The Annual Quality Assurance Report (AQAR) of the IQAC

Name of the Institution : MKSSS’s Cummins College of Engineering for Women

Year of the Report : 2009-10

PART – A

Similar to previous years, Principal and Heads of Departments decided to look after the following points for the overall quality improvement of the college.

i) Initiatives to be taken towards faculty development programs. Faculty members to be sponsored for higher education to get M. E. / Ph. D. Degrees, to attend various conferences / seminars / workshops / submit and present papers to International journals and conferences, to initiate consultancy activities, etc.

ii) From the point of view of laboratory developments, to prepare and submit project proposals under MODROBS / TAPTEC schemes of AICTE and similar schemes of DST.

iii) To implement the scheme of obtaining feedback from students about the performance of teachers.

iv) To arrange lectures from experts from industry and other organization to educate students for important topics, which are not covered in the University curriculum.

v) To provide necessary health care and medical facility to all the students.

vi) To motivate students to participate in various sports activities.

vii) To provide to students career guidance and counseling for higher studies and competitive examinations.

viii) To see that more number of girls get placed through campus recruitment process.

ix) To motivate non-teaching staff members to improve their qualifications.

x) To develop collaboration activities with industries and other organizations.

xi) To encourage students to participate in various extra-curricular and co-curricular activities.
xii) To make efforts to increase number of students securing first class.

xiii) To conduct training for English communication skills to improve employability of our students.

**PART-B**

1. **Activities reflecting the goals and objectives of the Institution:**
   - Proposals have been submitted for funding to different agencies such as AICTE.
   - Faculty members encouraged for higher studies (ME, Ph. D). 1 faculty member registered for Ph.D. and 12 for ME / M. Tech. Programs.
   - Faculty members encouraged to participate in Conferences / Workshops / Seminars. 138 faculty members attended various seminars / conferences.

2. **New academic Programs initiated (UG and PG):**
   - Started Postgraduate programs in E&Tc and Instrumentation & Control Engineering.

3. **Innovations in curricular design and transaction:**
   - Few faculty members participated in the curriculum development activities of Pune University.
   - The college organized seminar for revision of curriculum, on behalf of University of Pune.
   - Most of the faculty members, being well versed with computers, internet, audio visual aids, multimedia etc., use of computers, LCD Projectors for classroom and laboratory teaching has been adopted.

4. **Inter-disciplinary programs started:**
   - Since the college is affiliated to the Pune University, curriculum of all the courses are designed by the University only.

5. **Examination reforms implemented:**
   - Results of test examinations, mock oral examinations as well as University examinations are communicated to guardians.

6. **Candidates Qualified: NET / SET / GATE etc.**
   - For Engineering Colleges, NET / SET examinations are not necessary. To go for higher studies, 6 students appeared GATE examination.
7. **Initiative towards Faculty Development Programs:**

   - 138 faculty members were deputed to attend summer / winter schools, seminars, STTP etc.
   - Evaluation of teachers’ performance was done through feedback received from students as well as through self-appraisal.

8. **Total number of seminars / workshops conducted:**

   - Four seminars / workshops were organized by the college.

9. **Research projects**

   - **a) Newly implemented: 04**
   - **b) Completed: 02**

   - New projects started
     -(i) Experimental investigations on violations of Leggett – Garg inequality
     -(ii) Investigation on the implication of disproof of Bell’s theorem
     -(iii) Performance analysis of Lead acid batteries
     -(iv) ‘Lab on wheels’ project

10. **Patents generated, if any.**

    - Nil

11. **New collaborative research programs:**

    - Collaborations with Industry KPIT-Cummins for research and development project.

12. **Research grants received from AICTE:**

    - Nil

13. **Details of research scholars:**

    - Prof. Shivsai Dixit (Assistant Professor in Mechanical Engineering) was awarded Ph.D. Degree by Indian Institute of Science, Bangalore.

14. **Citation index of faculty members and impact factor:**

    - Data not available

15. **Honors / Awards to the faculty:**

    - Prof. Mrs. Anagha Panditrao, Asstt. Professor in Instrumentation & Control, received National Project competition awards “Awiskar” and “Anveshan” from University of Pune.
16. Internal resources generated:

- The College solely depends on the tuition fees received from students. This is the only source of revenue.

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

- In August 2009, the program NPMASS (National Program on Micro and Smart Systems), a program of DST, Govt. of India, supported MEMS (Micro Electro Mechanical Systems) research and design center of Cummins College, through donation of software packages, viz. Intellsuite, Comsol-MultiPhysics, Tanner, Coventer etc.
- Sports Equipments Rs.60,000/-.
- Development of CMOS VLSI lab Rs. 14 Lacs.
- Development of Analytical and optical instrumentation lab. Rs. 15 Lacs.
- Entrepreneur development cell Rs. 8 Lacs.
- Library Staff Development Program Rs. 1.78 Lacs.

18. Community services:

- The College conducted blood donation camp, traffic control camp, thyroid camp, etc. NSS cell has been established by the college in 2010.

19. Teachers and officers newly recruited:

- 28 teachers newly recruited, 11 on regular basis and 17 on adhoc basis.

20. Teaching – Non-teaching staff ratio:

- 127 : 119 i. e. 1 : 0.937

21. Improvements in the library services:

- Science-direct e-journals subscribed
- Library OPAC made available
- Institutional membership of ARAI library obtained
- AICTE sponsored staff development program organized, on modern library trends.
- 3 library staff members attended workshops / seminars

22. New books / journals subscribed and their value:

- Books 3422 --- Rs. 19,81,029/-
- Journals --- Rs. 2,87,277/-
23. **Courses in which student assessment of teachers is introduced and the action taken on student feedback:**

- The college has established a mechanism to get the students’ feedback about the performance of teachers, every semester. This is done through a questionnaire, answered by students. To maintain the confidentiality, the feedback form does not contain name / roll number of the student.

24. **Unit cost of education:**

- (Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)
  
  (a) Including the salary Component = Rs.75,401/-
  (b) Excluding the salary component = Rs.39,006/-

25. **Computerization of administration and the process of admissions and examination results, issue of certificates:**

- Computerized administration processes are already in use.

26. **Increase in the infrastructural facilities:**

- Activities of the Computer Department have been enhanced by adding around 150 PCs.
- In view of heavy demand for hostel accommodation, the College has taken on rent, two more hostels. In all, total occupancy is 920.

27. **Technology Upgradation :**

- New Software packages viz. Pro-E, Object Analysis, visual FOX-PRO, Rational Rose, MS Project 98 have been purchased.

28. **Computer and internet access and training to teachers and students:**

- Computer and internet access is provided to teachers and students. A secured wi-fi facility is also provided in hostel and in the building of Mechanical Engineering Department.

29. **Financial aid to students:**

- Scholarships : 62 students Rs.1,73,286/-
- Aid : 18 students Rs.2,85,000/-
30. Activities and support from the Alumni Association:

- Annual Gathering of all Alumnae Students was organized on 4th Saturday of January. The Alumnae being young and junior in industry, no considerable financial support has been received from them.

31. Activities and support from parent-teacher Association:

- There is no formal parent teacher association, however, a feedback from parents is collected occasionally in the prescribed format, analyzed and used for further development.

32. Health services:

- Lady medical practitioner is available in the college hostel for 24 hours.
- The college has established a tie-up with Deenanath Mangeshkar Hospital for concessional treatment to all the employees and students.
- A health club / Modern Gym. Facility is made available in the campus to all the students.

33. Performance in sports activities:

- 120 students participated in various sports activities and won prizes.
- Our students are winners of table-tennis tournament in Pune City Zone, won second place in volleyball, won in third place in football & handball.
- At Pune University level, our students won second place in volleyball and swimming and they were winners for table tennis and football.
- Our students participated in football and table tennis tournaments held at Jiwaji University, Gwalior and Gaur University at Saga, in Madhya Pradesh.

34. Incentives to outstanding sports persons:

- Every year, the ‘Murty Prize’ for the achievement in sports is given to the student.

35. Student achievements and awards:

- Passing percentages of final year students

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- Rank holders (top 10) in the University Examinations --- 28
- Number of papers presented by students --- 08
- Number of students participated in technical events --- 38
36. Activities of the Guidance and Counseling unit:

- The entrepreneurship development cell received a grant of Rs. 8.00 lakhs from DST for the development of the activities of the cell

37. Placement services provided to students:

- The college has separate Training & Placement Cell with full time Training & Placement Officer and a Clerk. The Cell provides training in communication skills, interview technique, group discussions etc. The Cell also provides guidance for competitive examinations such as GATE, GRE, TOEFL. Number of students placed through campus recruitments is 264.

- A separate Training and Placement office adjacent to conference hall has been provided, with internet facility, separate cabins for conducting interviews, counseling etc. The conference hall is used by the interview committees for initial addresses.

38. Development programs for non-teaching staff:

- 9 supporting staff members have undergone training in Personality Development, English conversation and computer training.

39. Healthy practices of the institution:

- The institute always promotes the best practices such as,

- Regular feedback from students
- Multimedia classrooms and laboratories. All the classrooms have been equipped with audio, video, internet, LCD facilities.
- Memberships of professional bodies: The faculty and students membership, subscription borne by the college for few members every year.
- (a) International classification and computerized access to books (b) Induction program for new students to introduce library system and its usage. (c) Top 20 borrowers scheme in which top 10 borrowers are given extra borrowing book facility. (d) Online journals access to students & staff. (e) Access to NPTL Video lecture series.
- Special classes for improving English and Communication skills especially for rural students were conducted.
- College magazine and departmental newsletter were published as usual.
- Encouragement to teachers and students has been continued for conducting and attending conferences / seminars / workshops and writing papers in Journals.
- Encouragement for students to participate in extracurricular activities such as sports, cultural etc. for all-round development.
40. **Linkages developed with National / International, academic / Research bodies:**

- As before, Cummins India Ltd (CIL) continued to support the college in various activities.

- **MEMS research laboratory:** For the research in Micro Electro Mechanical system (MEMS) the laboratory is set up, which has been fully funded by National Program in Micro and Smart System (NPMASS), under Department of science and Technology (DST) of Government of India.

- **Persistent Systems Limited:** In 2009, the Institution has signed MoU with Persistent Systems Limited to collaborate in undertaking projects and activities related to teaching, training and research in the fileds of Computer Engineering and Information Technology.

- **KPIT-Cummins Ltd:** In 2009, the Institution has signed Mou with “KPIT-Cummins Ltd.” To have facilities in the areas of teaching, training and research for the departments (i) Electronics Telecommunication (ii) Computer Engineering and (iii) Information Technology.

41. **Any other relevant information the institution wishes to add:**

- Every department, every year, declares name of a student as “Best Outgoing Student”.
- For final year students “Best Project Award” is instituted in every department.
- Students are encouraged to present technical papers in various seminars / conferences and awards are given to “best papers”.
- Awards in the form of Gold Medals are instituted for students showing best overall performance in University Examinations of Second, Third and Final years.
- Another Gold Medal award is instituted for a student showing best performance in various sports events.
- All the points stated above, develop conducive atmosphere for learning.

**PART – C**

It was decided by the Development Committee (IQAC) that activities planned last year for overall improvements will be continued for the year 2010-11. Emphasis will be given on the following points.

- As usual, encouragement to faculty members for registration to higher studies (ME / Ph.D).
- It was decided by the Development Committee (IQAC) that activities planned last year for overall improvements will be continued for the year 2010-11. Emphasis will be given on the following points.
- To purchase some more PCs for the benefit of Computer Engineering students.
- To increase teacher : students ratio. Additional faculty members will be recruited which will result in improvement in overall teaching.
- To increase the faculty participation in different workshops / conferences / seminars.
- To improve the library services. To do this (i) New additional books will be purchased (ii) Additional journals will be subscribed (iii) Library working will be fully automated. (iv) Additional e-Journals will be purchased.
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