CHAPTER 2: ACTION TAKEN REPORT ON RECOMMENDATIONS OF ANNUAL QUALITY ASSURANCE REPORT (JULY 2016)

The Institute Quality Assurance Cell (IQAC) was established in July 2014. The first report AQAR (Annual Quality Assurance Report) 2015 was available in July 2015. It was sent to all Academic Heads of Departments of the Institute. The recommendations and possible action points were also discussed in IAMC (Institute Academic Management Committee) meeting. The same process was followed this year as well. In addition to this all the departments were asked to submit their report on work done as implementation process of various recommendations. The details sought and the progress reports sent by various departments are attached as Annexure 1 & 3-9.

Following is the action taken report on recommendations of AQAR-2016 report. The outcome is evident in AQAR-2017 report.

The major recommendations of the year 2016 and their improvising mechanisms are briefly discussed below:

Recommendation 1

Attention on Project Based Learning and inter-activeness components:

Class size has been reduced to stimulate the interactive learning atmosphere in the class room teaching. Project based learning programmes have also been increased considerably. CSE & IT department has introduced new courses on Project Based in three semesters giving a total weightage of 16 credits in the revised curricula of M.Tech Programme. Also in most of CSE & IT courses, there is an emphasis on project work as part of the TA component. Biotechnology department has also introduced PBL-I for M. Tech first semester students registered in Odd-2017, as per Institute guidelines. Term paper has been introduced for B.Tech final year pursuing B.Tech Biotech. In the electives offered by HSS department the evaluation of TA is project based in 24 papers across semesters and in some papers T2 is also assessed through the projects submitted by the students.

Recommendation 2

Curricula Development and content re-examination:

Physics I, Physics II, Material Science, Genetics, Development Biology, Digital Signal processing, Electrical Science- II, Analog Electronics, SDF- I, SDF- II, Data Structure, Database & Social media security, Microprocessor and Controller, Operational Systems and programming syllabi were found to be lengthy and diverse last year and IQAC had recommended for the contents to be re examined in these courses-

The Head of Physics & Material Sciences has stated in his report that "process of modification has been initiated. As a first step lecture-wise course delivery in Physics-I and Materials Science has been re-aligned in odd semester 2017 to estimate the length of the course that can be comfortably covered. The same will be done with Physics-II in the coming even semester 2018. Further modification will be subsequently done on the basis of outcome of the first step."

The Head for Biotechnology department has reported that measures are being taken to teach Genetics and Development Biology as independent courses as they were taught earlier before merging.

The department of CSE & IT has taken up the recommendations and is working towards their implementation.

The Department of ECE has modified and revised the content of the papers of Digital Signal Processing, Electrical Science-II and Analog Electronics as per the recommendation after thorough review of all the papers.

Also a number of Value Added Courses have been added this year.

Recommendation 3

Sequence of Digital Signal Processing course W.R.T. Analog Electronics and control system to be re examined

The department of ECE has deliberated on the sequence of these courses as per students' response and feedback and modified the sequence accordingly. Now DSP and Analog Electronics are being taught in 4th semester and control system is being offered in 5th Semester.

Recommendation 4

Experimentations and Lab improvisation:

List of Experiments in Digital System Lab, Analog Electronics Lab may be reviewed was another major recommendation last year.

A number of new software has been procured to enrich the practical and learning facilities. New Labs with state of art infrastructure have been established like the Language Lab (for HSS department) having 6 different software, research and PG labs in ECE and CSE departments. The department of ECE has revised the entire experiment list in Even (January-June) semester of 2017 with reference to the recommendation stated above. The details are given in Annexure 4.

Recommendation 5

Latest MATLAB facilities in labs

The department of CSE & IT feels that there is no need to promote MATLAB in CSE department as many open source software are being leveraged for the purpose. But the department of ECE feels that there is a need to increase the current number of Matlab licenses as MATLAB is extensively used in courses such as Digital Signal Processing, Signal and Systems and for Image Processing applications both labwork and research. Other important labs in which it is required are as follows: Advanced DSP, Signal and System, Digital Systems, ECE Design and Simulation Lab -I & II, Project and for simulation in research work at research lab.

Recommendation 6

Increasing the Research intake ratio

The Ph.D admission frequency has been increased with admissions being done twice now in every academic year. This year has witnessed 48 admissions in Ph.D as against 23 last year.

Recommendation 7

Funded Projects and Journal publication:

All the departments and faculty members are working hard to get more externally funded projects as well as scopus indexed journal publications. This year four new R& D Projects have been sanctioned with external funding of Rs. 91.09 Lakhs in comparison to the last year's number of two projects with an external funding of Rs 37.99 Lakhs. There has been a substantial increase by the Institute on developing research facilities in the departments. A total of Rs 479 Lakhs have been used for research purpose in comparison to Rs 10 Lakhs last year.

In the Physics department two research projects have been submitted to granting agencies in 2016-17. In 2017-18 one R & D project has been sanctioned by DRDO and one National PDF has joined the department with a project from DST.

The department of ECE has also submitted a research project to DST.

Recommendation 8

Subjects important for exams like GATE, IES, PSUs etc. maybe identified and completed before 4th Year

The department of Biotechnology offers 8 subjects for GATE in 3rd year and also offers 6 subjects for CSIR (NET). Details of the subjects are attached in Annexure 5.

The department of CSE & IT has stated that it is already being done partially and it is not possible to do so completely.

The department of ECE has been made Control System core subject, while other important courses like Digital Electronics, EMT, Signal and Systems and Digital Signal Processing are completed before 4th year.

Recommendation 9

Workshops, FDPs and Conferences to be organised by every department:

Each and every department has organized Workshops and FDPs and almost every department has organized at least one International Conference this year, except for the Department of PMSE and Jaypee Business School. They have proposed and are planning to organize it this year.

Recommendation 10

More Social Activities to be taken up:

In addition to the last year's social activities, this year Jaypee Institute has adopted two schools this year. The Social activity group of JIIT at Sector-128 has come up with a mission to assist children of economically weaker sections by imparting them basic education and general awareness through various means and resources provided by the Institute itself. The social activity group organises regular visits on every Saturday for the underprivileged children from nearby area to JIIT with objectives such as:

- a) Identify their academic weakness and providing at least 2 hours per week of time to these children for learning various subjects viz. Hindi, English, Maths etc. within JIIT campus
- b) Provide hands on practice session on computer and basic software
- c) Create awareness among them about cleanliness and hygiene of self and surroundings
- d) Conduct of outdoor fun and Sports activities
- e) Collect and Distribute Clothes/Stationary for the underprivileged.

Recommendation 11

Activities of Enterpreneurship Centre to be monitored:

The centre is continuously engaged in providing start-up advice and solutions to the young entrepreneurs. It has conducted comprehensive workshops as well and provides support and assistance in different forms to the students who wish to pursue their enterprising dreams.

Recommendation 12

Faculty encouragement mechanism to file patent, get projects or coordinate big events:

The faculty actively participating in Institutional enrichment programmes like filing of patents, getting externally funded projects or coordinating events like International Conferences are being regularly reported to the management and duly acknowledged by the authorities in a positive manner. The Institute is yet to go a long way to make progress in filing patents. However there is improvement in getting externally funded R & D projects.

Recommendation 13

End Semester Student Feedback to be made online:

This recommendation has been noted but is yet to be implemented.

Recommendation 14

Auditing of Non-Academic Departments:

This year, the auditing process of Non teaching departments of Finance, Registry, Administration, Training & Placement, Environment, IT, Jaypee Youth Club and Facility Management has been done successfully by various audit committees in a very exhaustive manner.