85,000	2 years	Completed	Chemistry
16	A new method for the quality control of Ayurvedic medicines	Minor	UGC	1,00,000	2year	Completed	Chemistry
17	Bio and Radiation Induced Transformations of Meleacean Triterpenes with a view to Synthesise bio-active molecules	Major	KSCST E, Govt Of Kerala	6 ,00,000	3 years	Completed In 2007	Chemistry
18	Systematic study into the Phytochemical aspects of ethno-botanical practices in Kerala & Microwave enhancement of Organic and Inorganic reactions	Major	KSCST E, Govt Of Kerala	14,00,000	3 years	Completed In 2008	Chemistry
19	Effect of Microwave heating in Organic reactions	Minor	UGC	35,000	2 years	Completed	Chemistry
20	Phytochemical studies on <i>Calophyllum descipens</i>	Minor	UGC	1,05,000	2year	Completed	Chemistry
21	Isolation and chemical conversion of a bio active natural product”(2010 MSc-S4).	Student Project	KSCST E	10,000	1year	Completed	Chemistry
22	Phytochemical studies on <i>Samadra indica</i>	Minor	UGC	40000	2 years	Completed	Chemistry
23	Isolation of bioactive compounds from <i>Hedychium flavesence</i>	Minor	UGC	35000	2 years	Completed	Chemistry
24	Melt/solution processable conducting polyaniline	Minor	UGC		2004-2006	Completed	Chemistry
25		Minor	UGC	Results of the work not Publish-ed	22-07-2007 to 31-05-2007	Completed	Chemistry

26		Minor	UGC	Rs.50,000-		Completed	Chemistry
27		Minor	KSCST E	Rs.50,000/-	2008-2009	Completed	Science popularisation
28	The study of Sodium benzoate preservatives in Ayurvedic formulations Kashaya (water decoction)	Minor	UGC	Rs.55,000-	2004-2006	Completed	Chemistry
29	The process development for Ameliorating alarming environmental and health hazards posed by phthalates in plastics: via Chemical, Biochemical and Bio remediation approach	Major	MOEF	23,50,000	2008-2011	Ongoing	Chemistry
30	Synthesis of polymer bound schiffs base	Minor	UGC	Rs.35,000	2004-2006	Completed	Chemistry
31	Synthesis and charecterisation of polystyrene bound chelates	Minor	UGC	2,00,000	2011-2012	Ongoing	Chemistry
32	Studies on Polination biology of secondary metabolites and their antibacterial activity	Major	KSCST E	193000	3 years	Completed	Botany
33	Reproductive biology of medicinal plants	Major	KSCST E	250000	3 years	Completed	Botany
34	Invitro culture of some medicinal plants	Minor	UGC	25000	2 years	Completed	Botany
35	Inventorying and Monitoring of biodiversity of Western Ghats		Indian Institute of Sciences , Bangalore		3 years.	Completed	Botany
36	Inventorying and Monitoring of		Dept. of		5 years	discontinued	Botany

	biodiversity of Eastern & Western Ghats		Biotechnology, Govt. of India				
37	Conservation & Consumption: A study on the Crude Drug Trade in Rare, Endemic, Endangered and Threatened Species of Thiruvananthapuram District, Kerala		KRPLLI Centre for Development Studies Trivandru		3 years	Completed	Botany
38	Documentation of plants of Religious Importance		UGC		1 year	Completed	Botany
39	Physico-Chemical Analysis of the Drinking Water Resources of Thiruvananthapuram City		KSCSTEC – Student project		1 year	Completed	Botany
40	Microbial Spoilage Of Vegetables In Kitchen Condition		KSCSTEC – Student project		1 year	Completed d	Botany
41	Expression Of Microbial Biodiversity Of Rhizosphere Of Certain Members Of Solanaceae Family In Terms Of Enzyme Activity		KSCSTEC – Student project		1 year	Completed d	Botany
42	Antihepatotoxic, Antioxidant and related Pharmacognostic Studies of <i>Oxalis corniculata</i>	Major	UGC	8,25,300	3years	ongoing	Botany
43	Impact of Plant Growth regulators on Germination and Growth of soybean [Glycine max(L)Merr.]	Minor	UGC	75,000/-	2010-11	Ongoing	Botany
44	Ecological studies of Aruvikkara Reservoir (DAM) with special Reference to Associated Micro and Macro Flora	Major	KSCST E	10,87,900/-	2010-11	Ongoing	Botany
45	Mass propagation of	Minor	UGC		2 Years	Completed	Botany

	<i>Chlorophytum borivilianum</i> (Safed musli) through tissue culture.						
746	Phytochemical and Pharmacognostic studies of <i>Monochoria vaginalis</i>	Minor	UGC		2 Years	Ongoing	Botany
47	Utilization of Certain common indigenous plants in Pest control” (2003-06)	Major	KSCST E	4,84,000	3 years	completed	Zoology
48	Effect of Endosulfan On the blood brain and Reproductive system of <i>Anabas testudineus</i> ” (2004-06)	Minor	UGC	47,000	2 years	Completed	Zoology
49	Ecology&Biodiversity of VAMANAPURAM RIVER	Major	UGC		3	Ongoing	Zoology
50	Hydrobiology of fresh water ponds in Nilamel Panchayat	Minor	UGC		2	Ongoing	Zoology
51	Studies on marine ornamental fishes of Lakshadweep	Major	UGC	598000	3	Completed	Zoology
52	Contrastive Linguistic Oriental (Russian-Malayalam) Computer –Aided Teaching Material for Russian	Minor	UGC	50000	2 years	Completed	Russian
53	Development of oral communication skills among rural students at the tertiary level	Minor	UGC	Rs 40,000	2004-06	Completed	English
54	Keral ke Hindi prachar meim vividh Hindi samsthavom ka yogadhan	Minor	UGC	40,000/-	2007 -08	Completed	Hindi
55	Indian social political and cultural influences in the poems of Bachan&Chengampuzha= A comparative study	Minor	UGC	25,000	2 years	Completed	Hindi
56	Contemporary Problem illustrated in Hindi Poetic Dramas After 1960	Minor	UGC	Rs.82,000	2009	Completed	Hindi

57	Child psychology : Sexual problem in Modernage with reference to sekar Ek teevani		UGC		2007	Ongoing	Hindi
58	Women psychology in contemporary short stories and its socio-psychic effect	Minor	UGC	40000	2005-08	Ongoing	Hindi
59	The challenges of women and their solutions narrated in prabhudaya misra's vedi novel "Maithrayee"	Minor	UGC	Rs 40,000	2007-2008	Ongoing	Hindi
60	Social and individual conflict in the short 59ounsel of Mohan Rakesh in the modern context.	Minor	UGC	Rs 40000	2007-2008	Completed	Hindi
61	An Analysis of the Present Political, Religious and Communal Situations – Special Reference to Selected Modern Hindi Novels	Minor	UGC	Rs 25000	2 years	Completed	Hindi
62	Samakaleen Hindi aur Malayalam kavita mein paryavaran	Minor	UGC	25000/-	2005 -06	Completed	Hindi
63	Agro Based Industries	Minor	UGC	30,000	3yrs	Completed	Economics
64	Quality of life of the LOW-Income Group: A Micro Level Cross –Sectional Study” in 2000 Sustainability of community	Major	KRPLLD, CDS ,Trivandrum,			Completed	Economics
65	Assets and institutions Created under the peoples Planning programme in Kerala-Selected Case Studies” in 2001	Major	KRPLLD, CDS ,Trivandrum			Completed	Economics
66	‘Balanced farming Project’ initiated in	Major	Keral Gandhi Smarakanithi in 2000			Completed	Economics
67	Durth Danida Project of water supply Soci-	Major	Economic Unit Foundati on in 2000			Completed	Economics

68	A feasibility study on improving the capability of Women in Governance of Local Bodies in Kerala – A case study in two districts	Minor	UGC	50,000	18 months	Ongoing	History
69	A Feasibility study on the introduction of 60ounseli and 60ounseling among college students	Minor	UGC			Completed	History
70	‘Adaptation of the Elderly to the changing pattern of life of Kerala Community’	Minor	U G C	45,000	2yrs	Ongoing	History
71	A Study On The ‘Twice Exceptionals’ Among The Physically Challenged In Kerala	Minor	UGC	65,000/-	2 years	Completed	Psychology
72	A Study On Life Skills Among the Adolescents In Kerala	Minor	UGC	1,00,000	2 years	Ongoing	Psychology
73	Resource Mobilisation In People Planning In Kerala	Minor	UGC	70,000	2	Completed	Commerce
74		Minor	UGC	65,000	2	Completed	Commerce
75	A critical study of the cultural heritage of Trivandrum district	Major	UGC	495560	3	Completed	Malayalam
76	Empowerment of women and children through theatre – A minor project	Minor	UGC	100000	2	Completed	Malayalam
77	Kali cult of Kerala	Major(PDF)	UGC		3	Completed	Malayalam

List of Publications from faculty

Sr No	Name of faculty	Department	Number of Publications
1	Dr K Madhu Kumar	Physics	3
2	Dr V Anupkumar	Physics	1
3	K Nagappan Pillai	Physics	1
4	Dr S B Syamala	Physics	6
5	Dr K Rajendra babu	Physics	12
6	Dr R G Bindu	Physics	11
7	Dr K Karunakaran	Mathematics	5
8	Dr K Radhakrishnan	Mathematics	5
9	Dr K Vineetha	Mathematics	3
10	Dr G Jayakumar	Chemistry	19
11	Dr M D Ajithabai	Chemistry	19
13	S Jalajamony	Chemistry	3
14	Dr C G Radhakrishnan namboori	Chemistry	2
15	Dr S Balachandran	Chemistry	8
16	Dr M R Sudarsana Kumar	Chemistry	19
17	Dr Sudha devi R	Chemistry	8
18	Dr Parvathy Menon	Botany	1
19	Dr M Jayasree	Botany	2
20	Dr K G Ajithkumar	Botany	2

21	Dr P R Geetha	Zoology	15
22	Sarojadevi	Zoology	1
23	Dr N Ajithkumar	Malayalam	47
26	Dr P Vijayalekshy Amma	Malayalam	2
27	Dr S Rajeswari Amma	Malayalam	1
28	Dr K Jyothish Kumar	Malayalam	67
29	Ajith G Krishna	Malayalam	6
30	Dr Geetha G Nair	Malayalam	1
31	C Pradeep Kumar	Malayalam	1
32	Dr C Lalitha kumari	Sanskrit	3
33	Dr K Manikandan nair	Hindi	8
34	Dr B Jayasree	Hindi	3
35	Dr S R Jayasree	Hindi	6
36	Dr S Maheswary	Hindi	2
37	Dr T Sreedevi	Hindi	5
38	Dr K S Beena	Hindi	1
39	Dr K P Ushakumari	Hindi	6
40	Dr K Jayakumari	Hindi	1
41	Dr P Krishna Kumar	Economics	12
42	Dr B Anil Kumar	Economics	7
43	Dr S Nirmala	History	1
44	G S Subalekshmi	Sociology	2
45	Dr B Mridula nair	Psychology	2

46	Dr N Adithi	Psychology	5
41	Dr V P vanaja Kumari	Psychology	2
42	Dr V Harikumar	Commerce	11

Appendix 4

Student feed back forms

Mahathma Gandhi College

(college with potential for excellence),

Thiruvananthapuram, Kerala, India – 695004

STUDENT FEEDBACK FORM

Department----- Class----- Academic Year-----

- I. Assess your DEPARTMENT for each Parameter, by putting a tick-mark in the appropriate column

Parameters	Excellent	Good	Average	Below Average	Poor
1. Coverage of Topics					
2. Approachability					
3. Creating General Awareness					

4. Discipline enforcement					
5. Laboratory facilities					
6. Library Facilities					
7 Personal Help					
8. Help in Extra-curricular activities					
9. Teacher-student relationship					
10.Team work					
11. Tapping External Resources					
12. Extension Activities					
13. Remedial Teaching					
14. Help in Career Guidance					
15. Promptness in daily communication					
16. Conduct of tests & its evaluation					
17. Parent interaction					
18. Organization within the Department					
19. Your overall experience					

II. Assess your COLLEGE for each Parameter, by putting a tick-mark in the appropriate column

Parameters	Excellent	Good	Average	Below Average	Poor
1. Encouraging Academic Pursuit					
2. Club and Extension Activities					
3. General Library					

4. Discipline enforcement					
5. Recreational activities					
6. Canteen-food and other facilities					
7. Toilet facilities					
8. Teacher-student relationship					
9 Team work					
10. Tapping External Resources					
11. Remedial Teaching					
12. Personal Help					
13. Help in Career Guidance					
14. Maintenance Work					
15. Office assistance					
16. Functioning of PTA					
17. Guidance and assistance from seniors					
18. Grievances redress mechanisms/ handling of complaints					
19. Activities of the college union					
20. Sports promotion					
21. Conveyance of essential information (University etc.)					
22. Promoting institutional loyalty					
23. Your overall experience					

III. Assess the TEACHER in your department for each Parameter, by putting a tick-mark in the appropriate column

Parameters	Excellent	Good	Average	Below Average	Poor
1.Punctuality and Regularity					
2.Coverage of Topics					
3. Sincerity					
4.Communication Skill					
5. Method of teaching					
6.Encouraging student participation in class					
7.Approachability					
8.Discipline enforcement					
9.Personal Help					
10.Help in Extra-curricular activities					
11. Nature and character					
12. Teacher-student relationship					
13. Remedial Teaching					
14. Help in Career Guidance					
15.Conduct of tests and its evaluation					
16.Finding alternate arrangements – when not available					
17. Your overall experience					

Appendix 5

New clubs initiated

Sr No	Club	Coordinator
1	Health Education (Mental Health Club)	Dr Mridula nair
2	Debate Club	S Sunil Kumar
3	Environmental Activities	Dr Parvathy Menon
4	Community Health Activity Swanthanam	DR K Manikandan nair
5	Performing Arts Club-Folklore	Dr N Ajithkumar
6	NSS	Dr Rajendran nair, Dr Adithi
7	NCC	Dr Suresh/ Dr Anoopkumar/Dr Krishna Kumar
8	Sports Club	S Vijayakumar
9	Science Club	Dr M R Sudarsanakumar
10	Nature Club/Eco Club	Dr Rema
11	Literary Club	S Sreekumar
12	Women's study Unit	Dr Syamala
13	Anti-Ragging Cell	Dr R Chandrika Devi