

# **Annual Quality Assurance Report 2011-12**

**Submitted by**



**Meenakshi College for Women (Autonomous)**

**Kodambakkam, Chennai 600 024**

**19th March, 2012**

Meenakshi College for Women (Autonomous)

Kodambakkam, Chennai 600 024

Annual Quality Assurance Report 2011-12

Submitted on 19th March, 2012

Members of the IQAC

Dr. K. S. Lakshmi Secretary & Correspondent	<i>K. S. Lakshmi</i>
Dr. Vasanti Rajagopalan Principal	<i>Vasanti Rajagopalan</i>
Mr. C. R. Sivaramakrishnan Senior Administrative Officer	<i>C. R. Sivaramakrishnan</i>
Dr. C. Sethukarasi HoD, Department of Advanced Zoology and Biotechnology	<i>C. Sethukarasi</i>
Mrs. P. V. Geetha HoD, Department of Mathematics	<i>P. V. Geetha</i>
Dr. Rukmani Vathanam HoD, Department of History	<i>Rukmani Vathanam</i>
Dr. Lavanya Vedagiri Rao HoD, Department of Commerce	<i>Lavanya</i>
Dr. Karpagam M. HoD, Department of Economics	<i>Karpagam M.</i>
Dr. Sankari G. Associate Professor, Department of Physics	<i>Sankari G.</i>
Dr. N. Manju Associate Professor, Department of Physics	<i>N. Manju</i>
Dr. Meenakshi Lakshmanan HoD, Department of Computer Science	<i>Meenakshi Lakshmanan</i>
Mr. K. C. Raghavan National Expert, IDO Executive Member, QCFI Chennai Chapter	<i>K. C. Raghavan</i>
Mr. V. S. Vikram Director, Meenakshi Sundararajan School of Management	<i>V. S. Vikram</i>



# Meenakshi College for Women (Autonomous)

Kodambakkam, Chennai 600 024

## Annual Quality Assurance Report 2010-11

### Contents

Institutional Vision and Mission .....	2
Preamble .....	2
IQAC Members.....	2
Thrust Area for the Academic Year 2010-11 .....	2
Report for the Academic Year 2010-11 .....	4
Criterion I: Curricular Aspects.....	4
Criterion II: Teaching-Learning and Evaluation.....	5
Criterion III: Research, Consultancy and Extension.....	7
Criterion IV: Infrastructure and Learning Resources .....	14
Criterion V: Student Support and Progression.....	15
Criterion VI: Governance, Leadership and Management .....	18
Criterion VII: Innovation and Best Practices .....	20
Conclusion .....	21
Annexure I: Academic Progress Monitoring System - Student Progression Reports	
Annexure II: Academic Progress Monitoring System - Arrears Monitoring Reports	
Annexure III: Faculty Appraisal System Reports	

## **Institutional Vision and Mission**

**The Institutional Vision** is to work towards the goal of continuous improvement in the discovery and sharing of knowledge by providing broad-based quality higher education on global standards to young women, particularly from the neighbourhood, in order to transform them into responsible and self-reliant individuals with a receptive mind for liberal arts & culture, and an empathetic attitude to societal problems.

### **The Institutional Mission:**

- To provide quality higher education and sustain academic excellence.
- To provide all the physical, human and technological infrastructure for an effective learning process.
- To create a stimulating environment for motivating research and development.
- To foster institution-industry interface that ensures academic programmes appropriate to employment needs.
- To develop the aptitude for appreciating liberal arts and culture among students.
- To impart values of patriotism, integrity and compassion for the under-privileged in a conscious manner.

## **Preamble**

### **IQAC Members**

1. Dr. K. S. Lakshmi, Secretary & Correspondent
2. Dr. K. V. Ramanamma, Principal
3. Mr. C. R. Sivaramakrishnan, Senior Administrative Officer

### **Senior Teachers**

4. Dr. C. Sethukarasi, HoD, Department of Advanced Zoology and Biotechnology
5. Mrs. P. V. Geetha, HoD, Department of Mathematics
6. Dr. Rukmani Vathanam, HoD, Department of History
7. Dr. Lavanya Vedagiri Rao, HoD, Department of Commerce
8. Dr. Karpagam M., HoD, Department of Economics
9. Dr. Sankari G., Associate Professor, Department of Physics
10. Dr. N. Manju, Associate Professor, Department of Physics
11. Ms. Meenakshi Lakshmanan, HoD, Department of Computer Science

### **Eternal Experts on Quality Management**

12. Mr. K. C. Raghavan, National Expert, IDO & Executive Member, QCFI Chennai Chapter
13. Mr. V. S. Vikram, Director, Meenakshi Sundararajan School of Management

### **Thrust Area for the Academic Year 2010-11**

At its meeting held on 14 July, 2010, the IQAC identified the thrust area for the institution for the academic year 2010-11, as **Quality Initiatives for Self-Assessment**.

The following **action plan for the year** was outlined by the IQAC:

- All departments to be instructed to go for self-assessment through external audit.
- The outputs of the quality initiatives kick-started in the last academic year for department and faculty appraisal and student progression monitoring, to be studied and its effectiveness
- To keep the curriculum updated, all departments are to be encouraged to organize national seminars in current developments in their subjects.
- To promote extension activities for developing sensitivity of students to community issues, particularly in rural areas, all the departments are to be instructed to take their students to villages in the neighbouring districts in Chennai to interact with rural children
- Based on the feedback from companies/employers it was decided to enhance the numerical ability of students through intensive coaching in numerical and verbal reasoning.

## Report for the Academic Year 2010-11

The Criterion-wise achievements of the institution during the academic year 2010-11 are summarized below.

### Criterion I: Curricular Aspects

#### 1. National Seminars

The national seminars conducted by various departments provided deep insights into the current trends in the relevant subjects and helped the faculty and Boards of Studies to recommend relevant changes to the curriculum.

#### 2. External Audits of Departments

External audits by subject and industry experts of each department involved a thorough review of the curriculum and helped throw up new ideas for improvement of the curriculum.

#### 3. Academic Council Meeting

- In its meeting held on 19 March 2010, the Academic Council approved the following additional skill-based courses under the choice-based credit system for UG and PG courses:
  - (a) Analytical Reasoning for all UG courses.
  - (b) Entrepreneurial Development for PG students in Economics.
  - (c) Banking Practices through E-learning for PG students.
  - (d) Basic Fitness Techniques for UG students.
  - (e) Functional Mathematics – Papers I & II
  - (f) Personality Enrichment.
- The UGC has extended Rs. 10 lakhs assistance as seed money for the introduction of a Career Oriented Course in the area of Information and Computer Technology. This is a progressive 3-level course offered at the UG level, leading to a Certificate, Diploma and Advanced Diploma in each of the three years of the course respectively. The syllabus as recommended by the Board of Studies in Computer Science was passed by the Academic Council.
- The Academic Council passed the changes in the syllabi of the following UG and PG Courses as recommended by the respective Boards of Studies.

#### UG Courses:

1. B.A. History
2. B.A. Economics
3. B.A. English Literature
4. B.Sc. Mathematics
5. B.Sc. Physics
6. B.Sc. Plant Biology and Plant Bio-Technology
7. B.Sc. Advanced Zoology and Bio-Technology
8. B.Sc. Chemistry
9. B.Com (General)

## 10. B.Com Banking Management

### PG Courses:

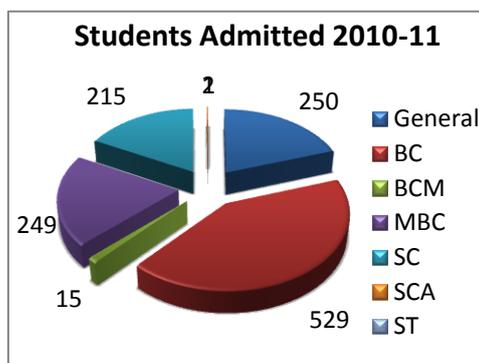
1. M.A. Economics
2. M.Sc. Bio-Chemistry
3. M.A. Public Administration

- The changes proposed to the syllabi of Foundation Courses and Non-major Elective courses in French, Sanskrit, Hindi and Tamil were ratified.
- The introduction of a new Certificate Course on Robotics in collaboration with Lema Labs, IIT, Madras, was ratified. It was placed on record that an MoU was signed with Lema Labs, IIT Madras, for conducting the course in the college for all interested students of the Humanities, Sciences and Commerce, and that a “Robotics and Technology Centre” is being set up for the purpose.

## Criterion II: Teaching-Learning and Evaluation

### 1. Student Admissions

Category	2010-11
General	250
BC	529
BCM	15
MBC	249
SC	215
SCA	2
ST	1
<b>Total</b>	<b>1261</b>



### 2. Demand Ratio Analysis

#	Programme	Applicants	Students admitted	Demand Ratio
1.	B.A. History	83	54	1 : 1.5
2.	B.A. Economics	100	46	1 : 2.2
3.	B.A. English Literature	93	50	1 : 1.9
4.	B.Sc. Mathematics	734	70	1 : 10.5
5.	B.Sc. Physics	378	50	1 : 7.6
6.	B.Sc. Chemistry	238	100	1 : 2.4
7.	B.Sc. PBPBT	218	50	1 : 4.4
8.	B.Sc. AZBT	193	50	1 : 3.9
9.	B.Com. (General)	1244	70	1 : 17.8
10.	B.Com. (Banking Management)	387	70	1 : 5.5
11.	B.A. Economics*	54	36	1 : 1.5
12.	B.Sc. Mathematics*	102	70	1 : 1.5
13.	B.Sc. Computer Science*	1010	47	1 : 21.5
14.	B.Com. (General)*	1747	210	1 : 8.3
15.	B.Com. (Corporate Secretaryship)*	276	70	1 : 3.9

#	Programme	Applicants	Students admitted	Demand Ratio
16.	M.A. History	18	12	1:1.5
17.	M.A. Economics	28	17	1:1.6
18.	M.A. Public Administration*	7	4	1:1.8
19.	M.A. Tamil	14	8	1:1.8
20.	M.Sc. Mathematics	112	35	1:3.2
21.	M.Sc. Physics	46	19	1:2.4
22.	M.Sc. Biochemistry*	32	12	1:2.7
23.	M.Sc. Information Technology*	80	24	1:3.3
24.	M.Com.*	127	36	1:3.5
25.	Master of Computer Applications	67	13	1:5.2
26.	Master of Computer Applications*	12	3	1:4.0
27.	M.Phil. History	6	4	1:1.5
28.	M.Phil. Tamil	6	5	1:1.2
29.	M.Phil. Mathematics	20	6	1:3.3

\* Self-financing course

### 3. Faculty recruitment

The following are the statistics of faculty recruitment to Government-aided posts as well as to posts filled by the College Management.

#	Department	No. of Faculty
1.	Economics	2
2.	English	2
3.	Computer Science	1
4.	Commerce	4
	<b>Total</b>	<b>9</b>

### 4. Faculty Development

#### Orientation Courses:

#	Name	Department
1	Usha Sadasivan	English
2	M. Vennila	Tamil
3	Suba Chandrasekar	Physics
4	E. Manjula	Physics
5	B. Sujatha	Computer Science

#### Refresher Courses:

#	Name	Department
1	Esther Kirubavathy	English
2	M. Shanthi	Tamil
3	N.K. Anusuya	Commerce
4	S. Jeya	Advanced Zoology and Biotechnology

#	Name	Department
5	P. Vasanthi	Advanced Zoology and Biotechnology

### 5. College Schedule

The College Calendar and Hand Book was published and distributed to all faculty and students at the beginning of the academic year. As is customary, the book contained details of college working days and holidays, important college functions, the dates of all examinations including those of the mid-semester examinations, model examinations and end-semester examinations.

### 6. Examinations

All examinations were conducted as per schedule and evaluations done centrally, with a few papers being sent for door valuation. The results were published within 2 weeks of completion of the examinations.

The examinations management software, Adhyaksha, developed by the Department of Computer Science was used effectively for most parts of the examination process.

## Criterion III: Research, Consultancy and Extension

### 1. Research Activities

#### Awards for Research

- **Dr. K. S. Lakshmi**, Secretary - Fellow of the Madras Science Foundation for outstanding contribution to teaching of sciences and scientific research – Madras Science Foundation

#### Collaboration with National / International Organizations:

- The Department of Physics organized a National Symposium on Radiation Physics in collaboration with the Indian Society for Radiation Physics (Kalpakkam Chapter) in 2010.

#### Conferences / Seminars Organized and Eminent Participants

##### 1. National Seminar on Astrophysics - Dept of Physics

- Dr. Soundararaja Perumal, Deputy Director, B.M. Birla Planetarium
- Dr. Rajaram Nithyananda, Former Director, NCRA, TIFR, Pune

##### 2. Seminar on Stem Cell Therapy and Regenerative Medicine – Dept of AZBT

- Mr. V. K. Subburaj, Secretary, Health and Family Welfare, Govt of TN.
- Dr. V. P. Narayanan, Former Vice Chancellor, Madras Medical College and Research Institute
- Dr. V. Parthasarathy, Assoc Prof, Dept of Pharmacy, Annamalai Univ.
- Dr. Jayant Ganguly, Scientist, Regional Science Centre, Kozhikode.
- Dr. Saranya Narayan, Medical Director, Jeevan Blood Bank, Chennai.
- Dr. S. Krishnakumar, HOD, Ocular Pathology and In-charge, Stem Cell Laboratory, Shankara Nethralaya, Chennai.
- Dr. Bhabatosh Biswas, Professor & Head, Department of Cardio Thoracic Surgery, R. G. Kar Medical College, Kolkata.
- Dr. Anandkumar, Principal Scientist and Head, Department of Stem Cells and Regenerative Medicine, DD Hospitals, Thiruvallur.

3. *National Seminar on Status and Sustainability of Micro-finance in India – Dept of Economics*
  - Dr. K.G. Karmakar, Managing Director, NABARD
4. *National Seminar on Translations - Pitfalls and Profundities – Dept of English*
  - Mrs. Vasanta Surya, Freelance poet, Journalist and Translator
  - Dr. Gowri Ramnarayan, Deputy Editor, The Hindu
  - Dr. Alladi Uma, Department of English, University of Hyderabad.
  - Mr. V. Shriram, President, Alliance Francaise de Madras
5. *National Seminar on Mathematical Modelling through Computational Intelligence – Dept of Mathematics*
  - Dr. C. Raghavendra Rao, Professor, Department of Computer & Information Sciences, University of Hyderabad
6. *National Seminar on Graph Theory and Applications - Dept of Mathematics*
  - Dr. Sriraman Sridharan, Associate Professor, Department of Computer Science, Universite de Perpignan Via Domitia, France
7. *National Conference on New Era Biotechnology - Dept of PBPBT*
  - Mr. Vikram Kapur, I.A.S.
  - Dr. Sujatha Sunil, Scientist, International Institute of Genetic Engineering & Biotechnology, New Delhi.
  - Dr. N. Barathi, Founder Director, Growmore Biotech Ltd., Hosur.
  - Dr. Karthikeyan, Scientist, Orchid Research, Chennai
  - Mrs. Florida Tilton, Managing Director, Biozone Research Technologies
8. *National Seminar on 'Arutpa Amudhu' - Dept of Tamil*
  - Padma Bhushan Pollachi N. Mahalingam
  - Dr. Pon Vaiko, Chief Education Officer, SRM University, Chennai

#### Summer projects (minor projects) funded by the College

#	Topic	Department	Grant
1	A study on access to basic and lifestyle amenities in the neighbourhood	Economics	15,000
2	பெண்கள் வேலைக்கு செல்வதற்கான அடிப்படை நோக்கம்	Tamil	15,000
3	Do's and Dont's for mobile phone users	Mathematics	15,000
4	Cancer Awareness	AZBT	25,000
5	A study on the usage of the internet by the local community	Computer Science	20,000
6	Awareness of consumer rights among residents of Chennai – A case study	Commerce	20,000

#### Minor Research Project

Project Title	Prevalence and knowledge of Cervical Cancer among urban women in Chennai
Principal Investigator	Mrs. P.V. Geetha Associate Professor & Head, Department of Mathematics
Collaborators	University of Iowa, NIRT-ICMR
Period	2010-2012

Fund Amount	Rs. 1,00,000/-
-------------	----------------

### Faculty on advisory committees of international conferences

#	Faculty	Department	Role in International Conference
1.	Dr. R. Padmavathy	Tamil	Member, Technical Advisory Committee, “செம்மொழி மாநாடு” (International Summit on Classical Tamil), 2010.

### Books authored by Faculty

- Dr. M. Karpagam, Department of Economics and Dr. R. Geetha, Department of Commerce have co-authored a book on “Green Management – Theory and Applications”, published by Ane Books Pvt. Ltd., New Delhi, 2010 (ISBN 978-93-8061-814-2).

### Chapters authored by faculty in books

#	Faculty Member, Department	Chapter name	Book Details
1	Dr. Lavanya Vedagiri Rao, Commerce	Micro Finance as an Engine for Inclusive Growth	<i>Inclusive Growth in India – An Emphasis on Financial and Social Inclusion</i> Excel India Publishers, New Delhi, 2010 (ISBN 978-93-80697-25-5)
2	Dr. Lavanya Vedagiri Rao, Commerce	Ethics Based Higher Education	<i>Accelerating Economic Revival through Innovation and Reform</i> Excel India Publishers, New Delhi, 2010 (ISBN 978-93-80043-76-0)

### Publications in National Journals

Department of English

- **S. Jayanthi**, *Chekhovian Love of Identity in Anita Desai’s Journey to Ithaca*, *Punya Bhoomi - A Quarterly of English Literature and Language With a slant to Indian Ethos and Values*, Volume 1, No. 4, Sep 2010, ISSN 0975-8623.

### Publications in International Journals

Department of English

- **P. Priya**, *Quest for Identity in Chester Himes’s The Third Generation*, *Synthesis - International Quarterly of English Literature & Language*, Volume 3, No.1, March 2010, ISBN 904094-1-7.

Department of Physics

- **Sankari G**, E Krishnamoorthy, S Jayakumaran, S Gunasekaran, V Vishnu Priya, Shyama Subramaniam, S Subramaniam, Surapaneni Krishna Mohan, *Analysis of serum immunoglobulins using Fourier transform infrared spectral measurements*, *Biology and Medicine*, Volume 2 (3), 2010, eISSN 09748369.
- Surapaneni Krishna Mohan, **Sankari G**, Vishnu Priya V, Ganesan S, Sivabalan S, Aishwarya T S, Gayathri M K, Jayakumaran S, Shyama Subramaniam, Subramaniam S, Gunasekaran S, *Auto fluorescence spectroscopic analysis of carbon tetra chloride induced rat tissues treated by pentoxifylline*, *Life Sciences*

and Medicine Research, Volume 2010: LSMR-11, eISSN 19487886, ISSN (Print) 4566, ISSN(Online) 2226-4558.

- Vishnu Priya V, **Sankari G**, Mallika Jainu, Surapaneni K M, Aishwarya T S, Saraswathi P, Chandra Sada Gopan V S, *Auto Fluorescence And Fourier Transform – Infra Red (FTIR) Spectral Investigation On Di Ethyl Nitrosamine (DEN) Induced Hepatocellular Carcinoma, Treated With Pericarp Extract of Garcinia Mangostana Linn in Rats*, Journal of Clinical and Diagnostic Research, Volume 4, 2010, ISSN (Online) 0973 – 709X.

#### Department of Computer Science

- Dr. N. Rama and **Meenakshi Lakshmanan**, *A Computational Algorithm for Metrical Classification of Verse*, IJCSI International Journal of Computer Science Issues, Vol. 7, Issue 2, No.1, March 2010, ISSN (Online) 1694-0784, ISSN (Print) 1694-0814.
- Dr. N. Rama and **Meenakshi Lakshmanan**, *An Algorithm Based on Empirical Methods, for Text-to-Tuneful-Speech Synthesis of Sanskrit Verse*, IJCSNS International Journal of Computer Science and Network Security, Vol.10 No.1, January 2010, ISSN 1738-7906.
- Dr. N. Rama and **Meenakshi Lakshmanan**, *A Computational Algorithm based on Empirical Analysis, that Composes Sanskrit Poetry*, IJCSIS International Journal of Computer Science and Information Security, Vol. 7, No. 2, 2010, ISSN 1947-5500.
- Dr. N. Rama and **Suganya R.**, *Power Analysis of the Gossamer protocol for Passive RFID tags*, International Journal of Wireless Networks and Communications, Vol. 2, No. 1, 2010, ISSN 0975-6507.
- Dr. N. Rama and **Suganya R.**, *Simulated Annealing based Optimization Model for the Gossamer Protocol*, International Journal of Engineering Science and Technology, Vol. 2, Issue 3, 2010, ISSN 0975-5462.
- Dr. N. Rama and **Suganya R.**, *An Enhanced Power-efficient Gossamer-based Protocol for Passive RFID Tags*, International Journal of Computer and Internet Security, Vol. 2, No. 1, 2010, ISSN 0974-2247.
- Dr. N. Rama and **Suganya R.**, *SSL-MAP: A More Secure Gossamer-based Mutual Authentication Protocol for Passive RFID Tags*, International Journal of Computer Science and Engineering, Vol. 2, No. 2, 2010, ISSN 0975-3397.
- **B. Sujatha** and T. Santhanam, *A Novel Approach Integrating Geometric and Gabor Wavelet Approaches to Improvise Visual Lipreading*, International Journal of Soft Computing (IJSC), Vol. 5(1), Medwell Journals 2010, ISSN 1816-9503.
- T. Santhanam and **B. Sujatha**, *A New Fangled Approach Using Ergodic Hidden Markov Model for Visual Lipreading*, European Journal of Scientific Research(EJSR), Vol.42 No.4, EuroJournals Publishing Inc. 2010. ISSN 1450-216X.
- **B. Sujatha** and T. Santhanam, *Classical Flexible Lip Model Based Relative Weight Finder for better Lip Reading Utilizing Multi Aspect Lip Geometry*, Journal of Computer Science (JCS), Vol. 6 (10): 1065-1069, 2010, Science Publications, ISSN 1549-3636.

#### Paper Presentations & Publications in National Conferences

##### Department of Economics

- **J. Sumitha Princess**, *An Assessment of Women Self Help Groups in Tamil Nadu*, National Seminar on “Economic Contribution of Women – A Multi- Dimensional Approach”, 2010.

- **Hemavathi Sekar**, *Policy Formulation for Urban Transport System*, National Seminar on “Urban Infrastructure – Transport and Related Issues”, 2010.
- **Shanthi Raja**, *Women Self Help Groups in Tamilnadu*, National Seminar on “Economic Contribution of Women – A Multi Dimensional Approach”, 2010.
- **Shanthi Raja**, *Education for Women Empowerment*, National Conference on “Education for Socially and Economically Deprived”, 2010.
- **Shanthi Raja**, *Infrastructure and Economic Development*, National Seminar on “Urban Infrastructure – Transport and Related Issues”, 2010.
- **J. Sumitha Princess**, *Characteristic Features of Self Help Group Women in Tamilnadu*, National Seminar on “Women Empowerment through Self Help Groups”, 2010.
- **Shanthi Raja**, *Barriers of Self Help Group Women and Role of Self Help Group in Eradicating Poverty*, National Seminar on “Women Empowerment through Self Help Groups”, 2010.
- **Shanthi Raja**, *Globalisation and its Impact on Indian Economy*, National Seminar on “Globalisation and its Impact in India”, 2010.
- **Shanthi Raja**, *Performance of Self Help Groups in Empowering Rural Women in Tamil Nadu*, National Seminar on “Women Empowerment through Self Help Groups”, 2010.

#### Department of Biochemistry

- **Inbathamizh L**, A novel Stem cell enhancement therapy to myelodysplastic syndrome using green tea, International conference Greenomics 2010.

#### Department of Commerce

- **Lavanya Vedagiri Rao**, *Micro Finance as an Engine for Inclusive Growth*, National Conference on Inclusive Growth in India – An Emphasis on Financial and Social Inclusion, 2010.

#### Department of Tamil

- **T. T. Geetharani**, முதிர்ந்த குறிஞ்சி, தேசிய மாநாடு – பாரதிதாசன் தொகுப்பு, 2010.
- **R. Kalavathi**, விழாக் குறிஞ்சி, தேசிய மாநாடு - தமிழிசை மரபு, 2010.
- **R. Kalavathi**, தேர்களின் நிர்வாகத்திறன், தேசிய மாநாடு - இந்திய தமிழாரி, 2010.
- **M. Shanthi**, சுந்தரர் தேவாரத்தில் இசை, தேசிய மாநாடு - தமிழிசை மரபும் தேவார திவ்விய பிரபந்தப் பண்களும், 2010.
- **M. Karpagam**, சங்க இலக்கியத்தில் இசை இன்பம், தேசிய மாநாடு - தமிழிசை மரபும் தேவார திவ்விய பிரபந்தப் பண்களும், 2010.

#### Department of PBPBT

- **Subha R**, *Isolation of Bacteria from Sea weed*, National seminar on Microbial Perspectives of Molecular Biology, 2010.
- **Subha R**, *Production of Single cell Protein from Yeast grown on Dairy effluent*, National seminar on New Era Biotechnology, 2010.
- **Suji B**, *Isolation of Bacteria producing Bacteriocin against MRSA*, National seminar on Microbial Perspectives of Molecular Biology, 2010.

## Paper Presentations & Publications in International Conferences

### Department of Economics

- **M. Karpagam**, *Corporate Environmental Orientation*, International Conference on Sustainability in Business, Malaysia, 2010.

### Department of Computer Science

- Dr. N. Rama and **Suganya R.**, *A Family of Gossamer-Based Mutual Authentication Protocols for Tag Pairs in RFID Systems*, Proceedings of ICMCS International Conference on Mathematics and Computer Science, 2010.

### Department of Commerce

- **Lavanya Vedagiri Rao**, *Ethics Based Higher Education*, International Conference on Accelerating Economic Revival through Innovation and Reform, 2010.
- **R. Geetha**, *Corporate Environmental Orientation*, International Conference on Sustainability in Business organized by the Faculty of Business and Accounting, INTI International University, Malaysia, 2010.

### Department of Tamil

- **R. Geetha**, பதிற்றுப்பத்தில் புலவர்கள், பன்னாட்டு மாநாடு - பதிற்றுப்பத்து, 2010.
- **T. T. Geetharani**, மாத இதழில் சுற்றுச்சூழல் விழிப்புணர்வு, பன்னாட்டு மாநாடு - தமிழ் இதயிழல் உலகம், 2010.
- **T. T. Geetharani**, பரிபாடலில் திருமால், பன்னாட்டு மாநாடு - பதிற்றுப்பத்து, 2010, ISBN 978-81-910216-1-5.
- **P. Sathiyabhama**, பதிற்றுப்பத்தில் உயிரினங்கள், பன்னாட்டு மாநாடு - பதிற்றுப்பத்து, 2010, ISBN 978-81-910216-1-5.
- **S. Alamelumangal**, புராண மரபியல், பன்னாட்டு கருத்தங்கம் - ஒப்பாரிப் பாடல்களில் வாய்மொழி இலக்கிய கூறுகள், 2010.
- **S. Alamelumangal**, பதிற்றுப்பத்து - சேரர் வரலாறு, பன்னாட்டு மாநாடு - பதிற்றுப்பத்து, 2010, ISBN 978-81-910216-1-5.
- **M. Shanthy**, பரிபாடலில் அறிவியல் கருத்துகள், பரிபாடலில் பன்னாட்டு கருத்தங்கம், 2010.
- **M. Karpagam**, கி. வா. ஜகந்நாதனின் படைப்புகளில் சங்க இலக்கியத் தாக்கம், பன்னாட்டு கருத்தங்கம் - சங்க இலக்கியம், 2010.
- **M. Karpagam**, பதிற்றுப்பத்து செல்வக் கடுங்கோ வாழியாதன் வீரம், பதிற்றுப்பத்து பன்னாட்டு ஆய்வுக் கருத்தரங்கம், 2010.

### Department of PBPBT

- **Subha R**, *Antibacterial activity of Medicinal Plants Cuminum, Piper, Coleus & Pogostemon*, International Conference on Medicinal Plants and Herbal Drugs: Challenges and Opportunities in Cultivation, Sustainable Utilization and Conservation, 2010.
- **Suji B**, DNA Finger Printing of Some Medicinal plants, International Conference: Medicinal Plants and Herbal Drugs: Challenges and Opportunities in Cultivation, Sustainable Utilization and Conservation, 2010.
- **Selvi V**, Invitro Antimicrobial activities from flower extracts of *Fistula*, International Conference – Global Environment and its sustainability, 2010.

## **2. Extension Activities**

### **Awards and Recognitions for Extension Activities (2010-2011)**

- Year Round Growth Banner Badge - Lions Club of Chennai Meenakshi
- Best Lion of the Region - Ln Jeya S. (Department of AZBT)
- Best President - Ln Jeya S. (Department of AZBT)
- Best Secretary - Ln. Vasanthi P. (Department of AZBT)
- Recognition for Blood Donation - Lions Club of Chennai Meenakshi
- Best Club of the Region - Lions Club of Chennai Meenakshi

### **NSS / Lions Clubs Activities**

- The KRS Free Medical Centre continued to provide free services to the poor and needy in the neighborhood of the college.
- The annual Mega Health camp was conducted by the Campus Lions Clubs in which free medical services were provided to the needy in the neighborhood of the college. The camp included free health checkup, free medicines, dental checkup, eye checkup, free cataract surgeries and free spectacles, diabetes screening and Ayurvedic medicines.
- Activities to help the students of the adopted Corporation School at Puliyur were enhanced this year by systematic taking of classes in the school by some of the students of Shift II.
- Other activities such as conducting School Day and providing free school uniforms, etc. for students of the adopted Corporation School at Puliyur were undertaken as usual.
- A Seminar on Female Infanticide - Abortion - HIV, by Dr. Amudha Hari from Mithra Foundation was conducted.
- A Road Safety Rally was organized by the Campus Lions Clubs.
- Blood donation camps were organized twice during the year on campus.
- The Lions Campus Clubs took the lead in organizing Republic Day and Independence Day celebrations in the College this year. These celebrations have been an unflinching routine in the College since inception, so that students imbibe a sense of patriotism.
- Campus Cleanliness drives were organized by the student members of the Campus Lions Clubs.
- Eminent personalities were invited from time to time to address students on their social responsibilities.
  - A memorable event in this connection is the visit by His Excellency Former President of India, Dr Abdul Kalam, who interacted with students on the duties of a responsible citizen.
  - Lion Neville Mehta, International Secretary, Lions Clubs International, addressed the students on the need to be socially conscious.

### **Visit to Single Teacher Schools**

The Single Teacher Schools project is a noble effort made by a voluntary organization called Swami Vivekananda Rural Development Society (SVRDS), to improve the education and health care status of the children of remote and backward villages in Tamil Nadu. The College partners with SVRDS in this noble mission to uplift children in the rural areas. SVRDS runs support schools in each village of these districts, for which a lady from the village is trained to take classes for children every evening after they return from school. This is an effort at increasing the enrolment rate at the regular schools and to prevent dropouts.

This year, a huge exercise was organized by the College with help from the Lions Clubs, in which students and faculty members visited around 60 villages in three Districts of Tamil Nadu, viz. Thiruvallur, Kancheepuram and Chengalpet. All 3000 students and all faculty members went on this visit from the College, for which about 60 buses were arranged.

This visit exposed the College students to rural life and kindled in them the spirit of service and sharing. They interacted with the village children, taught them songs, conducted games, gave them gifts and motivated them to take education seriously. The students not only entertained the children of these schools through games, etc. but also taught them values through stories. The teachers of the school were also also honoured with gifts for their service to the children.

This is a unique initiative of the College and turned out to be highly fulfilling for all involved. It is hoped that this exercise will be repeated at least once every year.

## **Criterion IV: Infrastructure and Learning Resources**

### ***1. Additions to Computing and Related Resources***

- Robotics and Technology Centre was created in collaboration with Lema Labs, IIT Madras. A new room with technology aids was allocated for the Centre.
- The internet leased line for the College was upgraded from 2 Mbps to 8 Mbps.

### ***2. Additions to Laboratories***

#### **Physics Laboratory**

- Microwave test bench
- Constant temperature water bath

#### **Chemistry Laboratory**

- UV Visible Spectrophotometer

#### **Plant Biology and Plant Biotechnology Laboratory**

- Digital electronic table-top balance

#### **Biochemistry Laboratory**

- Colorimeter(Digital)
- Pocket pH meter
- UV Spectrophotometer

#### **Computer Science Laboratory**

- Viewsonic PJD 5112 3D Project was set into Abhinava Vidyatheertha Computer Centre's Seminar Hall.

### ***3. Additions to the Library***

- Bar Coding equipment including a printer and three scanners were procured and deployed in the College Library.
- Autolib Library Management Software was procured and deployed.

- All books were bar-coded
- The Library's OPAC went online and became accessible from all computer installations on campus.

The library procurements for the year 2010-11 are summarized below:

#	Department	New books procured
1.	History	102
2.	Economics	175
3.	English	67
4.	Public Administration	8
5.	Tamil	324
6.	Mathematics	25
7.	Physics	82
8.	Chemistry	50
9.	Botany	7
10.	Zoology	13
11.	Biochemistry	6
12.	Computer Science	195
13.	Commerce	65
	<b>Total</b>	<b>1,119</b>

Total number of books in the library = **46,407**

The number of journals subscribed to this year is given in the table below:

National Journals	International Journals	Total number of journals
46	15	<b>61</b>

## **Criterion V: Student Support and Progression**

### **1. Student Scholarships**

The College provided the maximum possible financial help to complete their studies. The summary of the Scholarships disbursed this year is provided below:

#### **Government & University Endowment Scholarships**

#	Scholarship Type	Students	Amount
1.	SC/ST & SCC Scholarship	462	14,75,787
2.	BC Scholarship	418	6,33,244
3.	MBC Scholarship	348	5,68,090
4.	Cine Worker's Children Scholarship	12	36,000
5.	Farmer's Security Scheme Scholarship	2	5,500
6.	Central Sector Scholarship	45	4,50,000
7.	University of Madras – Endowment Scholarship	8	21,700
	<b>TOTAL</b>	<b>1,295</b>	<b>31,90,321</b>

#### **Private Scholarships**

#	Details	Students	Amount
1	Maharani Vidyavathi Devi of Vizianagaram Trust	475	13,62,500
2	Tamilnadu Congress Committee Charitable Trust	6	15,000
3	Rajasthan Association Tamilnadu Scholarship	2	2,000
4	Sree Venkateswara Students Hostel Scholarship	2	1,000

#	Details	Students	Amount
5	Janaki Sundaram Trust Scholarship	1	5,000
6	Jaigopal Garodia Scholarships	1	1,000
7	Janaki Raman Scholarship	1	5,000
8	Individual Sponsors	1	28,260
<b>TOTAL</b>		<b>489</b>	<b>14,19,760</b>

## 2. Academic Performance of Students

Given below is the programme-wise pass percentage of students in the academic year 2009-2010.

#	Course	Pass Percentage
1.	B.A. History	91
2.	B.A. Economics	97
3.	B.A. English Literature	84
4.	B.Sc. Mathematics	100
5.	B.Sc. Physics	100
6.	B.Sc. Chemistry	90
7.	B.Sc. Plant Biology and Plant Biotechnology	100
8.	B.Sc. Advanced Zoology and Biotechnology	100
9.	B.Sc. Computer Science	-
10.	B.Com. (General)	99
11.	B.Com. (Banking Management)	100
12.	B.A. Economics*	88
13.	B.Sc. Mathematics*	86
14.	B.Com. (General)*	100
15.	B.Com. (Corporate Secretaryship)*	99
16.	M.A. History	100
17.	M.A. Economics	100
18.	M.A. Public Administration	100
19.	M.A. Tamil	100
20.	M.Sc. Mathematics	100
21.	M.Sc. Physics	100
22.	M.Sc. Biochemistry	100
23.	M.Sc. Information Technology	100
24.	M.Com.	100
25.	M.C.A.	100
26.	M.C.A.*	100
27.	M.Phil. History	100
28.	M.Phil. Tamil	100
29.	M.Phil. Mathematics	100

\* Courses offered in Shift II

### 3. Student Placements

Though by policy the College does not encourage placements at the UG level because its aim is to motivate girl students to pursue higher studies, it goes all out to woo recruiters to hire students from the PG courses. Further, the college also recognizes the compulsions of some students of having to take up jobs after their UG degree itself, and hence organizes placements for them too.

The Placement Cell of the College is an active body that arranges for various reputed companies to visit campus and recruit students every year. Meenakshi College has been the Campus of Choice for many renowned multinational companies. The student placement statistics of this year are presented below:

#	Company	Selected
1.	Aavaranaa Sarees	5
2.	Aon Hewitt	1
3.	Bahwan Cyber Tek Pvt. Ltd	2
4.	Bajaj Allianz	9
5.	Client Network Services India (CNSI)	8
6.	Cognizant Technology Solutions Pvt. Ltd.	14
7.	Dell Services	11
8.	Financial Express	14
9.	Global Art India	6
10.	Pleasant Health Care	18
11.	Red Black Tree Technologies Pvt. Ltd.	2
12.	RR Donnelley	16
13.	SAP Labs	2
14.	Satyam Technology Systems	2
15.	Tally Solutions	5
16.	Tata Consultancy Services	10
17.	US Technologies	5
18.	Wipro Academy of Software Excellence	40
19.	Wipro Software Technology Academy	22
<b>Total</b>		<b>192</b>

The following tables provide data regarding student progression in the academic year 2009-10 to higher studies, employment and entrepreneurship.

#### Student progression from UG

#	UG to PG %	Employed %		Entrepreneurs %
		Campus	Off Campus	
1.	42.84	21.89	18.51	2.16

#### Student progression from PG

#	PG to MPhil %	PG to Ph.D. %	Employed %		Entrepreneurs %
			Campus	Off Campus	
1.	13.10	0.69	13.79	40.69	0.69

### Student progression from M.Phil.

#	M.Phil. to Ph.D. %	Employed %	Entrepreneurs %
1	18.18	100.00	0.00

### Number of students who took up competitive examinations

#	NET / SLET	GATE / CAT	GRE / TOEFFL / GMAT	Govt. Services
1.	22	140	21	289

#### 4. Student Achievements

- R. Rakhi, B. Narayani (Department of Biochemistry) won the 3<sup>rd</sup> prize in a National level poster presentation competition on ‘Recent Advances in Cancer Therapy’.
- J Jayashree (Department of Economics) got the University First rank.
- Lion G.S Durga (Department of Mathematics) of the Lions Club of Thomas Alva Edison received the Membership excellence award for all-round growth.
- P. Rohini (Department of Mathematics) got the University Tenth rank.
- Mangayarkarasi S and Lakshmi R (Department of Computer Science) bagged the University Fourth and Sixth ranks respectively in MCA course.
- Archana V (Department of Computer Science) won the first place and received a cash award of Rs. 10,000/- in a national level paper presentation contest conducted by eWIT – Empowering Women in IT.

#### Sports

- The College Rugby team won the II Place in the National Level Rugby tournament.

## Criterion VI: Governance, Leadership and Management

### 1. The IQAC’s Unique Quality Assurance Initiatives

The IQAC designed a unique quality control and assurance system last year, based on inputs from Adhyaksha, the Examination Management Software, and especially with the help of the Department of Computer Science. The first year’s reports (2009-10) were reviewed in the IQAC meeting held on 15 July, 2010. Presented below is a summary of the deliberations. The reports are provided in the annexures.

#### a. Academic Progress Monitoring System

##### 1. Tracking each student’s incremental growth

The system has provided never-before insights into a student’s performance, through the graphical outputs it provides. The reports generated by the system compare every student’s performance in each semester in comparison with the class average. The reports are also provided in a community-wise manner so that the Departments get additional information regarding social background and can analyze whether that has had a bearing on the student’s performance. This would in turn be helpful in providing suitable support to students to perform better.

For UG students, the system takes only Part III (Main and Allied) subjects into account, while for PG students, it takes only Part A (Main and Choice-based Credit System) subjects into consideration for the calculation.

**Annexure I** provides the reports for the year 2009-10.

## **2. Tracking and analysis of arrears**

This system provides details of students who have not passed in papers during the examinations. Reports are generated for each examination session for each class, i.e. for the Regular examinations held in November and April, and for the Supplementary examinations held in December and June. The report also has details of each student's social and economic background as supporting information.

The process that the IQAC has institutionalized is that after every examination session and after the results are published, a date is fixed on which the class teacher of every class, the Head of the Department and one IQAC member sit together and discuss the reasons for failure in the concerned subjects and plan remedial measures. This is tracked after the next examination session and observations on the effectiveness of the remedial measures planned and implemented earlier are recorded.

**Annexure II** provides the reports for the year 2009-10.

### **b. Department and Faculty Appraisal System**

This system provides reports regarding the Department students' profile and major departmental activities during the academic year.

The performance of every faculty member of the Department is documented based on her academic contribution, research contribution and other activities undertaken during the academic year.

These reports prepared by the IQAC are presented by each Department to the Principal and the Secretary of the College. Suggestions and possible future plans for the department and faculty members are discussed in these annual appraisal meetings.

**Annexure III** provides the reports for the year 2009-10.

## **2. *Workshop on Academic Reforms***

All faculty members attended this day-long workshop organized by the College Management, and gained insight into the academic practices in vogue in various other institutions.

## **3. *Workshop on Administrative Reforms***

All faculty, both non-teaching and teaching, attended this day-long workshop conducted in the College and gained useful information from administrators of other educational institutions and former principals and vice-chancellors.

## **4. *Formation of Quality Circles***

Quality Circles were formed in six Departments and initial intensive training was organized for faculty and students by professional trainers from QCFI, the Quality Circle Forum of India. The students and faculty members produced wonderful solutions to problems at the end of the exercise and their presentations were lauded uniformly by external judges.

### ***5. Workshop on Ethics and Accountability to Ensure Quality in Higher Education***

All faculty attended this workshop organized by the College. The workshop had sessions by eminent resource persons who talked about continuously improving quality in higher education. These sessions were followed by the Quality Circle presentation competition by students. The workshop proceedings were released in the valedictory function that evening.

### ***6. External audit of all Departments***

All Departments submitted themselves to an external audit. Eminent academicians and industry practitioners were invited as part of a panel of experts by each department to evaluate the various aspects of the department's functioning, especially in the context of autonomy.

All departments were appreciated for the good work being done and some suggestions were also proffered by the experts for future directions and efforts.

## **Criterion VII: Innovation and Best Practices**

The IQAC's unique quality assurance initiatives have started bearing fruit this year, with processes in place to systematically gauge, compare and improve student and faculty performance. The feedback loop incorporated in the processes themselves have ensured accountability and a clear sense of direction for all the stakeholders.

The visit to Single-Teacher Schools is a unique initiative by the College to imbue in students a sense of social responsibility towards rural children, and to also make the college students recognize the privileges they enjoy and to therefore make the most of their opportunities.

The external audit of all departments provided an opportunity for all departments to benchmark their practices and performance and to gain insights into the avenues of improvement.

The introduction of Quality Circles has been a unique initiative in an Arts & Science College, and will certainly go a long way in making the students imbibe a quality consciousness and crucially, to impart to them crucial problem-solving skills.

## Conclusion

In its meeting held on 16 March, 2011, the IQAC reviewed the above achievements of the institution on the basis of the goals set by it at the beginning of the academic year.

The IQAC was pleased to note that its institution-wide, unique quality initiatives to monitor and improve student progression and to build in accountability into the system to ensure benefits in a time-bound manner, have been well-received by the Management, Principal and all staff members. Its worth in giving all a better understanding of the incremental growth and performance of students and faculty so that time-bound action plans may be implemented to ensure student support and progression on an individual basis. The efforts to mine the required data from the Adhyaksha system by the Department of Computer Science, was unanimously lauded by the IQAC, for this data forms the bedrock of the entire analysis system.

The IQAC noted and appreciated the large number of research publications made by the faculty members especially in peer-reviewed international journals.

The unique initiative to visit the rural Single Teacher Schools was applauded in one voice by the IQAC members.

The IQAC also placed on record its appreciation for and gratitude to all Departments for conducting such a wide variety of national seminars with eminent resource persons.

The fact that all departments submitted themselves voluntarily for external audits was a matter of great satisfaction for the IQAC, and the IQAC was also pleased to note the positive feedback from the external experts.

The IQAC members thanked the Management for organizing such important workshops on Academic Reforms, Administrative Reforms and also on Quality in Higher Education. The Management was also especially lauded by the IQAC for the initiative to start Quality Circles on campus and to impart the necessary skills and knowledge to the students and especially the faculty.

Overall, the activities planned by the IQAC were carried out this year with the cooperation and support of all the stake-holders.