# **Internal Quality Assurance Report**

# Submitted to

# **National Assessment and Accreditation Council**

Ву

**Internal Quality Assurance Cell** 

# MAHATMA GANDHI COLLEGE

Pattom, Thiruvananthapuram, Kerala

2010

# Internal Quality Assurance Cell

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# Preface

The Principal, members of the IQAC and the academic community of Mahatma Gandhi College is proud to present the Self Appraisal Report of the college for the academic year 2009-2010. This report provides a bona-fide account of all the activities taken up during the year which includes many creditable strides in teaching, learning and research.

This report gives a detailed purview of activities related to academics, consultancy and extension work, student support systems, governance and leadership and innovative practices. Each item is elucidated with the help of charts, diagrams and appendices.

We earnestly hope that the report would give a clear picture of the status of the college at present. We would like to thank the management, staff and students who have been a source of inspiration to us.

Principal

# Foreword

Founded in 1948 by the great visionary Bharath Kesari Mannath Padmanabhan, Mahatma Gandhi College, Trivandrum, is one of the prestigious centers of higher education and research in the state of Kerala. With its sixty two years of glorious service, it has become synonymous with excellence, equity and inclusiveness. The college was accredited at 'A' level by NAAC in 2004.

The Self Appraised Report of the year 2009-2010 has been prepared by the Internal Quality Assurance Cell (IQAC) of the college. The academic year witnessed the setting up of new benchmarks and initialization of new practices with a view to elevating the college to the status of an institution with Potential for Excellence. The entire college community is happy that it could achieve most of the objectives set for the year. Departments of Chemistry and Physics were selected for the award of FIST assistance. The application for FIST assistance was forwarded by the Departments of Biological sciences and Mathematics. The college community is enthusiastically involved in the implementation of the schemes awarded under CPE.

With renewed vigor the institution is involved in the organization of programmes for the uplift of the economically and socially backward sections of the society and continues to function as a beacon of hope for those students who strive for excellence.

Convener

Principal

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# PART A

It is our pleasure to present yet another Annual Report of Mahatma Gandhi College prepared by the Internal Quality Assurance Cell. The year 2010, discerned with the high frequency academic events, paved the way for adorning Mahatma Gandhi College with the tiara of the 'College with Potential for Excellence', a gleaming distinction for the inexorable tradition of excellence, bequeathed on us by the University Grants Commission. This achievement has impelled and triggered the immaculate academic radiance of the institution by generating an atmosphere, conducive for accomplishing the long cherished aspirations and perceptions of the academia and the management.

As the college is preparing for reaccreditation, the ensuing academic year is expected to witness another land mark feat in its history of brilliance, if our plans progress as conceptualized, conceived and contemplated. Therefore this annual report, prior to reaccreditation, assumes special relevance and further wishful thinking. It is apparent that the unswerving campus functionaries have been striving hard for sustaining and stabilizing the quality parameters elucidated by multifarious interventions. Nevertheless, in the light of the essential prerequisites for reaccreditation, a stock taking of the activities cogitated and completed during the year is imperative.

#### 1. Curricular aspects

Rumination of recent academic bustles show signs of explicit guality reflections in research input- out put of the Science Departments. Under these circumstances the IQAC decided to expedite the potential of Botany and Zoology Departments, the former specializing in tissue engineering and the latter pursing environmental sciences. Augmentation of infrastructural facilities by increased resource mobilization has been pointed out as an import linkage and programs for the same are in progress. Humanities and social science Departments with indelible imprints in the academic realm of the institution are the ensuing priorities to be focused on, with futuristic approach. The inescapable acumen of the IQAC in this regard is being shored up. Even though the institution could attain substantial growth in research during the past few years, there were lacunae in the dissemination of information to the user community. The rationale for this situation was the rigidity of the syllabus, the colossally orthodox examination system and lingering paraphernalia permitting near to nil academic freedom and zero flexibility. Hence efforts in this direction have to be concentrated in the areas were the institution could have its own say. In spite of all impending bottlenecks, programmes for enriching the curriculam in the form of add on courses, computational skills, women empowerment, soft skill development etc., already initiated during the years have to be innovated, imbibed and blended into the academic fabric of the institution, well in tune with the demands and implications of the 'global village' environment.

Another area where we could incorporate institution specific quality parameters is in the inculcation of objective and ingenious project ideas in the minds of prudent and perceptive P.G students born to excel,

with vision and innovation. This has been a locale with total negligence and little intervention at the University or college level. The formulation of a totally novel methodology, if deliberated, will invariably lead the institution and empower the faculty in improving the quality of the project work envisaged in P.G curriculum. Innovative exam practices for student skill development and empowering the faculty is an area to be researched on with precision from unusual academic angles, of course to be undertaken by high profile academic planners with vision, acuity and mindset for introspection and excellence. The experiment initiated on these lines with UGC assistance by the Department of Economics will have to be promoted, replicated, humanized and disseminated.

# 2 Teaching learning and evaluation

The class room teaching and learning, the quintessence and resilience of an academic transaction can be reinforced by enabling quality ICT support. Programmes should be conceived to augment IT content in class room teaching and the conventional examination system requires special meandering. The old system of year-end examination has its own perils and is not accepted in modern academic circles. A system with provision for both continuous and end semester evaluations find better support from global academic communities. The view that for increased coverage and in-depth learning, students should have opportunities to execute their examinations based on apportioned syllabus, is gaining more acceptance. This will enable the amassing of more knowledge and critical analysis of the subjects taught. However the evaluation system requires more refinement and strengthening with assured learner centered quality parameters. It has to be fool proof with provision to understand the criteria of evaluation with transparency.

Quality of language teaching and learning can progressively advance a great deal, especially in pronunciations by the use of IT tools. The institution is offering courses in five languages, including oriental and foreign like English, Hindi, Malayalam, Russian and Sanskrit. A premeditated and logistically pertinent language lab can go a long way in making the teaching of languages more effective, efficient, attractive and systematic in addition to ensuring user friendliness.

### 3. Research Consultancy and extension

Research, particularly of basic and applied sciences, throughout the world is undergoing radical transformations with emerging interdisciplinary approaches in novel areas. Hence prime importance is attributable to collaborative and multidimensional research, obliterating the scope and relevance of singular research ventures. We are in the process of congregating the potential of our research personnel, from experiences and stray attempts experimented earlier. We rush to the realization that intra institutional, interdepartmental collaboration is our most precious and persuasive strength in the generation and dissemination of knowledge. If the same is supplemented with inter institutional collaborations, both national and international, the seed of which are long dormant within the academic fraternity, we can work out wonders. The only pertinent bottleneck in this land mark achievement is the mindset of few erring individuals

and interest groups, which have to be ignored. To tide over the narrow outlooks if any, interdisciplinary research teams should be articulated with incentives and appreciations, especially to those who mobilize maximum resources. The services of both working and retired teachers should be harnessed and pooled by the Alumni Association, for vetting the proposals if necessary.

## 4) Infrastructure and learning resources

The IT infrastructure of the college has to be reinforced for more durability during the year as it is insufficient to meet the demands of all the users. Arrangements ought to be made to offer internet connectivity to all departments and to chosen class rooms. Procurement of more branded computers, strengthening the backbone of the existing CAN, increasing connectivity using routers and purchase of interactive boards are on the anvil. However the system is expected to demonstrate its strength and fulsome functioning by the end of the ensuing academic year. These circumstances compel us to presume that every student and member of the faculty of Mahatma Gandhi College will have at least 2 cents (GB) of free land in the global cyber city. A specific program for the same will soon be launched by the cyber forensic experts of the IQAC of the college

Teaching and learning methods have been undergoing far-reaching changes in the past few years as there is increased use of ICT in the different arenas of teaching. Internet facilities are increasingly being used by teachers and students, is a welcome development. It is palpable that teachers use it for the preparation of their lesson plans and teaching aids, while students use it mainly for organizing assignments and expediting the contents of various seminars.

Research scenario is rapidly changing and research in basic and science disciplines is now highly machine dependant. Instrument facilities available with the institution are insufficient to meet the demands of students in general and teachers in particular. At present the instruments available in one department are not freely accessible to students of other departments as and when necessary. A centralized instrument pooling facility can have beneficial effects on the total research output. This can, as envisaged, lead to the growth of self dependent multi-disciplinary research within the campus.

### 5 Student support and progression

This is one of the key areas of intervention. The institution was concentrating more on academic achievements in the past years and the extra curricular talents of students were not receiving adequate attention. Some of the students could make achievements in University and state level competitions, but many of them were stray attempts base on individual talents. De facto, the institution should have a programme for concerted talent hunt, training and grooming of the gifted, with the objective of enabling them to display their faculties adequately and convincingly.

The Government and the University have agendas to support the meritorious students belonging to socially and economically disadvantaged communities. Mahatma Gandhi College endeavors to offer quality education to all without prejudices and barriers of caste, creed, color or culture. Hence it should formulate

more and more programs to provide financial and cultural assistance to economically underprivileged students.

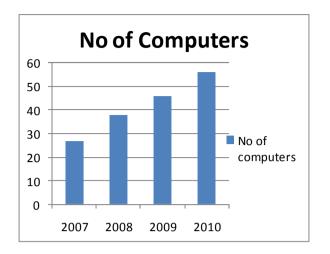
# 6 Innovative practices

Innovation is the major stumbling block in any society, as it demands cross border and transcontinental intellectual activity and imagination when the human brain suitably satisfies and signifies the role of transcendental computer. Every singular achievement of humanity, if properly explored can be traced back to the genetic driven innovative thinking propensity. The brain storming sessions of the IQAC should bank on intellectual vibrations of the bonded academic flock available for deliberations. It is this proposition and line of thinking that made us formulate courses like 'Homestead farming and S.H.Gs" approved, assisted and lauded by the UGC. Some of the programs that have to be re-energized include, Slow Leaner Support Program (SLSP) Student and Parent Counseling Program (SPCP) Multidimensional Collaborative Research program(MCRP), Cyber Skill Development Program (CSDP), P.G Students Research Empowerment Program (PGSREP), Talent Hunt and Development Program (THDP) Women Empowerment and Inclusive Development Program (ERMP) Parent Teacher Student Interactive Program (PTSIP), Multimedia and E-Learning Resource Program (MELRP) etc. Certain innovative and integrated agendas on Nano- taxonomy and Eco-economics, Cyber Biology and Cyber Chemistry highlighting the significance of environmental, economic social and ethological and issues are on the anvil.

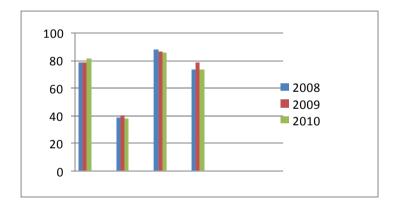
# Achievements

The year 2009-10 was a year of commendable achievements for the institution. A new multidisciplinary add-on course jointly conceived by the faculties of Zoology, Botany and Economics, has been advancing. Cyber skill development and career guidance programs could attract more students. The facility of the computer lab was augmented to meet the increased demand of students. All the Cyber related programs have received creditable attention and recorded rapid growth and development.

### Growth of computer facility during 2007-10



It is worth mentioning that the proposal for setting up language and multi media labs submitted to the UGC have been sanctioned and the same is being implemented, the anticipated potential of which is expected to be discovered in ensuing years. Analysis of the results of the university examinations during last three years showed a more or less positive trend, and number of first classes at P.G level has been significant in spite of a drop in the quality of the students recruited, invariably due to the interlacing incursions of self financing education institutions.

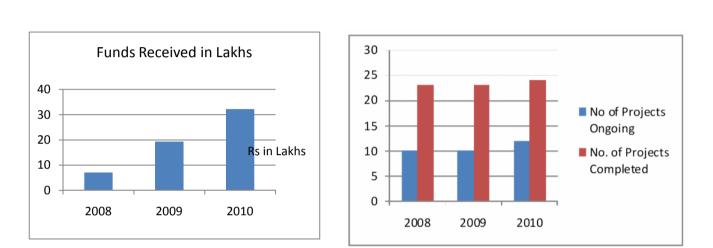


Comparison of the results and first classes at UG and PG levels.[UG pass, UG first class, P G pass, P G First class]

As usual the institution conducted internal examinations at regular intervals as per schedule and the PTSI meetings convened to inform parents about the performance of their wards has created discernible transforms in the attitude, aptitude and approach of students and parents.

Assessment of research arena of the college showed that it has been demonstrating excellent growth as denoted by the number of external funded projects and the quantum of funding received during the year amounting to several crores of rupees. UGC basic assistance of more than 1.5 crores, CPE one crore, FIST 70 lakhs etc are some of the initial releases from UGC. We place on record our sincere sense of appreciation and thanks to the Planning Board of the College which conscientiously and relentlessly

formulated high quality proposals and presented the same to UGC and other National funding agencies, for creating a colossal quantum leap in resource mobilization. The qualitative change noticed in the P G dissertations prepared as part of MSc Degree curriculum has to be admired. It is pertinent that three P G projects could attract external funding during this period.

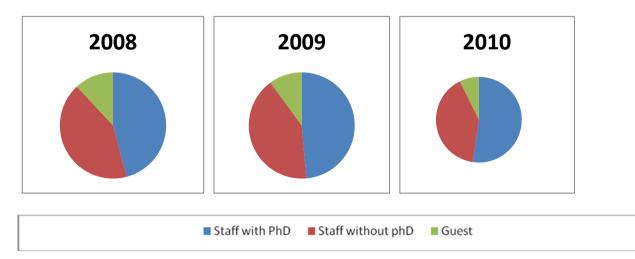


Ongoing and completed projects during 2008-10

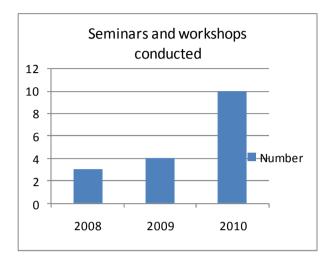
The number of faculty members with PhD degrees also increased during the period which is another quality criterion. A few faculty members preceded for higher studies under the faculty development program of UGC is another welcome proposition. Consultancy expertise also recorded significant increase with more faculty members coming forward for offering the same to the Govt and NGOs

No. of research students and faculty members with PhD

Research funding during 2008-10



Interdisciplinary research collaborations also doubled during the period with several departments involving in multidisciplinary research. Seminars and workshops organized by the institution as well as that attended on by the faculty also showed improvement.



# PART B

# Activities reflecting the goals and objectives of the institution

The motto of the institution truly reflects the vision and mission contemplated by the founder as it carries on the objective of providing quality education to all; particularly to the weaker sections of the society. The activities and programs of the institution have been perpetually crafted for meeting well set objectives for maximum possible accomplishment

. The administration of the College is vested with the Principal subject to the general direction and control of the N.S.S Colleges' Central Committee, University of Kerala and the Government. The College council, an advisory body gives support to the Principal in internal affairs. The College Council consists of Principal, Heads of departments, elected representatives of the teaching staff, the Administrative Assistant and the College Union Chairman. The Internal Quality Assurance Cell, a statutory organ in NAAC accredited colleges functions for maintaining the quality of academic programs by attempting incisive interventions for maintaining eminence and superiority. Another vital organ of the college in resource mobilization, the Planning Board has excelled during the year converting Mahatma Gandhi college as the leading and lone institution in maximum resource mobilization at national level. The attitude of UGC and Government of India in financing the institution is laudable and both the IQAC and Planning Board , have been dynamic and instrumental in their wishful intercessions for resource mobilization, academic empowerment and sustenance of quality parameters.

The admissions are in accordance with the rules and regulations of the University and Government. Merit is the primary criterion for all admissions, 20% of the seats are reserved for the SC/ST and another 20% is management quota. Economically weaker students are given concessions even at the time of admission. Merit is given the top priority in admissions and appointments. The staff once appointed are given ample opportunities to improve their skills and career advancement. The different club activities contribute to the strengthening of teaching learning process, in addition to identifying the skills of students by increased exposure.

## Activities

1. The College starts functioning with National Anthem every day

2. Gandhi Jayanthi week is celebrated every year with diverse activities in which the entire College fraternity participates, thereby building and strengthening the symbiotic relationship with the institution.

3. Education is imparted with the objective of creating harmony and peace. Observing and celebrating days and festivals of national importance is a tool for fulfilling the social, cultural and national objectives.

4. Strict discipline is enforced by the Discipline Committee, Student affairs Committee, Grievance and Redressal Cell, Anti ragging Cell, Cell to Combat Sexual Harassment and Ethics Committee. **[Appendix 1]** 

5. Moral values are nurtured in the campus through discourses of expert academicians, interaction with dignitaries, and conducting workshops etc:-

6. College fosters Gandhian values and principles of national integration and reconstruction. Gandhiji's vision that small scale industries and handicrafts play a vital role in the development and self sufficiency of villages is fostered. As an introduction to this concept the College is providing opportunities to gain experience in Soap and detergent making, hand made paper making and waste recycling.

7. Gender sensitization and women empowerment activities are done by women's studies unit through workshops, seminars and programs for the same is the prerogative of the unit.

8. Leader ship training, Empowering the parents to equip the adolescents and assistance in placement are some of the services rendered by the institution

# New academic programmes initiated

# UG programmes(Add-on courses)

We are conducting two add - on courses of the UGC this year.

1. One of the courses on retail marketing management conducted by the department of commerce is progressing.

**a.** Another, a interdisciplinary add on course jointly organized by the departments of Zoology, Botany and Economics has been initiated during the year. This is an innovative and unique course designed to meet the emerging demand of 'women empowerment' and has been named as Homestead farming and SHGs.

#### b. Programmes funded by other agencies

**100% Computer literacy programme** The College has initiated a programme to make all the students computer literate. All students are given a syllabus based course on computer basics and certificate is issued to the successful candidates.[Appendix 2]

**Examinations-** Examination is an important part of teaching learning process. The college is conducting three examinations every year in the University examination pattern .Valution of answer scripts and issue of progress cards are made systematically. This year we are planning to start a new programme for online examination.

### **Research Committee**

All the PG courses have a project component in its curriculum. The projects generates a lot of new knowledge and information which normally remain with the student and guide alone. We have developed a programme for the transmission of this knowledge down the ladder, especially among the student community. All the post-graduate projects are now being presented before an audience of the students and teachers and the best project is given an award. The research committee had decided to compile all research publications of teachers of this college.

### **Gandhian Studies**

An institution bearing the name of Mahatma Gandhi should give due consideration to Gandhian studies. We are planning to start a programme on Gandhian studies this year. College imparts values of Gandhiji's National reconstruction programme. In village self development and the development of small scale industries play vital roles in Gandhian philosophy. As an introduction to this line of Activity College is providing an opportunity to gain experience in Soap and detergent making, hand made paper making and waste recycling.

# Career development programme

Job oriented short term Training programme in Visual media – (Malayalam department) and Plant Nursery Management techniques – Botany department need special mention.

### **Communicative English Programme**

Hindi translation (English to Hindi & Hindi to English)Finishing School programme for outgoing women students (Women Studies Unit) Personality development programme etc are some of them

# Innovations in curricular design and transaction

Curriculum based activities within college is planned and organized by the Academic committee. The improvements introduced this year are detailed below.

### 1 Increase ICT content in teaching and examination.

The college has been trying to supplement conventional class room teaching with ICT enabled techniques and significant changes in conventional pedagogy and examination systems planned to be introduced are expected to bear fruits in the immediate future. One class room in each department has been be changed into ICT enabled learning space which brings computer and internet to such class rooms. Projection systems and smart boards will be introduced into class rooms by the end of the year. This is expected to bring a total change in the curriculum transaction process.

## 2 Increase ICT content in examination.

The examination system has been supplemented by online examinations on an experimental basis. Once the experiment is over, question banks at various levels will be prepared extensively and hosted to the central server. It will be possible for the students to answer these questions at their own convenience using internet or LAN and the teacher evaluating them accordingly. This is slowly turning out to be a very good incentive to advanced learners.

# 3 Teaching plan

.The Academic committee of the College prepares broad guidelines for the preparation of teaching plan.**[Appendix 3]** The plan incorporates extracurricular programmes in the agenda, in addition to syllabus based teaching. The committee collects the teaching plan from all teachers and examines its compliance periodically with the help of respective Heads of Departments.

### 4 Seminars and assignments

Student seminars and assignments are compulsory and hand written assignment has to be submitted in person to respective faculty members. But students are permitted to submit soft copies of the draft and final version of their projects work to respective guides.

### 5. Remedial teaching and peer teaching

A program by name "Each one teach one" formerly in existence has been revamped with induction of peer teaching and is often used as gap filler during the free hours which obviously helps the slow learners and boost the advanced learners. Tutors who are supportive often allocate specific topics to bright students who are buoyant in teaching that topic to the entire class.

Remedial teaching program has been diversified depending on the demand of the end users

1. Practical and hand-on experience, in poetry recitation, drama presentations etc were done on particular chapters

2. To facilitate learning relevant sections of lessons like Natyasastra, it was presented through CD's, cassettes and still photos of eminent artist. Eminent artists were invited to perform the same

3. Students have been taken to other research centers, where more facilities are available for hands on experience

# Inter disciplinary programmes started

The only interdisciplinary program started during the year is the career orientated advanced Diploma Course on "Homestead farming and SHGs" which involves the participation of Life sciences and Economics.

However the program is meant to empower the women students of the college in the backdrop of the emerging role SHGs in Kerala economy. More similar programs will have to be initiated during the ensuing years.

#### Inter disciplinary collaborations in research.

Departments of Physics, Chemistry, Botany and Zoology and Economics are engaged in collaborative research programmes. In addition to the existing programmes new research programmes have been initiated by the Department of Chemistry. The new programme deals with the characterization and sensitivity studies using Phytochemicals and traditional Ayurvedic medicines which demand the combined efforts of the three departments.

#### **Inter Departmental Collaborations**

Programme	Parent Department	Collaborators	Teachers involved
Phytochemical studies on	Chemistry	Botany	Dr M D Ajitha bai(Chemistry)
Medicinal plants		Zoology	Dr G Jayakumar(Chemistry)
Phytochemical studies on Ayurvedic medicines			Dr M. Jayasree (Botany) Dr P Madhusoodanan Pillai (Zoology)
On voted arrow th	Dhusias	Ob e mietre i	
Crystal growth	Physics	Chemistry	Dr K Rajendra babu (Physics) Dr M R Sudarsana Kumar (Chemistry)

# **Examination reforms implemented**

Exam reforms is a grey area under the control of the university which permits no room for intervention. Examinations are organized by the affiliating University or board as an annual or end semester programme. This has the limitation that the student is examined for two to three hours at a stretch on a particular subject the student has studied for a specific period. This impinges mainly on the memory and physical and psychological condition of the student is never given any consideration.

The internal examinations conducted by the institution were not normally taken into account. This drawback has induced many universities to introduce an additional component into the examination system. The examination at present has two components internal and end semester.

However a good examination process should have the following qualities. It should be capable of assessing the intellectual capacity of the student and remunerating the effort the student has expended. The

process should be fair, transparent and free of tampering/ corruption and there should be mechanisms for redressal of mistakes if any.

There should be specific and uniform norms for setting up question papers to test the skills and information levels of all categories of students, like the average, above average, good and excellent.

However the internal evaluation system has been strengthened by incorporating the components of attendance, seminar, assignment etc. The university has increased the component of internal examination to 25% and has introduced a grading system for the benefit of the students. Clear rules have been formulated for assigning grades to students in order to ensure uniformity. The provision for redressal of grievances, revaluation immediately after publication of results, provision for cancellation of examination and opportunity for students to view their answer sheets are already in voyage.

#### **Contribution of the College**

In spite of impending bottlenecks the college has adopted steps to see that the objectives of the University in introducing exam reforms and modifications are fully supported. All examinations are conducted in a strict and serious atmosphere without any chance for malpractice. During the year the college conducted three internal examinations for the annual stream and two for the semester stream. Valuation is done immediately after the examinations. The parents are informed of the performance of the students through progress reports and face to face meetings during the PTS sessions as the college level continuous evaluation turns out to be an important component and indicator of the score of the students in the end semester university examination.

#### On line examinations

This is a innovative and unique programme that has been introduced during the year. The college has a duplex central server system and all Departments are linked to the server. The server has question banks of various subjects which are updated annually. The students are free to access these questions and answer them and the teacher evaluates the questions online. But multiple choice questions give the scores abruptly. A student who has completed the questions of a particular level can go to the higher level. This is a good incentive to advanced learners and hard working students. As there are two modules, provisions are being made for making available the learning module on line from the college website so that students can learn at home and assess their levels of knowledge during holidays, especially when preparing for the examination. Student can also raise their doubts and get them cleared from this portal

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

We have been making stray attempts to train students for NET and SET. But during the current year UGC sanctioned some amount for conducting NET training and the program is being launched. Faculty members and experts from the colleges and universities have been contacted for engaging the classes. A programme for model exams is also being planned. Details of students qualified NET and SET from different disciplines during 2008 is given in **appendix 4**.

# Initiative towards faculty development programme

The institution always encourages the faculty to improve their academic skills. Teachers are given duty leave to attend seminars and workshop and departments are encouraged to organize seminars and workshops. The PTA of the college has earmarked an amount in its budget for organizing seminars.

No	Department	No. of teachers who attended seminars	Seminars/workshops/invited lecturers organized
1	Mathematics	9	National Seminar on Current Trends in Discrete Mathematics and Analysis (Sponsored by UGC)
2	Physics	8	Mathematical Physics
3	Botany	6	Intellectual property Rights
4	English	5	English @web-20 web2 technologies & learning of English
5	Hindi	9	Current trends in Hindi Short stories
6	Chemistry	5	Emerging tends in Phytochemistry

### Teachers deputed for M.Phil or PhD under the faculty development programme.[Appendix 5]

No	Department	No. of teachers	
1	Mathematics	1	
2	Chemistry	2	
3	Physics	1	
4	Malayalam	1	

# Seminars of workshops conducted

Seminars and workshops, an integral part of the curriculum are explicitly promoted at national and international levels and conducted at two echelons: teacher and student levels. The increase in use of ICT based applications in administrative processes necessitated the organization of workshops for the administrative staff.

Student seminars are conducted by all P.G departments as a part of the internal evaluation process. Each student is assigned a topic which he/she prepares for presentation with the help of the teachers, library and internet facilities. The topic is presented before the students of the same/ different classes in the presence of teachers which befall into a precious learning experience.

National and regional seminars are organized by different disciplines bring the teaching community of the college as well as other colleges together and provide a good platform for the exchange of ideas. Usually researchers and experts in allied disciplines attend these programmes facilitating healthy interactions between research and teaching fraternities. Such programmes often pave the way for new academic collaborations and linkages.[Appendix 6]

The PTA (Parent Teacher Association) of the college encourages the organization of seminars and workshops by providing consolidated ad hoc assistance to each departments. Almost all departments have organized one day seminars for using such funds,

# **Research projects**

More than 80% of the staff is having research degree and majority of them are engaged in active research. The seven research departments of the college also contribute to the research scenario through twenty one research guides and 51 research scholars. The funding for research is mainly derived through projects. This is particularly relevant in the areas of basic and applied science research which require a lot of funds for equipments, literature and consumables. The institution has many ongoing as well as completed research projects. [Appendix 8] Research projects of P.G students are supported by the institution and no extra expenditure is charged on students.

No	Department	No of research guides	No of research students	No of projects
1	Chemistry	5	20	4
2	Physics	3	9	3
3	Botany	3	5	1

### **Research profile of Departments**

4	Zoology	3	8	1
5	Sociology	-	-	1
6	History	-	-	1
7	Hindi	2	4	2
8	Malayalam	2	1	-
9	Commerce	2	8	-
10	Economics	1	3	-

## New collaborative research programmes

Collaborative research and multi-disciplinary research is an important paradigm shift in recent rush for knowledge. The fast expanding vistas of knowledge make studies so complex and by multi- dimensional tools becomes an absolute necessity for analysis and interpretation. In non-science disciplines analysis using scientific tools and programmes is gaining acceptability. This changing face of research makes collaborative research a necessity rather than a luxury.

Research collaborations of the institution aim at two things.

1) Collaboration with other departments of the college for a multidisciplinary solution of problems.

2) Collaboration with premier research institutes for instrumentation techniques and interpretation of sophisticated data.

The former occur through the association of various disciplines for specific problem resolution as illustrated by the phytochemical studies organized by the department of chemistry. The work involves the collection and identification of plant specimens which is done by the department of Botany. The extraction, isolation and identification are done by the department of Chemistry. The biological evaluation of the identified samples and sensitivity studies are undertaken by the department of zoology.

#### Research collaborations in Mahatma Gandhi College

No	Drogramma	Donortmont	Collaborating	National /international Collaborations
No	Programme	Department	Collaborating	National /International Collaborations
			departments	
1	Isolation and biological	Chemistry	Botany &	1) NIIST ,Trivandrum
	evaluation of natural products		Zoology	2) Rajeev Gandhi institute of Biotechnology, Trivandrum
				3) IISC, Bangalore
				4) Post Graduate and Research
				Department of Biotechnology,

				<ul> <li>Vivekanandha College (W), Trichengode, Namakkal, Tamil Nadu, India</li> <li>5) Plant Environment Division, Honam Agricultural Research Institute (HARI) National Institute of Crop Science (NICS), Rural Development</li> <li>Administration (RDA), #381 Songhak- dong, Iksan, Chonbuck, 570-080, Republic of Korea</li> <li>6) Department of Chemistry, College of Science, Sultan Qaboos University, P.O. Box - 36,Al-khode-123, Oman</li> </ul>
2	Synthesis and characetrisation of metal complexes	Chemistry	Physics	<ol> <li>Department of Applied Chemistry, CUSAT, Kochi</li> <li>NIIST, Thiruvananthapuram</li> <li>SAIF, IIT, Chennai</li> <li>SAIF, IIT, Mumbai</li> <li>SAIF, IIT, Roorkee</li> <li>IPC,IISc Bangalore</li> </ol>
3	Crystal growth of NLO Materials	Physics	Chemistry	<ol> <li>1) NIIST, Thiruvananthapuram</li> <li>2) VSSC, Trivandrum</li> <li>3) SAIF, CUSAT, Kochi</li> <li>4) SAIF, IIT, Chennai</li> <li>5) IPC, IISc, Bangalore</li> </ol>
4	Characterisation of nano materials	Physics	Chemistry	<ol> <li>Centre for nano science and nano materials, University of Kerala, Thiruvananthapuram</li> <li>SCTIMST, Thiruvananthapuram</li> </ol>

5	Thermo luminescent materials and phosphors	Physics	Chemistry	1) Regional Cancer Centre, Thiruvananthapuram	
6	Laser	Physics		1) International School of Photonics, CUSAT, Kochi	
7	Magnetic Materials	Physics	Chemistry	<ol> <li>IISc, Bangalore</li> <li>RR Centre for Advanced Technology, Indore</li> </ol>	
8	Decapod Crustacean Systematics	Zoology		Zoological survey of India	
9	Coral fishes of Lakshadweep	Zoology		Dept of fisheries, Govt of Lakshadweep	
10	Graph Theory	Mathematics	Chemistry	Department of Mathematics, University of Kerala	
11	Statistics	Mathematics		<ol> <li>Department of Mathematics, CUSAT, Kochi</li> <li>Department of Mathematics, IIST, Thiruvananthapuram</li> <li>Department of Statistics, University of Calicut</li> </ol>	

# Research grants received from various agencies

Research grants are secured from Central and state agencies though the main research funding agencies are UGC, CSIR, DST, KSCSTE and University of Kerala. The UGC releases research funds for major and minor projects. CSIR also provide fellowship to students for taking up careers in research. Teachers are deputed for acquiring research degrees under the Faculty Development Program of UGC. DST funding for research is offered under the FIST programme of the Ministry of Science and Technology. KSCSTE (Kerala State Council for Science, Technology and Environment) promote research directly through award of research projects to teachers and students and indirectly by providing fellowships to rank holders in University examinations. The University also provides scholarship for research students. The research funding received under these heads is detailed below

No	Department	Programme	Agency	Amount(lakhs)
1	Mathematics	FIP	UGC	5
2	Physics	FIP	UGC	5
		Projects	UGC	3
		Projects	KSCSTE	4
3	Chemistry	FIP	UGC	5
		Projects	UGC	0.5
		Projects	KSCSTE	1.5
		Instruments	FIST	15
3	Botany	FIP	UGC	-
		Projects	UGC	.35
4	Zoology	FIP	UGC	5
5	Hindi	Projects	UGC	0.85
6	Malayalam	PDF	UGC	7.5

#### Research funds received during 2009-10

### **Details of research scholars**

The institution is providing high priority to the development of research activities which may be classified under the following heads. 1) Research scholars of research departments 2) Faculty research through external funded projects 3) Student research projects.

The college has seven Research Departments and a number of students are registered under these departments. Most of the registrations in language departments and commerce are part time, where as the registrations in the science departments are predominantly full time. We have now sixteen research guides in different Departments. Students of some research guides who have retired from service are also working in some departments. The institution offers available facilities to the research students free of cost except for the caution deposit collected during the time of admission. The details of research guides in service and the students working under them are listed.

# Research scholars working at M G College

No	Department	Name of Guide	Research scholars
1	Physics	Dr K Rajendra babu	Bijini B R
			Santhosh V S
			Lakshmi S Nair
			Arya B
			Sajeev Mohan S
		Dr K Madhukumar	Jayasudha S
			Resmi G Nair
			Lekshmi P Nair
		Dr K C Ajith Prasad	Sarath Chandran
2	Chemistry	Dr M D Ajithabai	Remesh Kumar S
			Sreedevi S
			Deepa P Nair
			Sunitharani S P
		Dr C G Radhakrishnan Namboori	Somanadha Menon
			Santhi
			Harikumar
			Sreelekshmi
		Dr M R Sudarsana kumar	S Vijayakumar
			Siji
			Dhanya
			Sunalya
			Remya

	Dr S Balachandran	S Mohandas
		Sunitha Rani S P
Botany	Dr M Jayasree	Geetha R Nair
		Sreejith
	Dr K K Ajith Kumar	Suja Simon
		C M Prakash
	Dr Prasanna Kumar	Sushama Raj
Zoology	Dr P R Geetha	K B Sreelatha
		C Sreelatha
		Bindu V S
	Dr P Madhusoodanan Pillai	V.Unnikrishnan
		Rejitha B.T
		Bismi R
	Dr M S Rajendran Nair	Deepasree
Malayalam	Dr Ajithkumar	I Sreeja
Hindi	Dr K Manikandan	Asha
		Sreeja
		Lekha
	Dr S R Jayasree	Smitha
Commerce	Dr B Harikumar	Varkey Jhon
		Rajeev
		Radhakrishna Kurup
		Rekha Devi
		Athira
	Zoology Zoology Hindi Hindi	Image: second

		Dr B Manmadhan	Kamath
			Murali
			Anil
8	Economics	Dr P Krishna Kumar	

There are a number of guides registered through our research centers are working in other institutions. Due to the lack of facilities in their institutions their students are working hers. The details of such guides are given in **appendix 7**.

# **Citation index and Impact factor**

The institution produced 38 publications of the faculty in national and international journals. The citation index and impact factor of the articles and journals are listed in the table. The list of publications is appended. **[Appendix 9]** 

No	Department	No Publications	of	Range of citation index	Journal impact factors
1	Mathematics	2			
2	Chemistry	14		0.564 to 0.368	1.367 to 0.34
3	Botany	10		1.369 to 0.83	1.367 to 0.53
4	Zoology	4		0.432 - 1.3	0.358 -1.4
5	Malayalam	5		Not listed	Not listed
6	Psychology	2		Not listed	Not listed

#### Publication details of faculty

Books published by the faculty are appended.( Appendix 10)

### Honours and Awards to faculty during 2010

The faculty members of Mahatma Gandhi College include well known writers, scientists, eminent academics, regular columnists and those involved extension activities. Many members of the faculty are famous electronic media personalities and some host television shows.

Dr K S Ravikumar of Department of Malayalam got award for literary criticism from Kerala Sahithya Academy.

Asha S Nair of the Department of Hindi got the SBT Hindi Literary award instituted by Hindi Academy.

Dr.N. Ajithkumar, Departmentment of Malayalam was awarded UGC Post Doctoral Fellowship on 'Critical Study of Kali Cult in Kerala'.

Dr.Mridula Nair, Department of Psychology was honored by the Rotary Club for her contribution Youth Leadership programme

Dr K Jyothish Kumar, Dept. of Malayalam got AIR National Award for his innovative script 'Hello Ithu Njananu and also received Kavitha Award of Keltron Recreation Club

# Internal resources generated during 2009 -10

The main source of internal revenue is the contribution from parents through PTA (Parent teacher Association), the aim of which is to provide a helping hand in academic and extracurricular activities. However the organization is having an imperative role in the functioning of the college in the recent years.

Total Fund Generated	Heads of Expenditure	Amount
1900000	Salary to guest teachers	1000000
	Repair and maintenance, cleaning etc	400000
	Seminars, workshops	200000
	Awards	100000
	Meetings, Examination, stationary	200000

## Fund generation and pattern of utilisation of PTA funds

Another source of internal revenue is the computer club which functions on no profit no loss basis. The club collects one time membership fee of Rs 100 from newly admitted students. The fund is utilized for providing IT services to students and the amount generated during 2009-10 under this head is represented. The club is running a programme for computer literacy of students.

# Funds generated through computer lab

Income		Expenditure	Amount
Membership -	Rs	Payment to staff	35000
100000	_	Stationary	20000
Fee for services - 20000	Rs	Internet charges	10000

Repair and maintenance	20000
Additions to infrastructure	25000

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

Department of Chemistry received 22.5 lakhs under the FIST scheme of the DST during 2008-9 and the instruments worth 15 lakhs were procured during 2009-10. The department of Physics was also awarded FIST assistance of 32.5 lakhs during 2009-10 and 22.5 of this was released The infrastructure additions through FIST are listed.

FIST funds received by the Department of Chemistry during 2009-10

Funds received	Equipments purchased	Amount	Outcome
FIST	Computer	100000	New books and equipments
(Chemistry)			Added
	Melting point apparatus	75000	Improved research facilities
	Flame photometer	35000	Advanced experiments at the P g level
	Polarimeter	40000	Support for PG practical and research
	Spectrophotometer	50000	
	Electronic balance	75000	
FIST	Digital Storage Oscilloscope	100000	Support for PG practical and research
(Physics)			
	High Temperature Furnace	400000	Research
	LCR meter	900000	Research
	T L reader	350000	Support for PG practical and research
	Sputtering Unit	200000	Research

Constant temperature bath	50000	Support for PG practical and research
Michelson interferometer	75000	Support for PG practical and research

The Department of Physics of the college was also selected for assistance under FIST during this year and the scheme provided financial assistance of Rs 37 lakhs over a period of two years for purchase of equipments.

# **Community services**

The N S S groups of institutions consider education a tool for ensuring social justice and always try to see that financial burden on the students is the minimum. Moreover the institution tries to build up socially responsible citizens and social problems are brought to the notice of students.

**National Service Scheme (N S S)** Three units of N S S lead by different program officers function in the college. In addition to the community service programmes organized by the University, the college also organizes several activities aimed at developing the service mentality of member students. The current year activity is centered on the adoption of a backward rural village. Blood donation to the needy is always entertained by N S S volunteers.

**National Cadet Corps (N C C)** :- Along with routine military training an important area of activity of N C C is the community services. The cadets also serve as volunteers for multifarious activities. They have programmes for cleaning, road construction/ repair, slum renovation and reforestation. The college has units of army as well as navy and the N C C cadets are enlisted for voluntary blood donation.

**Club activities** : Some club activities take care of community services also and "Swanthanam" is a group of students who have special interest in community services. They have adopted a backward village which the students frequently visit to involve in social service activities such as cleaning, road construction/repair, caring of the diseased, teaching of illiterate etc. Mental Health Club run by the Department of Psychology is engaged in offering counseling services to nearby schools. Students of sociology and psychology visit old age homes and spend time with the destitute old people who have been deserted by their families.

Science for sustainable development: This is a special extension programme organized by Dr M R Sudarsanakumar, Department of Chemistry as the part of the activities related to a science popularization project of the Kerala State Council for Science, Technology and Environment. Several science seminars were organized in the college and school children of adjoining schools were invited to participate in the seminars and to visit laboratories for doing experiments.

# Teachers and officers newly recruited

# FACULITY MEMBERS RECRUITED DURING 2009-10

			Nature of the	
SI.No.	Name of the teacher	Department.	post	Qualification
1	Kavitha raj. N	Hindi	guest	M A ,Ph. D
2	Krishna Kumar	Russian	guest	M A. Ph. D
3	Deepa. P	History	guest	MA. B.Ed
4	vineetha. S	History	guest	MA
5	Sunitha. I.f.	Economics	guest	MA
6	Bindu bhasker. b.s.	Economics	guest	MA
7	Manjusha s.	Economics	guest	MA
8	Subalekshmi	Sociology	Permanent	M A, M.Phil
9	N K Sunil kumar	Sociology	Permanent	M A ,M Ed
10	Prathibha	Psychology	Permanent	MA
11	Sjeeja.S.	Commerce	guest	M.Com
12	Gopikamenon	Mathematics	guest	M.Sc.
13	Anaswara.S	Mathematics	guest	M.Sc.
14	Soumya S. Nair	Statistics	guest	M.Sc.
15	Remya I.R.	Chemistry	guest	M.Sc.
16	Sandhya P.	Botony	guest	M.Sc.
17	Sarasija P.	Zoology	FIP guest	M.Sc. Ph.D
18	Priya D.S	Mathematics	FIP guest	M.Sc.

# Teaching and non teaching staff ratio

The staff strength of the college consists of 94 teachers and 50 administrative and laboratory staff. As the Government imposed a ban on the recruitment of new staff in1998 which has not been lifted till date, the teaching posts that fell vacant since 1998 were filled up by guest lecturers, paid by the Parent Teacher Association.

No of teachers	No. of non-teaching staff	Ratio
94	50	1.9:1

# Improvements in library services

The college has a central library housing more than 56000 books managed by four full time staff members. In addition to this all major departments have department libraries for reference purpose. The categorization of books and stock entry are made in the central library. The books to be purchased are selected by the faculty members, research scholars and students. The Library regularly update text books, reference books and journals. Inter departmental borrowing is encouraged particularly for research and P.G students. All major Departments have also a good collection of books in the emerging areas and reading room facilities.

A library advisory committee functions in the college, monitors the functioning of library and makes recommendations to the Principal for improvements. The committee has teachers, librarian and a student representative as members. Central library, in addition to its functioning during class hours and intervals resorts to extended library hours prior to the commencement of examinations. The books are categorized as per the library software and arranged systematically for quick access. A programme to extend browsing facility to the central library is being implemented with the assistance of UGC. This will be supplemented by online subscription to journals to boost the research activities of the institution.

Department of Chemistry and Physics received financial assistance to the tune of Rs. One lakh each from DST for purchase of books as part of the Fist program and the same is being implemented by procuring standard text books and reference books from reputed international publishers. The future grants to be received under this head will surely boost the collection of good quality library books. The proposal for assistance under the FIST programme submitted to DST by the life science departments if approved, will transform our science libraries into best resource centers.

### **Class Room Library**

Some departments have a programme called "class room library" consisting of books contributed by teachers and offered as complimentary copies and one of the students is given charge of its up keeping. These books are available during working hours for reading and reference work, after which, the students can borrow it for one night and return it the very next day. It has been found that the reading habits of many students have improved since the inception of this programme. We are extending this innovative programme to other departments.

#### **Career Guidance Corner**

The Career Guidance Corner of the General Library does admirable service to the students. The collection of books in the section disseminates important information regarding various types of competitive examinations and has a ready stock of year books, study materials and reference books of various competitive examinations.

#### **Book Exhibition**

The General and Departmental Libraries conduct thematic book exhibitions coinciding with some of the important days. The General library periodically conducts the exhibition of books written by famous authors and National leaders on special occasions. The Departmental Libraries also conduct similar exhibitions to showcase their special books.

# New books/ journals subscribed and their value

The funds needed for the purchase of books and journals are normally derived from plan funds of the UGC and the library fee reimbursed by the state Government. During the year 1081books were purchased for an amount of `4,49,410/- consisting of `2,68,541/- from UGC and `68,889/- from PD, and `99,980/-from DST. Eighty three important books with a cost of more than `1000 each were purchased during the year

The book selection for the General Library is finalized by the Library committee. The members of the teaching staff, research scholars and students can give suggestions for the purchase of books in the General Library and the committee finalizes the list by inviting proposals from the stake holders. Journals subscribed are listed. [Appendix 11]

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

Feed back reports from students, parents as well as general public are taken into account before initiating important academic reforms. Direct feed back is collected through structured discussions during PTA (Parent Teacher Association) and PTSI (Parent Teacher Student Interaction) meetings. Feed back data is also collected using questionnaire. Normally three PTA meetings are arranged for each class during an academic year, one in each term. The student performance is assessed on the basis of regularity in attendance, test-paper and university examination marks. The meeting usually transpire in the presence of the Principal, in which parents and students given total freedom to express frank opinion about the functioning of the college in general and departments in particular.

Organized feed back collection has a two pronged strategy. One by the college using printed forms containing questions for students to present their views regarding the functioning of the different organs of the institution and the practices followed. **[Appendix 12]** The feed back data is consolidated which forms a useful guide for preparation of the action plan for the next year.

A second method of feed back is the one that is being organized by the fervent teachers who utilize it as a means for enhancement of academic fervor. Teachers often use a self refined questionnaire for appraising their teaching methods, styles, degree of comprehension, clarity of perceptions, depth of the topic etc. This method has some unique features like diversity of approach, vision, ambience and innovative approaches. At the same time there are certain inherent dangers like the inclusion of substandard questions, not properly conceived with objectivity. Hence it has been found that several members of the faculty make use of the common questionnaire prepared by the IQAC. It has been stipulated that students are at liberty to conceal their identity in filling up the forms and teachers use the data for self improvement. It is obvious that assessment by students constitute the most effective and vibrant feedback mechanism for the improvement of the teaching community, especially when done by Post graduate students. This is an optional provision for teachers, but many teachers consider this as an opportunity for self improvement and willfully organize the programme.

Year	College budget	PTA budget	No. of students	Unit	cost	of
				education		
2007-2008	54804811	1653737	2163	26101		
2008-2009	70480034	1923101	1889	38328		
2009-2010	75438525	1900000	1857	41647		

# Unit cost of Education 2007-10

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

#### Administration

Administration system has been partially computerized and the same is being fully computerized as part of the total office automation program (TOAP). Data collection, storage and retrieval are important for quick decision making, for which extensive use of computersis essential. Student data such as attendance, examination marks etc are collected and stored in the computers. The members of the faculty and Heads of departments use computer, internet and LAN to furnish data to the Principal and university. Compilation of the data for college level decision making is done by the computer technician. Data Communication to the management is also done using computers and internet.

### Admission

Admission process of Mahatma Gandhi College has been computerized since past seven years and the rank lists are promptly published in the college website, giving an opportunity for students to expedite the

chances of getting admitted to various courses, from the ambience of their home. All updates are given periodically in the website and once admission is over, data compilation of admitted students is done.

This year the University of Kerala initiated a centralized application processing and allotment process for various P.G courses with ensured transparency. The students can apply online to the University. The University process the applications and upload the rank list in their site. The colleges have to download the rank list prepared by the university from the appropriate site and enroll the students.

#### Examination

Examination process is by the conventional means. However preparation of question papers, nominal rolls, examination attendance etc makes extensive use of computers. During the internal examinations computerized processes are employed for preparation of mark lists and grades. The examination registrations as well as the issue of hall tickets are now partially computerized.

Issue of certificates, mark lists etc are areas that come under the preview of the University. The certificates from college are also issued by conventional means at present. In a very near future they may change to computerized process.

#### **Internal Assessment**

The internal assessment of students involves three components viz. attendance, test papers, assignments and or seminars. The student's performance is compiled with the use of computers. The scores obtained by students are published in the notice board and complaints and grievance of students are looked into. The communication of the internal marks to the University is partially computerized. It is done online for the PG classes, but for the degree classes conventional procedures are followed.

# Increase in infrastructure facilities

### **Teaching through ICT**

Teaching through ICT was introduced in the college a few years back. The research and the PG departments make extensive use of this technology. The ICT learning has made it easier for the tutors to teach everything much efficiently, as the lessons are thought with the help of graphics and animations.

No	Instrument		Department	Price
1	Digital Oscilloscope	Storage	Physics	100000

#### New instruments acquired during 2009-10

2	High Temperature Furnace	Physics	400000
3	LCR meter	Physics	900000
4	T L reader	Physics	350000
5	Sputtering Unit	Physics	200000
6	Constant temperature bath	Physics	50000
7	Michelson interferometer	Physics	75000
8	Olympus microscopes	Botany &Zoology	10000
10	Computer	Chemistry	100000
11	Melting point apparatus	Chemistry	75000
12	Flame photometer	Chemistry	35000
13	Polarimeter	Chemistry	40000
14	Spectrophotometer	Chemistry	50000
15	Electronic balance	Chemistry	75000
16	Computer	Chemistry	100000
17	Melting point apparatus	Chemistry	75000
18	Flame photometer	Chemistry	35000
19	Polarimeter	Chemistry	40000

### Lab Modernization

The laboratories of the Chemistry and Physics were developed using the FIST fund. Labs are equipped with advanced and sophisticated equipments. Department library was updated with the latest books and journals. New software was purchased and computer lab was modernized. The access to the journals is made online. Teaching of IT based subject has been done through LCD screens in the computer classes.

### Seminar Hall

Overhead projector and electronic roll down screen are now permanently installed in the seminar Hall. The seminar hall will be furnished with A/C so that presentation and seminars will be done in a more convenient

environment. The seminar hall will be connected to the LAN and will have access to internet. More convenient seating and audio mechanisms will be introduced to the hall subject to the availability of funds.

#### Annual Maintenance Contract

The computers available in the general computer lab, departments and office are maintained by AMC.

#### **Office Automation System**

The college automation system aims at automating the college operations. The automation system made interdepartmental communications easier. The system also helps us to give the student result and details online.

#### **Physical Education**

The gymnasium of the Physical education department was updated with more power equipments.

#### Library

The library software is updated and database strengthened. The browsing facility in the library is enhanced.

#### Communication

The PBX line in the college provides opportunity for inter departmental communication. This makes the adjustment of classes between departments easier. The departments can also communicate with the principal's office, administrative and account office, Library, Computer Lab and Canteen through the intercom. The PBX system was renovated this year and is functioning well. The LAN is extended and strengthened to make data transfer more efficient.

#### **Proposed Projects**

#### **ICT classrooms**

Over the last decade, information and communication technologies have enabled changes in the way people live, work, interact and acquire knowledge. ICT and social computing can improve the effectiveness of learning and the learning outcomes, but results depend on the approaches used. Hence, initial and inservice teacher training should disseminate insights and best practices with new innovative approaches, encouraging teachers to experiment with digital and media technologies and to reflect on the learning impacts of their own teaching practices. Establishing and participating in teacher networks and following innovative practice development of the field should become part of teacher training.

#### Wi-Fi Campus

Wi-Fi access is proposed to be established throughout the Mahatma Gandhi College campus. Students and faculty members will be provided their login ID and password to access the college's Wi-Fi network. Comprehending the vast expanse of the internet for referring to journals and publications, the campus will be enabled with this facility. Students can access the web round the clock in the labs and also on their laptops even after the normal college hours. Notably this technology will offer high performance and congestion free connections thus facilitating better and faster connectivity.

#### Library Automation

Innovative E-Libraries, are proposed to be set up that may store the entire information about available books and other resource material on computers. E-Library can subscribe to international e-journals, books and reference articles. These libraries may also possess over 300 video and web based courses prepared by the faculty of the institutions.

#### **E-Class rooms**

Spacious e-class rooms having excellent ambience and equipped with all modern teaching aids like LCD, video courses, multi media projectors etc. are to be made available from where the students can consult study material related to the syllabus and beyond.

#### High speed internet dedicated T1 line

A high speed dedicated T1 line will be subscribed. The high speed line will give dedicated bandwidth which will give high speed internet to the users.

#### Smart class

Smart class is a technology oriented initiative for colleges. It provides tools and content for interactive selfpaced learning by students, as well as rich-media presentations for teacher-led classroom learning. Smart class is available for teachers and students over the web, and can also be installed on the college's local server for faster and more reliable access to the content. The content available consists of pedagogically sound and visually rich curriculum resources mapped and customized as per the College's Scheme of Work. This content can be streamed into the classroom and shown by teachers in the classroom to make abstract concepts real. Teachers may also include their own learning materials for use by their students. The optional software available with smart class supports creation and management of question bank and eTests. With this tool, teachers will be able to create multiple choice questions and deliver them to students. Online tests can be conducted with the help of the system.

#### **Multimedia Lab**

The multimedia lab will have high configuration system. The systems can be used for video, audio editing. It can be also used for graphic works. The students will be given suitable training for media, publishing, graphics and web design software.

## Technology up gradation

#### **Renovation of LAN**

Computers of the different departments were networked in the previous years. The system was upgraded with an advanced and more user friendly software. Interdepartmental communication and data sharing is now practiced trough the LAN system.

#### Office automation

In addition to salary bills and PF schedules more functions were automated during the period. The different type of fee concessions and scholarships are now automated. The students have to apply online for fee concessions and scholarships. After proper verification they are forwarded to the Government. The allotment as well as dispersal are automated. All students have to open bank accounts and all scholarships are operated through these accounts.

#### Communication

A good part of the communications with the management are now carried out through internet. Periodic reports are sent as mail attachments. The University is also making good use of the e-mail service for quick communication.

#### Improved library automation

A detailed database of the books and journals available was made.. The Introduction of the software made book indexing and issuing easier and faster.

No	Area	Old technology	New technology	Departments
1	Laboratory heating	Gas burners	Electrical heating	Chemistry
			Microwave heating	
2	Optical density	Colourmeter	Spectrophotometer	Chemistry

#### Technology upgradation in science laboratories

				&Botany
3	Weighing	Chemical balance	Electronic balance	Chemistry, Physics, Botany, Zoology
4	Vacuum distillation	Vacuum pump	Rotary evaporator	Chemistry
5	Melting point	Capillary tube	Melting point apparatus	Chemistry
6	Signal analysis	Cathode ray Oscilloscope	Digital storage Oscilloscope	Physics
7	Voltage, frequency measurement	VTVM	Digital frequency meter	Physics
8	Electronics	Velves, transistor,	Digital/analogue integrated circuits	Physics

## Internet training to teachers and students

## Training in IT for Research Scholars and PG students

The research scholars and PG students attached to various departments are given special training for making them IT enabled. The research scholars require browsing net for updating their work in their research area. The PG students also have to carry out a research project during their fourth semester. The information regarding Scirus, Science Direct etc. are disseminated to them to make their literature search easy. The students and faculty members also make use of the Kerala University Library, VSSC and NIIST libraries for this purpose.

#### **Online registration for University Examinations**

The internet training during the year concentrated on the post graduate students. Even though many students had exposure on the use of internet, the use of it for official business was limited. The post graduate students have to register online for the University examinations. The training for this purpose was provided by the college through the computer club. The hall tickets are also forwarded online. This has to be downloaded by the Principal and distributed to the students. The office staffs were given training for these operations.

#### Net use by teachers

The use of internet by teachers also increased during this period. Teachers were encouraged to submit the student data such as attendance, mark sheets of internal examinations, question papers of internal examinations etc through internet. Many teachers who used to have no operational mail id got new ones in order to facilitate the communication with the Principals office.

#### Notices through the notice board of website

Another action that increased the internet usage was the publication of notices and important events in the college website. The rank list for degree admissions was also published in the website.

### Financial aid to students

The NSS group of institutions was started with the objective of providing quality education to the economically and socially downtrodden sections of the society. True to this objective, the institution take special care to see that financial backwardness never arise as a problem for acquiring quality education. This may be one of the reasons why majority of the students coming to this institution are from the BPL sections of the society. A number of schemes are available to such students for pursuing their education with confidence. The management joins hands with the Government in providing financial assistance to such students.

N o	Name of scheme	Beneficiaries	Agency	Nature of help
1	Lump-sum grant	SC/ST	State	Advance of money
2	KPCR	Financially backward	State	Fee waiver
3	Fishermen scholarship	Children of fishermen	Fisheries Dept.	Scholarship
4	Suvarna Jubilee scholarship	selected students based on Merit and income	Higher education Dept	Scholarship
5	Higher education council scholarship	BPL students	Higher education council	Scholarship
6	Indira Gandhi Single Girl child	Single girl students	UGC	Scholarship

#### Schemes of financial aid available to students.

	scholarship			
7	Hindi scholarship	Hindi students	Central Govt.	scholarship
8	Suvarna Jubilee scholarship	Selected students	Management	Scholarship

#### Management

The institution takes extreme care to see that educational expenditure of the students are kept at the minimum. The Management collects no donation or contribution even to the admissions under management quota. The institution collects only the fee prescribed by the Government. Above all this the management is providing scholarship to the educationally backward students. The Kanaka Jubilee Scholarship is sponsored by the Management to all students studying in the NSS institutions on a merit cum means basis.

Kanaka jubilee scholarships provided by Management

No	Course	Name of scholarships	No	Amount
1	Degree	Kanakajubilee		2000
2	Post-graduate	Mannam Nidhi		2000

#### Parent Teacher Association

The source of funds for the activities of the PTA is the donation collected from parents during the time of admission. In the case of parents having financial difficulties no donation is insisted. The PTA in its annual function provides cash awards to meritorious students. The PTA also provides financial assistance to the needy students.

#### Teachers

Many departments provide financial helps to the neediest students through voluntary contributions from teachers. Not much publicity is given to these activities since it may affect the self esteem of the recipient students.

## Activities and support from the alumni association

The alumni association has been a source of inspiration and strength to the institution. The college with its long history has been able to supply prominent personalities in all walks of life. M G College has an association of passed out students and retired teachers called MGCOSTA which has been functioning for a

long time. In addition to this, each department has a separate alumni association which meets periodically. The important activities of the association may be summed up as follows.

- 1 To Provide support for the infrastructure development.
- 2 Provide a platform for the reunion of old students.
- 3 To Provide resource persons for seminars, workshops etc.
- 4 To Facilitate placement services to students.

The alumni of MG College contributed a major share for the building of the Mannam block which at present accommodates three Departments and 15 class rooms. Plan for the construction of a new research block with the help of alumni is under consideration.

The alumni meetings provide a good platform for the old students to reassemble. People in different walks of life coming together and sharing their experiences with the students are a good learning experience as far as the students are concerned. Last year the commerce alumni organized a cultural fest which was one of the best programmes organized at the college during the year.

Many of the alumni who are prominent in a particular area of knowledge take pleasure in coming to the college and sharing their knowledge and expertise with the students. In almost all seminars organized at the institution invariably at least one of the resource persons usually happens to be an alumnus.

The alumni association is rendering valuable help in the activities of the career and placement cell. A good number of our students could find placement due to the support rendered by the alumni. This year we have a plan to identify and list these sources and systematically tap its potential to improve the career prospects of our students.

## Activities and supports from the Parents teachers association

The Parent teacher association (PTA) has established itself as an essential component if all aided institutions. The Government takes the responsibility of payment of staff and Management takes care of the development and maintenance of infrastructure. The UGC provide funds for specific schemes. The other areas that require attention are being cared by the PTA.

The PTA of the college has a general body with all teachers and parents of students studying in the college as members. The general body meets annually and elects an executive council of ten members with equal representation from teachers and parents. I addition to these members the principal will function as the president. The Secretary is elected from the teachers and Vice president from the parents. The executive council meets periodically and decides upon the functioning of the PTA

The activities of the PTA may be categorized under four headings.

- 1 Support for academic programmes
- 2 Student amenities
- 3 Support for maintenance and development of infrastructure
- 4 Maintenance of discipline in the campus.

The appointment of permanent lectures is delayed due to the policy of the Government consequent upon the de linking of pre-degree from college. The PTA supports the institution by providing pay for the Guest Lecturers posted in various departments. The PTA also provides funds for seminars and invited lectures organized by various departments. The terminal examinations are partially funded by PTA. The institution arranges at least two PTS (Parent- Teacher- Student) meetings every class. The PTA supports this special venture of the institution.

PTA has taken the initiative to appoint security personal as well as sufficient cleaning staff. Regular cleaning of the building as well as occasional cleaning of the premise is organized by the PTA.

Majority of students studying in this institution are from the lower strata of society. The PTA extends financial support for the neediest students. The students who excel curricular, co-curricular and extra curricular activities are also encouraged by the PTA through cash awards.

All minor repairs for power problems, water supply problems and sanitation works are arranged by the PTA. Urgent medical care for students, accident care etc. are also addressed. PTA also contributes towards the improvement of infrastructure. The Mannam block was constructed with the help of a liberal contribution from PTA.

PTA renders help to the institution in dealing with the problems of security and indiscipline. There were problems due to outsiders entering the campus unchecked. The PTA took the initiative to appoint security personal and also for the issue of identity cards to students and staff.

#### **Health Services**

At the time of the creation of the World Health Organization (WHO), in 1948, *health* was defined as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity". The college also understands this and arranges various activities for the physical, mental and social well being of the students.

1. Students were given awareness camps for promoting total physical & mental health along with periodical medical examinations by University Health Centre,...

2. The health card programme & the service of a part time trainer initiated by the department of Physical education which was found to be effective was continued this year.

3 Yoga classes were started for teaching and non teaching as a new experiment and were found to be very effective. The Psychology department also organize yoga and meditation classes.

3. The Psychology department organized seminars on suicide prevention and mental health and related topics. The group tutors identify students with depression

4. The group tutors identify students with mental illness and they are provided with counseling service by the psychology department.

5 The class teachers are in charge of the overall health of the students of their classes. The medical inspection is conducted in the University Health services by them.

6 Students are encouraged to donate blood, thus inculcating pro social behavior. Many students and staff came forward extending their willingness to donate blood. A well functioning blood donor forum is functioning.

7 The Department of Zoology conducts awareness campaign about healthy habits and life style diseases.

8. The mental health club under the auspices of the Department of Psychology is playing a leading role in the organization of the health awareness programmes. Student counseling is an important activity that the department is organizing through the club.

Date	Programme	Activity	Resource person
8-8-09	Stress reduction	YOGA classes	Dr Vanajakumari
21-7-2010	Councilling(Parent)	Seminar	Joseph Padamadan
21-7-10	Councilling(Student)		

#### Programmes on mental health organized by the institution

## Performance in sports activities

Our college, one of the leading institutions in the University of Kerala, has consistently been putting up outstanding performances in the university intercollegiate sports and games competitions. We also play a valuable role in bringing up sports persons to national and international levels.

We make sincere efforts to attract sports talents to our college. We follow professional as well as transparent system of enrolling sports persons into our college. The college organizes long term coaching camps and sufficient practice matches before proceeding for the University competitions, particularly in our priority areas. The Department of Physical Education takes keen interest and leadership for the college to attain glory. The activities of the Department are focused to produce better results in University sports and games competitions. In addition, we also seek every possible technical support from other sources, which include: Kerala Sports Council, the Department of Physical Education University of Kerala etc.

More than 25 athletes / players make it to the prestigious Kerala University teams every year, in different disciplines. Our players regularly occupy a place in the highly competitive Kerala state teams such

as: Football, Cricket, Swimming and Waterpolo. We have also been able to produce a few sports persons with international stature.

. Our college has been the University champions in cricket for the last seven years in succession, which is a record. We have been maintaining an excellent team in Football for several years now. The team had won two University titles in the recent past. Our university team, which won the All India Inter-university Football Championship, in 2006-07, comprised six players from our college. We also stand either at the first or second position, both in Water polo and Swimming championships, for the last ten years. Lately, we are the reigning champions. We also maintain good teams in Weight-Lifting and Power-Lifting. Our team won the Power-Lifting championship in 2009-10. We also retain high performance teams in Volleyball, Softball and Tennis.

#### PERFORMANCE CHART-2009.10

(University Intercollegiate Championships only)					
Discipline	Position	No. of Performers Selected to			
		the University Squad			
Cricket	Winner	05			
Waterpolo	Winner	05			
Swimming (Women)	Champions	03			
Boxing	Champions	03			
Power Lifting	Champions	01			
Swimming (Men)	Runners up	02			
Tennis	Runners up	02			
Best Physique	Runner up	01			
Cycling (Women)	Runners up	01			
Football	Semi-finalist	04			
Softball	Semi-finalist	02			

## List of Players Selected to the University Teams 2009-2010

Discipline	Name	Class
	1.Rakesh . J B	III Psychology
Tennis	2.SyamBabu	II BCom
Softball	ball 1.JithinJayakumar I English	
	2. Rakesh .M .K	II English
Power lifting	1. Rajeev .P.S	II Hindi
	1. Sarath Gopal. S	II Economics
Football	2. Dhaneesh. M	II Economics
	3. Shahir.	I History
	4.Melbin	I B Com
Cycling Women	1. Parvathy .V.G	I Psychology
	1. Shjan Salim	II Zoology
	2 Sandeep.R	III BCom
Cricket	3.Unnikrishnan	II BCom
	4.Rahul.L.R.	II Sociology
	5.Jijin.M	II BCom
Baseball	1. Rakesh .M.K	II English
	1. Saranya. S .Nair	III Sociology
Swimming women	2. Anuja.A	III BCom
	3.Neethu	I Zoology
	1. Praveen	I History
Swimming Men	2.Jithin Viswan	I Sociology

#### Incentives to outstanding sports persons

The institution has a good track record for promoting sports activities particularly in team events like football and cricket. The college has been able to supply quality players to state level teams in these disciplines. The college could establish this tradition through the support it has been giving to sportsmen.

Incentives start with the selection of student for the seats reserved for sportsmen. The achievements of the candidate in the respective disciplines are the only criterion that is given consideration. The candidates selected through this procedure are given full opportunity to develop his potential. This comes in the form of special coaching sessions, presentation for maximum possible competitions and placing the entire available infrastructure at his disposal. He is allowed to enjoy maximum possible flexibility in academic timings and schedules. Whatever loss of academic input he suffers is made up through special tuition sessions organized exclusively. This facility free the sports personal of the tension of loosing classes and equip him with the ability to face the examinations with confidence.

The college is very particular in honoring talents and felicitating achievements. The special love and appreciation bestowed upon the outstanding sportsmen by the students and college community is a very strong force behind their achievements.

#### Student achievements and awards

#### Academic achievements

The institution produced very good results during the year. The UG results averaged 82 % and the PG results 86%.

Ν	Discipline	Pass	First c	class
0		percentage	percentage	
1	UG	70.6	18.78	
	Humanities			
2	UG Science	94.7	56.45	
3	Commerce	72	38.9	
	UG Average	82	38.05	
1	PG	88	67.14	
	Humanities			
2	PG Science	86.	76.1	
3	PG	94	78.95	
	Commerce			

PG Average	86	74.06

The institution could register one university rank for sociology this year.

## Sports and extracurricular activities

## List of Players Selected to the University Teams 2009-2010

Discipline	Name	Class
	1.Rakesh . J B	III Psychology
Tennis	2.SyamBabu	II BCom
Softball	1.JithinJayakumar	I English
	2. Rakesh .M .K	II English
Power lifting	1. Rajeev .P.S	II Hindi
	1. Sarath Gopal. S	II Economics
Football	2. Dhaneesh. M	II Economics
	3. Shahir.	I History
	4.Melbin	I B Com
Cycling Women	1. Parvathy .V.G	I Psychology
	1. Shjan Salim	II Zoology
	2 Sandeep.R	III BCom
Cricket	3.Unnikrishnan	II BCom
	4.Rahul.L.R.	II Sociology
	5.Jijin.M	II BCom
Baseball	1. Rakesh .M.K	II English
	1. Saranya. S .Nair	III Sociology
Swimming women	2. Anuja.A	III BCom
	3.Neethu	I Zoology
	1. Praveen	I History
Swimming Men	2.Jithin Viswan	I Sociology
	1.Anoop	I MSc Zoology
	2 Vishnukumar	I Physics
Water Polo	3.Dhaneesh.T	II Psychology
	4.KrishnaKumar	I Chemistry

## Activities of the Guidance and Counseling Unit:

The Mental health club, in association with the Career and Counseling Cell conducted yoga classes, stress reduction sessions and counseling services. The counseling unit that was started in our sister institution, N S S Higher Secondary School, continued the activities this year also New units were started in neighbouring schools. Involvement of the faculty of this dept. as resource persons for various T.V channels, resolving mental agonies continued this year also.The induction programme for students (1<sup>st</sup> Degree) proved to be effective in goal setting.

Date	Activity	Торіс	Resource person
9-7-09	Counseling	Study skills - N.S.S.Higher Secondary School Kesavadasapuram	Dr.Mridula.Nair HoD,Dept: of Psychology,M.G College
12-10-09	Induction programme for Ist D.C students	Adjusting to new life experiences	Dr.Gireesh(clinical psychologist)
10-10-09	World Mental Health day celebration	Various programmes- talks,skits ,spending a day with inmates of Cheshire Polio Home	Dept:of
2-2-10	Inter-dept: programme	Life skill development to sociology students.	HoD,Dept: of Psychology,M.G College

## Placement services offered to students

A committee headed by the Principal appointed Dr. Bindu, Sr. Lecturer in Physics as placement officer during the academic year 2009-2010. Besides the regular activities, the committee prepared a proforma for collecting the bio-data of all the final year students. The proforma was distributed among the final year student and the data was collected. It was found very useful as most of the companies and banks that came for campus recruitment could gather a first hand information about the background, skills and aptitude of the student from the proforma. From the details collected through the proforma, the placement cell could create a file and now the cell is equipped to forward these details to different recruitment agencies through the net.

As tens and thousands of vacancies were reported in nationalised banks, there was a clamor for coaching in tune with the competitive examinations of banking recruitment agencies. Special sessions were conducted on numerical analysis, clerical aptitude and essay writing. The service of the professors of the

Department of Mathematics, Economics and Commerce was used. Experts from centres which specialised in coaching for banking recruitment were invited to coach the students. The expenses towards it was met by P.T.A.

A lot of our students got employment in State Bank of India even while they were doing their final year. Globalization and liberalization have influenced career guidance and placement as well. They have thrown in a lot of opportunities. A large number of girl students have either completed or doing additional courses like air hostess training. Career guidance and placement cell help them by informing them of vacancies and arranging mock-interviews.

Many worshops were conducted on career development this year under the auspices of the career development and placement cell. Apparel training and design centre, Thumpa, conducted a one day seminar. John & Mary International, academy of corporate training, conducted a walk-in-interview for a domestic call centre on January 13-14th 2009 from 10.00 am. They selected about 15 students who were willing to work outside. They were trained after the completion of their course and appointed later. A seminar was conducted on MBA as a career and career prospects after Degree, by Triumphant Institute of Management Education Pvt (Ltd). Infosys Technologies conducted a test for B.Sc Physics and Maths students who have scored more than 60% at the XII level. Five students were selected to undergo their training. They were appointed after the training. In the written test and interview conducted by Wipro fifteen students were selected to undergo training at their facility at Bangalore. All there companies were very particular to select only those students who are well versed in English and mathematics. So the career development and placement cell gives special attention to those subjects.

## Development programmes for non teaching staff

The developmental program for administrative staff continued with more emphasis in the computerization of administration. The course offered by the computer club in the computer literacy enabled them to acquire advanced knowledge in different types of office management programmes. Other than the common development activities which are continuing for the last few years two workshops were organized during the year.

Four staff members namely Dr. G. Madhukumar , Principal M. Rajashekharan Nair, administrative assistant K Pradeep typist , N Harikumar UD Clerk , participated in the one day programme on computerization of establishments (SPARK )conducted at ST.Mary's School Pattom on March 2010 organised by the Govt. Of Kerala. In relation to the SPARK program.

Six staff members AA(M Rajashekharan Nair), Jr. Supdt.(K Gopalakrishnan Nair)Two UD clerks(Harikumar and Harikishore) and two typist (K Pradeep and Ramakrishnan Nair) participated in the UGC sponsored program on office management of NSS college Karamana on April 2010. The program discussed the benefit of SPARK (Salary Processing through Service and Payroll administrative Repository of Kerala) along with other office management techniques.

The non-teaching staff were deputed for training on electronic submission of scholarship applications and their online processing.

The non-teaching staff members and a teacher were deputed for attending seminar on centralized online admission process.

## **Healthy Practices**

The Admission process to various courses has been marvelously executed with the assistance of admission committee and was carried out as per University rules & regulations

Students were motivated through various clubs to practice what they studied in the classroom .

Dedicated faculty actively engaging in extension activities and community awareness programmes along with students.[Appendix 13]

The goal of 100% Computer literacy, spoken English and personality development programs continued with more enthusiastic students.

Teaching ,non-teaching staff, students were made aware of B.M.I and remedial measures were suggested with the help of experts.

Health clubs with multi-gym continued as usual..

PTSI, strengthened since last few years and many parents willingly extended their services as resource persons.

The campus succeeded in maintaining it smoke free..

A well maintained garden with the assistance of both Students & staff strengthened the teacher-student bond.

.Legal awareness programme continued this year also

#### Legal awareness programme

Date	Activity	Participants	Resource person	
12-8-09	Counseling for parents	Parents	Dr.Kumari Bhagavathy,HoD,Dept: Psychology,Govt:Women's Thiruvananthapruam	of college
7-9-09	Legal awareness	Students	Judges and Advocates of District court	

## Linkages International, National

Many departments have linkages with national and international agencies in the areas of research. Many of the research are collaborative programmes and many joint publications are produced every year.

-			
bai	Sultans Quaboos University, Oman	Utilization	of
		instrumental facilities	
	Dai	bai Sultans Quaboos University, Oman	

National

Department	Name of faculty	Institution / academy	Nature of linkage
Chemistry	Dr. M D Ajithabai	KSCSTE Govt of Kerala,	Project
		NIIST TVM, TBGRI TVM, RGCB TVM,	Utilisation of
		SCT MST TVM , IIT Madras, IISC	instrumental facilities
		Bangalore	
Chemistry	Dr M R Sudarsana	CUSAT, Ernakulam	Instrumental facilities
	Kumar		
Physics	Dr K Rajendra babu	V S S C, Trivandrum	Instrumental facilities,
			Library,Consultancy
Botany	Dr M Jayasree	TBGRI, Palode	Joint programmes
Mathematics	Dr K Karunakaran	Dept. of Mathematics,	Research
		University of Kerala	
Malayalam	Dr. Ajith Kumar	Ministry of Panjayathraj Govt. Of India	Book Publication
		Women's development corporation	Book publication
Malayalam	Dr. K. Jyothish	NATPAC Doorasarshan, Surya	Book publication
	Kumar	TV, AIR , IGNOU`	Broadcasting media,
			TV and Ratio.

# PART C

## Prospective plan for the next year

1 The limitations of infrastructure has been limiting the utilisation of the full potential of IT tolls in the teaching learning process. Internet availability need to be increased and it should be possible for the teachers to use it for class room teaching.

2 Language teaching should be enriched by the support of a language lab.

3 Library should be strengthened to attract the students. More online journals are to be included and CD library should be strengthened.

4 Examination practices require modification. In addition to the conventional system IT supported examination techniques should be introduced. An online question bank should be set up and students should be given the opportunity to take online examinations.

5 A multimedia lab can support teaching in many disciplines. It can increase the effectiveness of biology demonstrations, fecilitate electronic demonstration of chemical reactions and also assist the screening of educational films.

6 The international standards of research are rising and it is high time that our research infrastructure expand to meet the challenge..There should be more sophisticated instruments for scientific research and more reference facility for the researchers. Programmes for incorporating the research culture in students should be initiated.

7 Extension activities require greater attention. Blood donation, anti-AIDS campaign etc should have well arranged procedures.

8 Parental and student counseling should receive more attention.

9 The institution has a lot of economically backward students. There should be programmes for supporting these students in their education.

## **Clubs and Committees**

#### Library Committee

M G college has a central library and thirteen department libraries. The library committee functions to promote effective and interactive access and use of information resources for all users. It prepares clearly-worded rules and guidelines with regard to hours of access, circulation policies and other regulations to offer better services to the users. This committee is vested with the responsibility of recommending, selecting and purchasing books for the library. The committee also puts forward its recommendations regarding the improvement of infrastructure and the means to make it more user-friendly.

#### **Research Committee**

Research has developed as an important component of the academic activities of the college. The institution has seven research departments, with about30 research guides and more than 100 research students. The committee attempts to enhance research output of the college. It makes the members of the faculty informed of the schemes of the UGC and other funding agencies. The committee also makes sure that the proposals are submitted in time and proper follow up actions are made. It also makes invaluable suggestions for the improvement of the research centers of the college.

#### Examination committee

Internal examinations are now an important part of the academic process. Semesterisation has increased the frequency of the examinations. The examination committee supervise the conduct of internal examinations.

#### Purchase Committee

The purchase committee monitor all the purchases made by the institution. The institution is keen on maintaining credibility and transparency in all transactions, and it respects social audit more than anything. As a part of upholding the idea, a committee is formed to supervise all the purchases made in the campus. Necessary guidelines are also framed for the committee to exercise its powers judiciously.

#### Academic Committee

This is the body responsible for planning and monitoring of the academic programmes in the college. The committee develops the academic calendar for the year. The periodic review meetings study the compliance of the schedule planned initially. plan. The academic calendar fixes the time frame for all the academic, co-curricular and extra- curricular activities and the examinations,

#### **Discipline Committee**

Discipline is the bedrock on which an academic institution functions. Discipline committee is formed with the task of ensuring a peaceful campus congenial for efficient academic business. Any act of

commission or omission on the part of the students who threaten the peaceful campus atmosphere will be properly investigated and appropriate disciplinary actions also be recommended to the college council for final approval. The committee consists of senior faculty members, NCC Officers, NSS program Officers, Staff advisors to the College Union, elected members of the College Council and five elected student representatives of the College Union.

#### Student Affairs Committee

The Committee looks after the student affairs in the college. Committee consists of the Staff Advisor to the College Union, Convenor Discipline Committee, President, Arts Club, Treasurer to College Union, Chairman, general Secretary and Vice Chairperson.

#### Grievances Redressal Cell

The committee is vested with the authority to settle any type of grievances raised by the students, teachers and non-teaching staff of the college. The students are expected to lodge their grievances with their respective tutors who will in turn intimate the matter to the committee for necessary action. Students are not encouraged to petition to the principal, at first. They have to avail themselves avenue provided by the grievance redressal cell and then to the principal, if the grievances are not redressed.

#### Anti Ragging Cell

The cell functions to prevent any physical or mental torture or any disorderly conduct towards any student of this institution causing apprehension, dread, humiliation or agitation in him or her. The college is particularly firm on taking action against the offenders, as per the provisions contained in the Anti Ragging Act of Kerala.

#### Cell to Combat Sexual Harassment

The cell functions as per the guidelines issued by the University of Kerala. The objective of the cell is to protect the lady students from atrocities and helping them in hours of need. Any type of sexual harassment physical, verbal or mental shall come under the purview of the cell, and it is empowered to initiate legal actions against such offences.

#### Ethics Committee

Ethics is the science of morals. The right kind of education is value-based or ethics-based. Ethics committee is constituted to instill basic human values in the students and thus make them kind and compassionate to the community around.

:<u>SERVICE CELLS</u> Career Guidance & Counseling Cell Realizing the needs of the fast changing world, and the opportunities thus created for our students, the college has set up a Career Guidance and Counseling Cell. The cell primarily aims at train and guide the students in their search for a better career.

#### Placement Cell

The cell aims at obtaining the best possible placements to the final year students and making them aware of the higher education options available to them in various subjects. The Cell has identified certain areas which have a lot to do with the campus selections, and training is imparted according to the formulated programmes. The expertise available in the institution is tapped optimally for this purpose.

#### Human Resources Development Cell

The activities of this cell in the college supplement the curriculum programme for moulding the students into responsible citizens. The cell organizes inter- disciplinary classes during free hours. The programme of the cell is intended to develop leadership qualities in students.

#### Women Study Cell

The cell functions with the objective of empowering the girl students with confidence to face the challenges of life. The unit organises programmes for enabling the lady students to become the responsible women of tomorrow. It helps them to sholder responsibility with greater confidence, commitment, efficiency and effectiveness.

#### Counselling Centre

Students Counselling Centre helps the students to deal with both personal and academic problems and enables them to identify their strengths and weaknesses, to chalk out a suitable educational / career path. It also organizes seminars and workshops on career planning and personality development. The expertise of the Department of Psychology, in this area, is utilized in the effective functioning of the centre.

#### WELFARE ASSOCIATIONS

#### PARENT TEACHER ASSOSIATION (PTA)

The Parent Teacher Association is a statutorily constituted elected body which aims at overall development of the college. Parental co-operation in creating a healthy campus atmosphere is of utmost importance. The PTA aspires for co-operation and participation of parents in full measure, in the wholesome activities of the college. An executive committee, comprising the principal as chairman, a teacher elect as the secretary and seven others, meets frequently to carry out the regular affairs of the body. A general body, consisting of all the parents and teachers, meets occasionally and it gives paramount importance in ensuring a healthy and congenial academic atmosphere in the college.

The PTA has been focusing on the growth and development of the college

since its inception. The body collects only a moderate amount as donation from the parents and which is utilized in the college for the welfare of students. It provides salary for the guest lectures, security staff, computer lab assistant, etc. Drinking water facilities and cleanliness of the college is also looked after by the

PTA.By installing a generator, PTA has also ensured uniterrupted power supply in the college. It also supports the poor and backward students.

#### **ALUMNI ASSOCIATION**

The forum of the former students, the alumni association aspires to establish and maintain a warm relationship among the former students, helps them to renew their old associations with their college, classmates and teachers and support their alma-mater in her hours of need. The college proposes to utilise their skill and competence in its many sided developmental programmes.

#### **CO-CURRICULAR ACTIVITIES**

#### Arts Club

The Arts Club is a part of the College Union, which is meant to cater to the artistic talents of students. The arts club secretary who is elected from among the students and a staff advisor deputed by the college council control the club activities. The arts club selects and trains the teams for different cultural events.

#### National Cadet Corps (NCC)

NCC, the largest statutory youth organization in India, has been functioning in this country for the last 60 years, with the motto unity and discipline .In the beginning it was supposed to act as a feeder organization to the Indian Defense Forces, but later the focus was shifted and it started concentrating on fostering good citizens for the future.

With a right perspective of the ideals of the organization, the college welcomed the NCC to commence its units in the campus. By now, quite a good number of cadets from our units have won laurels for the institution, through their participation in various competitions and camps, and a few have placed themselves at respectable positions, largely on account of their credentials in the NCC. Currently the Naval and the Army wing NCC are carrying out their activities in the college. Every possible support is provided by the institution for its smooth functioning.

#### NATIONAL SERVICE SCHEME (NSS)

The objective of National Service scheme is develop the spirit of service, cooperation, patriotism, and discipline among the youth of this country. The scheme provides ample opportunities for the volunteers to participate in camps, social service activities, and also to attend useful classes. The variegated activities of the NSS train the student volunteers in the art of living together. Three units of the NSS are functional in this college.

#### **Science Club**

The Science Club is established to create awareness and interest among the students. The activities of the club are expected to stimulate the pursuit of scientific knowledge, encourage the students' potentiality to express scientific ideas and to identify their field of interest in science. Students are assigned small projects which will boost their scientific zeal and help them to take up major projects, beneficial to the society later

on. The club conducts quiz, debates, seminars and talks on the frontiers of science and technology. The students are motivated to host exhibitions in their disciplines. The club also brings in experts from different fields to enlighten and guide the students on career options in science.

#### Nature Club

The nature club of the college is named 'Devatharu' it opens the eyes of the students to the wonders of nature through its nature camps, visits to national parks, sanctuaries and orientation camps. The students are made aware of the umpteen ways through which our mother earth has blessed and motivated us to develop an ecofriendly attitude to preserve and conserve our invaluable legacy. The club encourages the students to live in harmony with nature by engaging them in engrossing pursuits such as bird watching, sapling, planting, nurturing, caring and protecting plants. Exhibitions, slide shows, camps and other periodical programmes are organized with the help of the World Wide Fund for Nature India

#### IT Club

The IT club in the college functions to exploit avenues opened for the students in the fields of computer and information technology. The college particularly aims at imparting essential knowledge to every student on computer without imposing financial burden on them. The internet facilities are made open mostly during the working hours. A neatly equipped computer lab is the the club oversees set up for the purpose the progress of the schemes prepared by the college.

#### **Tourism Club**

Tourism in Kerala has become a major source of direct and indirect employment. The Tourism Club aims at building an awareness among the students in responsible tourism. The Club is functioning under the aegis of the Department of History. It organizes seminars, discussions, and training sessions to keep its members abreast of the numerous organizations and departments related to tourism. It is also engaged in the task of identifying potential tourist spots and devising strategies to attract tourists to the sites.

#### Quiz Club

Quizzing looks a funny activity, but its value in the modern competitive world is enormous. Keeping this fact in mind, the quiz club is formed to regularly engage our students in this knowledge enhancing and thought-provoking process.

#### **Debating Club**

The club organizes debates on subjects of common interest and encourages students to participate in the discussions. The faculty members also join hands with the students in these programmes and involve in active discussions.

#### Film Club

The club members are students who take an active interest in films. The club has members from all departments. They meet frequently and organize discussion on films. The college has facilities to projecting films. A film screened is discussed in detail by the club members. An important activity of the club is the organization of the film festival.

### Computer training programme for staff and students.

Training on the use of computer is essential for the students as well as staff. Many of the correspondence with the University and Governmental agencies like Harijan Welfare Department are now operated through the internet. Scholarship schemes also require the use of internet by students as well as the college office. The college has hence launched a scheme to train all the students on the use of computer. The programme is operated through the computer club.

The college has a centrally located computer lab and is available to users on all working days. The lab has 20 computers, printers, scanners and internet facilities. The computers are networked so that multiple access to internet and data sharing is easy. The lab meet the operational expenses from the membership fee collected from members,

## Format for Academic Planning and Review

## DEPARTMENT PLAN

## Name of Department

Ν	Classes	Portions	for	I	Portions	for	Second	Portions	for	
0		term			Term			term		
1	I DC Main									
2	IIDC									
	Main									
3	IIIDC									
	Main									
4	I SUB									
5	II SUB									
6	IPG									
7	IIPG									

## FORMAT FOR TEACHING PLAN

## Name of Department

## Name of Teacher

Ν	Classes	Topics	for I	Topics	for	Second	Topics	for	
0	allotted	term		Term			term		
1	I DC Main								
2	IIDC Main								
3	IIIDC Main								
4	I SUB								
5	II SUB								
6	IPG								
7	IIPG								

Number of students qualified for NET from different disciplines during 2007-08

N o	Department	Students NET	qualified	for
1	Mathematics	2		
2	Physics	2		
3	Chemistry	1		
4	Botany	1		
5	Zoology	1		
6	Economics	1		
7	Commerce	1		
8	Malayalam	2		
9	Hindi	-		

## TEACHERS DEPUTED FOR PhD

NAME	DEPARTMENT	Research Centre
Smt. S Sreelatha	Zoology	
		M G College
Sreeprabha K S	Mathematics	Dept of Mathematics
		University of Kerala
Kishore	Economics	Centre for Development Studies,
		Trivandrum
Smt. Mini M Nair	Economics	Centre for Development Studies,
		Trivandrum
Harikrishnan M R	Mathematics	Dept of Mathematics
		University of Kerala
S Jalajamony	Chemistry	Dept of Chemistry
		University of Kerala

## AGENCIES ASSOCIATING WITH THE INSTITUTION FOR CONDUCTING SEMINARS

No	Agency	Associating	Programme
		Department	
1	Academy of Chemistry	Chemistry	Seminar
	Teachers(ACT)		
2	Academy of Physics	Physics	1)Seminar 2)Aptitude test for
	Teachers(ACT)		Secondary School students
3	NIST( National Institute of	Chemistry	1)Seminars,(2)Instrumental support
	Science and Technology)		for research (3)Laboratory visits
4	Department of Mathematics,	Mathematics	Seminars in Mathematics
	University of Kerala		
5	Department of Aquatic Biology,	Zoology	Seminars and support for research
	university of Kerala.		
6	TIME	All departments	Seminars & Placement services
7	Legal Service Society	College	Legal awareness programmes
8	Aids control Society	College	Seminars and Aids awareness
			programmes
9	Seshans Academy	Career guidance and	Preparation for competitive
		Placement cell	examinations
10	Global ventures	Science departments	Hardware courses

## RECOGNIZED RESEARCH GUIDES OF EACH FACULTY

SI.No.	Name	Specialization	No. of Scholars
	<u>Malayalam</u>		
1.	Dr. N. Ajithkumar	Literature, Theater	04
2.	Dr. K. Jyothishkumar	Media, Literature	
	<u>Hindi</u>		
1.	Dr. K. Manikantan Nair	Drama	02
2.	Dr. Asha . S . Nair	Poetry	02
3.	Dr. S.R. Jayasree	Poetry (Dalit and Environment)	01
4.	Dr. T. Sreedevi		
	Economics		
1.	Dr. P. Krishnakumar	Welfare Economics	02
	Physics		
1.	Dr. K. Madhukumar	Radiation Physics	04
2.	Dr. K. Rajendra Babu	Material Science	05
3.	Dr. K. C. Ajith Prasad	Non Linear Physics	01
	<u>Chemistry</u>		
1.	Dr. M.D. Ajitha Bai	Phytochemistry	05
2.	Dr. C.G.Radhakrishnan Namboori	Coordination Chemistry	05
3.	Dr. M.R. Sudarsana Kumar	Coordination Chemistry	05
4.	Dr. S. Balachandran		02
	<u>Botany</u>		

1.	Dr. M. Jayasree	Palynology, Biochemistry	01
2.	Dr. K.G. Ajith Kumar	Plant Physiology	03
	<u>Zoology</u>		
1.	Dr. P.R. Geetha	Insect Physiology	03
2.	Dr. P. Madhusoodanan Pillai	Environmental , Aquatic Biology	03
3.	Dr. M.S. Rajendran Nair	Cytology, Ichthyology, Environmental Science	01
1. 2. 1.	Commerce Dr. V. Harikumar Dr. B. Manmadhan Mathematics Dr. C. Sunil Kumar (on leave)	Industrial Economics , Banking Management	05 04

## RECOGNIZED RESEARCH GUIDES OF EACH FACULTY (EXTERNAL)

	Physics
1.	Dr. M.N. Sreedharan Nair, Former Principal, NSS Colleges
2.	Dr. N. Vasudevan Nair, Former Reader, MG College
3.	Dr. C. Mohanakumaran Nair, Former HOD, MG College
4.	Dr.V, Narasimha Iyer, Former HOD, MG College
5.	Dr. M.H. Rahim Kutty, MSM College, Kayamkulam
6.	Dr. M. Deepa , All Saints College, Trivandrum
	<u>Chemistry</u>
1.	Dr. R. Krishnan, Former Reader, MG College
2.	Dr. R. Sudha Devi, MMNSS College, Kottiyam
3	Dr G Jayakumar, N S S College, Pandalam
	<u>Botany</u>
1.	Dr. G. Vilasini, Former HOD, MG College
2.	Dr. P. Sreedevi, Former HOD, MG College
3.	Dr. R. Prakash Kumar, Principal Scientific Officer, KSCSTE
4.	Dr. Suma Maheswari, NSS College for Women, Karamana
5.	Dr. S. Pradeepkumar, Controller of Exams., Kannur Uty.
	<u>Zoology</u>
1.	Dr. K.G. Narayana Pillai, Former Principal, NSS Colleges
2.	Dr. K.K. Sreedevi Amma, Former HOD, MG College
3.	Dr. V. R. Vijayalekshmi, Former Reader, NSS College, Pandalam
4.	Dr. N. P. Suresh Babu, VTM NSS College, Dhanuvachapuram
	<u>Commerce</u>
1.	Dr. B.Vijayachandran Pillai, Associate Professor, Calicut Uty.

2.	Dr. S. Mohanan, Former Reader, MG College
3.	Dr. K. Manoharan Nair, VTM NSS College, Dhanuvachapuram
4.	Dr. S. Hareendranath, Former HOD, MG College

## RECOGNIZED RESEARCH GUIDES OF EACH FACULTY (EXTERNAL)

SI.No.	Name
	<u>Malayalam</u>
1.	Dr. B. Sudheendran Pillai, Principal, VTMNSS College
2.	Dr. K.S. Ravi Kumar, Uty. Department, Kariyavattom
3.	Dr. S.V. Venugopan Nair, Former Principal,NSS Colleges
4.	Dr. Sethunath, Former HOD, MG College
5.	Dr. Ramachandran Nair, Former Reader, MG College
6.	Dr. R.B. Rajalakshmi, Former HOD, MG College
	Physics
1.	Dr. M.N. Sreedharan Nair, Former Principal, NSS Colleges
2.	Dr. N. Vasudevan Nair, Former Reader, MG College
3.	Dr. C. Mohanakumaran Nair, Former HOD, MG College
4.	Dr.V, Narasimha Iyer, Former HOD, MG College
5.	Dr. M.H. Rahim Kutty, MSM College, Kayamkulam
6.	Dr. M. Deepa , All Saints College, Trivandrum
	<u>Chemistry</u>
1.	Dr. R. Krishnan, Former Reader, MG College
2.	Dr. R. Sudha Devi, MMNSS College, Kottiyam
3	Dr P Harikumar, TKM College of Arts and Science, Kollam

	Botany			
1.	Dr. G. Vilasini, Former HOD, MG College			
2.	Dr. P. Sreedevi, Former HOD, MG College			
3.	Dr. R. Prakash Kumar, Principal Scientific Officer, KSCSTE			
4.	Dr. Suma Maheswari, NSS College for Women, Karamana			
5.	Dr. S. Pradeepkumar, Controller of Exams., Kannur Uty.			
	<u>Zoology</u>			
1.	Dr. K.G. Narayana Pillai, Former Principal, NSS Colleges			
2.	Dr. K.K. Sreedevi Amma, Former HOD, MG College			
3.	Dr. V. R. Vijayalekshmi, Former Reader, NSS College, Pandalam			
4.	Dr. N. P. Suresh Babu, VTM NSS College, Dhanuvachapuram			
	<u>Commerce</u>			
1.	Dr. B.Vijayachandran Pillai, Associate Professor, Calicut Uty.			
2.	Dr. S. Mohanan, Former Reader, MG College			
3.	Dr. K. Manoharan Nair, VTM NSS College, Dhanuvachapuram			
4.	Dr Hrikumar			

## **MAJOR/MINOR PROJECTS**

No	Principal investigator Department	Title of project	Funding agency	Amount	Duration	Nature
1	FIST(Chemistry)	Development of research infrastructure	DST	2200000	3	Major
2	Dr. K. Madhu Kumar	Development of Cost Effective Hemoluminescent Phosphors for Environmental Radiation Dosimetry Applications	KSCSTE	1163800	3	Major
3	Dr K Ajith Prasad	Studies on Non Linear Dynamics in Discharge Plasma	UGC	675000	3	Major
4	Dr M Jayasree	Hepatoprofetive, Free Radical Scavenging and Pharemaeognosttcal Studies of Oxalis Corniculata	UGC	591300	3	Major
5	Dr S R Jayasree (Hindi)	Eco-Aesthetic study in contemperory Hindi & Malayalam poetry	UGC	40,000	2 years	Minor
6	Dr Parvathy Menon(Botany)	Conservation and documentation of plants of medicinal importance	UGC	50,000	2 years	Minor
7	Dr S B Syamala (Physics)	Variation of room temperature photoconductivity of CuInS <sub>2</sub> thin films with different (Cu)/In and (S)/(Cu) ratio	UGC	20,000	2 years	Minor

8	Dr M D Ajithabai(Chemistry)	Phytochemical studies on Callophyllum descipens	UGC	105000	2	Minor
9	Dr G Jayakumar(Chemistry)	A new method for the quality control of Ayurvedic drugs	UGC	105000	2	Minor
10	Dr Saritha(Sociology)	Adaptation of the Elderly to the Changing Pattern of Life of Kerala Community	UGC	45000	2	Minor
11	Dr Nirmala(History)	A Feasibility Study on Improving the Capabilities of Women in Governance of Local Bodies in Kerala – A Case Study in two Districts	UGC	50000	2	Minor
12	Dr B Jayasree(Hindi)	Contemporary Problems Illustrated in Hindi Poetic Dramas after 1960	UGC	82000	2	Minor

# Publications of the faculty during 2009-10

## ZOOLOGY

Ν			Name of	Year	of
0	Title of Paper	Author/s	Journal,Vol,page nos.	Publica-	
				tion	
1	Genotoxicity evaluation of acute doses of	V.S.Bindu and	The Asian Journal of	2009	
	Endosulfan to fresh water Anabas testudineus by	P.R.Geetha	Animal Science		
	Cytokinesis Block Micronuclei technique				
2	Effect of Organochlorine pesticide Endosulfan	V.S.Bindhu et	Asian J Envt Sci	2009	
	on blood and plasma of Anabas testudineus	al			
3	Acute toxicity, Behavioural changes and	V.S. Bindu and	Pollution Research	2009	
	haemopoetic alterations induced by Endosulfan	P.R.Geetha			
	in the Freshwater Fish Anabas testudineus				
4	Disruption of oocyte development of Oryctes	Sreelatha K B	J Bio pesticides	2009	
	rhinoceros treated with methanolic extract of	et al			
	Eupatorium odoratum				

## MATHEMATICS

Ν			Name	of	Journal,	Vol,page	Year	of
0	Title of Paper	Author/s	nos.				Publica-tion	1
1	D-Policy for a Production Inventory	Dr.K.Vineeth	Journal	of	f the	Kerala	2010	
	System with Perishable item	а	Statistica	al Ass	ociation			

## BOTANY

N 0	Title of Paper	Author/s	Name of Journal,Vol,page nos.	Year of Publica- tion
	Effect of BHC content in the soil on the spore count,% of infection,growth and nutrient levels in leguminous plants inoculated with a VAM fungus	Anil Kumar K.K. and G.Muraleedhara Kurup	Poll.Res 29(1) 1-4	2010

	Effect of VA mycorrhizal association on the growth and rate of photosynthetic products in leguminous plants under heavy metal stress	Anil Kumar K.K. and G.Muraleedhara Kurup	Ecol.Env.& Cons. 16 (1): 41-45 (0.889)	2010
	Occurence of mycorhizal fungi in some medicinally/economically important plants growing in their natural habitat	Anil Kumar K.K. and G.Muraleedhara Kurup	Indian Forester	2010
4	A study of the activities of enzymes in few basin Mangroves of Kollam District, Kerala.	K.G.Ajit Kumar	<i>Ecol.Env.</i> & <i>Cons.</i> 15 (1): 137-138. (0.889)	2009
5	<i>In vivo</i> pollen germination studies of distylous <i>Pentas</i> lanceolata var.white	M.Jayasree &Ajitha.V.S.	J.Phytol.Res(0.889) 22	2009
6	Flavonoids from Banana, <i>Musa paradisiaca</i> L. on Lipid metabolism in Rats	S.Vijaya Kumar, G. Presanna Kumar and N.R.Vijayalakshmi	Journal of Dietary Supplements, Vol 6,111- 123,June (0.33)	2009
7	Ethno Veternery study of few plants at Vattappara and Vizhinjam, Thiruvananthapuram district, Kerala		International Symposium on Environmental pollution, Ecology and Human Health	2009
8	Climate Change- a Threat to Agriculture and Food Security		National Seminar on Health, Food & Agro-biodiversity changing paradigms.12-14 February, Kozhikode.	2010
	Relative growth Rate, Net Assimilation Rate and Yield of soybean [ Glycine max(L) Merr.]		Proceedings of the 21 <sup>st</sup> Kerala science Congress	2009
1 0	An Ecological study of the Isolated Ponds at Chackai, Thiruvanathapuram, Kerala.		Section VII Environmental Sciences Proceedings of the Indian science Congress Association	2010

## CHEMISTRY

N0			Name of	Year of Publica-tion
	Title of Paper	Author/s	Journal,Vol,page nos.	
1	Ethnobotanical survey of the plants used in the treatment of diabetes.		-	2010
2	Pypyrones from Goniothalamus wightii,Hook.f.Thomas,	G Jayakumar,MD AjithaBai,B Harikumar, PK Viswanathan, B Rameshkumar,G Rajkumar,		2010.
3	pharmacological drug			2010.
4	Synthesis, spectral characterisation and thermal studies of zirconyl complexes of biologically active molecules	K. R. Jisha, S. Suma and	Journal of Thermal analysis and Calorimetry, Volume 99, Number 2 / February.	2010
5	Synthesis, characterization and physiochemical information, along with antimicrobial studies of some metal complexes derived from an ON donor semicarbazone ligand.	Suma S Prathapa	Spectrochim Acta A Mol Biomol Spectrosc. 2010 Jun;76(1):22-8. Epub	2010
6	Synthesis and spectral characterization of zinc(II) and cadmium(II) complexes of acetone-	V.L. Siji, M.R. Sudarsanakumar, S.	Polyhedron	2010

	N(4)-	Suma		
	phenylsemicarbazone:			
	Crystal structures of			
	acetone- <i>N</i> (4)- phenylsemicarbazone and			
	a cadmium(II) complex			
7	Vibrational spectroscopic	M.R. Anoop, P.S. Binil,	Journal of Molecular	2010
	studies and computational		Structure, Volume	
	study of ethyl methyl		969, Issues 1-3, 22	
	ketone thiosemicarbazone	Tresa Varghese, C.	April, Pages 48-54	
		Yohannan Panicker		
8	Effect of Certain Anti-	,	Journal Of Pure And	2009
	diabetic Ayurvedic Drugs	-		
	Against Microbes Causing Diabetes-Dependent	V.N. Jisha, S. Balachandran and	Vol. 3(2), (503-516.	
	Infections	Sailas Benjamin,		
		, , , , , , , , , , , , , , , , , , ,		
9	0 0 1	, D. Santhosh Kumar,		2010
	dependence in the rates of			
	solvolysis of 1,2- diphenylethyl system, (3.5)	Balachandran,	23 783–788	
10		T.S.Anirudhan,	Colloids and	2009
		S,Jalajamony and	Surfaces A:	
	anion exchanger with	P.S.Suchitra,	Physcicochemical	
	tertiary amine		and Engineering	
	functionality for the		Aspects 335	
	adsoption of Chromium(IV) from		107-113.	
	aqueous solutions			
11	Efficiency and Amine-	T.S.Anirudhan,	Industrial	2009
	modified poly(glycidyl	S,Jalajamony and	Engineering	
	methacrylate)-Grafted	L.Divya,	Chemistry	
	cellulose in the removal and		Research, 48 (4), 2118-2124.	
			2110-2124.	

recovery of Vanadium(V) from aqueous solutions			
Vibrational spectroscopic studies and computational study of ethyl methyl ketone thiosemicarbazone	S. Suma, M.R. Sudarsanakumar,	Structure, Volume 969, Issues 1-3, 22	2010
Chemical composition and antimicrobial activity of the essential oil from the stem bark and leaves of Popowia beddomeana.,Annonaceae	Ajithabai, Nirmal pathere, A Hisham,S Al saidi, P K	of essential oil	2010

## PSYCHOLOGY

N0			Name of	Year of Publica-tion
	Title of Paper	Author/s	Journal,Vol,page nos.	
1	Perceived Parental Affect	Dr V P Vanajakumari	Psychescape,	2009
	and Emotional Stability		Volume 3, No. 2,	
	Among Adolescents		Pages 45-52, July.	
2	Adolescent Perceptions of	Dr V P Vanajakumari	Psychescape,	2010
	Paternal and Maternal		Volume 4, No.1,	
	Control		Pages 34-40, January	

#### MALAYALAM

N0			Name of	Year of Publica-tion
	Title of Paper	Author/s	Journal,Vol,page nos.	
1	Malikappurathamma Lokamathavu	Dr N Ajith Kumar	Vandanam	March 2009
2	Keralathile Kaliyaattangal	Dr N Ajith Kumar	Service	March 15 2010

3	Ponkalayude Sastriyatha	Dr N Ajith Kumar	Vandanam	March 2010
4	Keralathile Kaliyaattangal II	Dr N Ajith Kumar	Service	April 1 2010
5	Atmasakshatkarathinte Kavyabimbangal	Dr N Ajith Kumar	Aswathanappathippu Swathi Samskarika Samithi	2009

## Appendix 10 Books published by the faculty 1. Dr. N. Ajith Kumar

1	Kadamkathappazhama	8	DravidabhashakalumMalayalavum
2	Khasakkinte Thampuran	9	Vamozhiyude Saudaryasastram
3	Hyndavam	10	Anaavicharam
4	Thirunizhalmaala Oru Padhanam	11	Ponkaala
5	Thekkanpaattuka	12	Malayaliyude Nadodivazhakkangal
6	Keralasamkaram	13	Hyndavacharasamhitha
-			

7 Folklorum Sahityanirupanavum

## Dr K S Ravikumar, Department of Malayalam

## <u>Authored</u>

*Karoor*, Monograph in Malayala Sahitya Nayakanmar series, Department of Publications, University of Kerala, Thiruvananthapuram, 2010

Edited with critical introduction

Pandalam Keralavarmayude Pradhana Kavithakal, Poems, Kerala Sahitya Academi, Thrissur, 2009

#### Articles published by the faculty in books

### Dr N Ajithkumar

Malayalam ARTICLES BY THE FACULTY IN PRITED BOOKS

No	Name	Name of Article	Publisher	yea
	Department			r
16	Dr N Ajithkumar	Bhashayude Naattuvazhakkom	K.M.Prabhakara Warrier	200
	Malayalam		Bhashagaveshanam Jeevitham	9
			State Institute of Language	
			2009	

## Journals subscribed during the period are listed below.

1 Indian Journal of Chemistry B	19 Journal of Bioscience
2 Current Science	20 Animal Research and Development
3 Yojana	21 Entamon
4 Mathematical intelligence	22 Down to Earth
Mathematical Education	23 Journal of animal Morphology and Physiology
6 Applied Science Periodical	24 CMFRI Bulletin
7Mathematics News Letter	25 Bhashaposhini
	26 Vijnanakairali
8 Indian Journal of Applied Physics	27 Sahithya lokam
9 Indian Journal of Engineering and Material	28 Sahithyachakravalam
Science	29 Literary Review
10 Journal of Scientific and Industrial Research	30 Samgrathan
11 Bulletin of material Science	31 Keral Jyothi
12 Resonance	32Anuvrath
13 Indian Journal of Chemistry Section B	33 Economic and Political weekly
14 Medicinal and Aromatic plant Abstracts	34 Southern economist
15 Journal of the Academy of Chemiatry	35 Kurukshetra
Teachers	36 Literary Survey
16 phytomorphology	37 Harithan
17 Indian Journal of Experimental Biology	38 Indian journal of English Studies
18 Journal of Plant Biochemistry and	39 Journal of Indian Writing in English
Biotechnology	40 Business India

41 Business World

42 Vision

43 Sociological Bulletin

- 44 Kerala sociologist
- 45 Journal of Indian History
- 46 journal of Kerala Study.

Format for feed back

MAHATMA GANDHI COLLEGE,

THIRUVANTHAPURAM-695004

Student Feedback

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

Asses the TEACHER in your Department for each statement

(Excellent: Good: Average: Below average: Poor)

Put X in appropriate column

## 1. Punctuality and Regularity

Excellent	Good	Average	Below average	Poor

## 2. Coverage of topics

Excellent	Good	Average	Below average	Poor	

#### 3. Clarity in teaching

Excellent	Goo	d Avera	age	Below a	average	P	oor

#### 4. Communication skill

Excell	ent	Good	Averaç	ge E	Below av	erage l	Poor	

### 5. Help in academic activities

Excelle	nt Goo	d Avera	ge Below a	iverage Po	or

## 6. Help in extracurricular activities

Excellent	Good	Average	Below average	Poor	

## 7. Encouraging student participation in class

Excellent	Good	Average	Below average	Poor

## 8. Teacher-student relationship

Excelle	nt Goo	d Averag	e Below a	iverage Po	or

## 9. Discipline Enforcement

Excelle	nt Goo	d Averag	ge Below a	iverage Po	oor

## 10. Help in Career guidance

Excelle	ent G	iood /	Average	Below	average	Poor

## 11. Remedial teaching

Excellent	Good	Average	Below average	Poor

#### 12. Understanding students

Excellent	Go	bod	Avera	ge	Below a	verage	Ро	or	

#### MAHATMA GANDHI COLLEGE,

#### THIRUVANTHAPURAM-695004

Parent Feedback

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

Asses the Department for each statement

(Excellent: Good: Average: Below average: Poor)

Put the number of teachers in each category

Α.

1. Punctuality and Regularity

Excellent	Good	Average	Below average	Poor	

2.Coverage of topics

Excellent	Good	Average	e Below average	e Poor

#### 3. Help in academic activities

Excelle	nt Goo	d Avera	age Below	average P	oor

#### 4. Help in extracurricular activities

Excellent	Good	Average	Below average		Poor	

#### 5. Teacher-student relationship

Excellen	nt Goo	d Average	Below average	Poor

## 6 Discipline Enforcement

Excellen	nt Goo	d Averag	e Below a	average Po	oor

#### 7. Remedial teaching

Excellent	Good	Average	Below average	Poor

## 8. Understanding students

Excellent	Good	Average	Below average	Poor

## 9. Effectiveness of P.T.A meetings

Excellent	Good	Average	Below average	Poor

B Asses the college for each statement (put X mark)

## 10. College atmosphere

Excelle	nt Go	od Aver	rage Below	average P	oor

## 11. Services of office staff in Fee section

Excelle	ent Goo	od Avera	ge Below a	verage Poo	r

### 12 .In Scholarship section

Excellent	Good	Average Below average Po	or

## 13. T.C, Conduct Certificate section

Excellent	Good	Average Below average	Poor

#### 12. Library services

Excellent	Good	Average	Below average	Poor

### 13. Canteen facilities

Excelle	ent	Goo	d A	Aver	age	Below	average	Ροοι	•

#### 14. Toilet facilities

Excellent Good Average Below average Poor


#### 15. Computer lab: services

Exceller	nt Goo	od Aver	age Below	average P	oor

#### 16. Sports & games facilities

Excellen	nt Goo	d Averag	je Belowa	verage Po	or
Γ					

#### 17. Interaction with Principal

Excel	lent (	Good	Average	Below average	Poor

#### MAHATMA GANDHI COLLEGE,

#### THIRUVANTHAPURAM-695004

#### Student Feedback

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

Evaluate the Tutorial System in your Department for each statement

(Excellent: Good: Average: Below average: Poor)

1. Tutor -student relationship.

Excellent Good Average Below average Poor

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## 2. Rapport & support from Tutor

Excelle	ent	Goo	bd	Aver	age	Below	average	Po	oor

#### 3 .Punctuality in conducting tutorial sessions

Exce	llent	Good	Average	Below average	Poor

## 4. Help in academic activities

Excellent	Good	Average	below avera	ge Poor	
	5. Remedial	teaching			

Excellent Good Average Below average Poor

## 6. Motivation & guidance

Excellent	Good	Average	Below average	Poor	

7. Help in extracurricular activities

E	Excelle	nt	Good	I 4	vera	ge	Below a	iverage	Рс	or

#### MAHATMA GANDHI COLLEGE

#### (Accredited at A level by NAAC)

#### Thiruvanthapuram-695004

Student Feedback

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

Evaluate the Office/Non-teaching staff of your college by awarding points for each statement

(Excellent -5, Good -4, Average - 3, Below average --2, Poor -1)

1. How do you rate the efficiency & readiness of Office /Non-teaching staff in:

1) Clearing	your doubts.	
2) Scholarship se	ction	
3) Fee section		
4). T.C, Conduc 5). Lab: attenders	t Certificate section	
6). Library attend	ders	
7) Action on your of	complaints	
8)Help from comp	outer Lab:	

11 Overall performance of Office/Non-teaching staff ------

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## Involvement of faculty in extra-curricular programmes

1)Dr N Ajith Kumar, Dept of Malayalam

**Documentary Scripts** 

SI	Name of Documentary	Agency & Year
No		
1	Naataranginte Nerchakkazchakal Episode I (Iverkali)	Doordarsan 2003
2	Naataranginte Nerchakkazchakal Episode II (Muthiyum Chozhiyum)	Doordarsan 2003
3	Naataranginte Nerchakkazchakal Episode III (Darikavadhom)	Doordarsan 2003
4	Naataranginte Nerchakkazchakal Episode IV (Thidambunruthom)	Doordarsan 2003
5	Kadalakramonam Nerum Ninavum	CESS 2005
6	Angry Earth	Institute of Land Management 2005
7	Jeevajalam Prakruthiyude Sukruthom	Centre for Water resource Development and Management (CWRDM) 2005
8	Harithamukulangalude Kavalmadam	Tropical Botanical Garden (TBGRI) 2006
9	Surekshayude Chuvaduvaipukal	NATPAC 2006
10	The Mythology of Aranmula Metal Mirror	Visile T V Professionals 2006
11	Gotrayanam	State Resource Centre 2006
12	Prambaryathinte Thiruseshippukal	Vasthuvidya Gurukulam 2006
13	Neerozhukkinte Nerarivukal	Kerala Water Authority 2006

14	Gramasabha Rorum for Direct Democracy	Kerala Local Administration (KILA) 2006
15	Jiaivavaividyavum Keralavum	Kerala State Bio-diversity Board 2007
16	Mavelippookkalude Madhurasmithangalil	Asianet Cable Vision 2007
17	Gramasamrdhiyude Nerkkazhchzkal	Anthyodaya, Visile T V Professionals 2007
18	Pratysa	Kerala State AIDS Control Society 2007
19	PLWHL (Positive Living)	Kerala State AIDS Control Society 2007
20	Swarnappana	OilPalm India Ltd. 2008
21	Gas Thedathu	KIRTHADS 2008
	(A Documentary On Cholanayckan)	
22	Pinkara	KIRTHADS 2008
	(A Documentary On Koragar)	
23	Alai (A Documentary On Kurumbar)	KIRTHADS 2008
24	Gidugu Hogathu	KIRTHADS 2008
	(A Documentary On Kurumbar)	
25	Ettathapatti	KIRTHADS 2008
	(A Documentary On Kadar)	
26	RX	Kerala State Pharmacy Council 2008
27	Quick Bird	Kerala Local Administration (KILA) 2008
28	Kudumbasree	Ministry of Panchayathiraj (Govt. of India) 2008
29	Kshobhikkunna Prakruthyum	Ministry of Panchayathiraj (Govt. of India) 2008
	Karuthalode Manushyanum	
30	Jaivananmayude Thiricharivukal	Kerala State Bio-diversity Board 2008
31	Panathinappuram	Food And Civil Supplies Department 2008

32	People's Bazar	Supply Co 2008
33	Not Alone	Ministry of Panchayathiraj (Govt. of India) 2009
34	For the People	Ministry of Panchayathiraj (Govt. of India) 2009
35	Company	Womens Development Corporation 2010
36	Export House	Womens Development Corporation 2010
37	A Picnic On Pedals	NATPAC 2010

#### **Teli-Film Script**

SI No	Name of Film	Year
1	"Azhangalil Amrutham" (Associate script Writer)	2005

#### 2) Dr K Jyothish Kumar, Department of Malayalam

Programmes On Visual Media

- 1. Written script and presented 40 episodes of SAHITHEESALLAPAM literary magazine programme for Doordarshan
- 2. Presented 23 episodes of PUSTHAKAVICHARAM book review programme for Surya T.V
- 3 Worked as Anchor for the SUPRABHATHAM programme in the Asianet T.V.channel for a long period.
- 4 Written script and given O.O.V Commentary for many T.V. Programmes
- 5 Interviewed many dignitaries

#### Programmes on Radio and TV

1. Written script for many programmes like features in Spoken Word, Yuvvani, Vidyabhyasarangom, Industrial Programme, Womens Programme in AIR

2. Write Script and present programmes for Gyanvani F.M of IGNOU

3 M Sreemumar, Dept. of English

Conduct daily programme in Asianet on Astrology

- 4 Dr M R Sudarsnakumar, Department of Chemistry Science and general discourses in All India Radio
- 5 Dr B Sudhendran Pillai, Department of Malayalam Literary discussions in TV.