

2.2.2. Quality of end semester examination, internal semester question papers, assignments and evaluation

- i. Continuous evaluation is followed in the true sense in the Department. Every Theory course has components of evaluation like Class Tests 1 and 2, Daily Home Assignments (DHAs), Daily Class Assignments (DCA), Additional Assessment and Attendance.
- ii. The weightage of the internal evaluation is 75% whereas the external end semester exam is for 25 %. The grades obtained in both the internal and the external evaluations are mentioned separately in the grade sheet. This is very important because any discrepancies will immediately come to light and the evaluation in the internals is done very seriously. It is uncommon for students to actually get better grades in external than in internal evaluation.
- iii. 5% marks are given as an incentive to attend classes and for attendance. Similarly Practical Courses / Projects / Seminars have multiple components.
- iv. All the evaluations are time bound and are made available on the Course Monitoring System (CMS) so that the students can see their marks at any time they wish.
- v. The answer books of Class tests are shown to the students after evaluation within a week of the test. Feedback is given and answers to the questions are discussed in class so that the students know what they have done right and what they have not.
- vi. Daily Home Assignments (DHAs) are given after every class and concern the matter covered in that class. These are evaluated and returned in the next class. This helps in making the class assimilate the contents delivered in the class and establishes a routine that makes them regular, disciplined and punctual. Since assignments are to be submitted in class it provides an additional incentive for regularity in attendance. Thus class attendance is typically very good. More importantly, the DHAs help in preparing the students to face daily targets which are typical in the industry. Thus they do not feel any difficulty in their jobs as they are used to regular sustained hard work.
- vii. The Daily Class Assignments are short tests held in class every week on the matter covered in the previous week. These prepare the students to pay attention to detail as they are typically quiz type in nature.
- viii. The format of the Additional Assessment is left to the teacher to decide according to the nature of the course. It could be a seminar on a topic related to the subject wherein the student may be required to dig deeper than what is possible in the course work on a particular topic. In Computer Science courses, the course teacher might prefer an implementation assignment so that the student gets a feel for the practical details in a small application related to the course. Others might prefer some other mode of evaluation.

- ix. Every theory course has a Question Bank that is given to the students at the beginning the semester. The Question Bank clarifies the level of detail that is expected on every topic in the syllabus of the course. It is also sent to the examiner of the end semester exam. The Question Bank is very helpful in standardizing the content delivered when multiple teachers teach the same course in the same year or across different years. It establishes a basic level of coverage that is expected.
- x. Several feedback mechanisms in the form of Suggestion Box, Class Committees, Proctorial Meetings, Academic and Administrative Audit Committee meeting etc. All these mechanisms have been put in place to ensure that any discrepancies from the expected level are immediately spotted and mid-course corrective measures are taken rather than as a post facto analysis.
- xi. The internal grades are proposed by the course teacher in each course. However, they are discussed in a Departmental Moderation Committee before finalizing. In this the all the course teachers teaching a particular class present their grade distributions. Any deviations from accepted norms are immediately visible. The grades in a particular course cannot be much higher or much lower than the other courses. If that happens, the course teacher has to provide a reasonable explanation or modify as per recommendation of the Committee. This is a powerful check and balance mechanism.
- xii. Attendance and performance have higher weightage in lab evaluations and projects.
- xiii. The end semester evaluation is completely transparent to the Department. Every course as a panel of examiners provided by the Department and the actual examiner in a particular year is decided centrally. So the course teacher is not aware of who it is. These examiners provide feedback about the student performance either question – wise or overall. Large discrepancy between the internal and external grades are spotted and reported to the Department for investigation and corrective measures if necessary. Some of the examiners in the last end semester examinations conducted in December, 2018 – January, 2019 include:
 - (i) Prof Prem Kalra, Professor, Department of Computer Science, IIT, Delhi
 - (ii) Prof V C Prasad, Retd. Professor, Department of Electrical Engg., IIT, Delhi
 - (iii) Prof. Hazur Saran, Professor, Department of Computer Science, IIT, Delhi
 - (iv) Prof. Nishchal Verma, Professor, Department of Electrical Engg., IIT, Kanpur
 - (v) Prof. R.K. Mishra, Professor, Electrical Engineering, IIT, BHU
 - (vi) Prof. Vishal Saxena, Department of Electrical Engineering, IIT, Roorkee
 - (vii) Mr. B. S. Gupta, Retd. DGM, BHEL, Bangalore
 - (viii) Mr. Bharat Bhushan, Project Officer, UPNEDA
 - (ix) Mr. Abhishek Nigam, Senior Manager, HCL Technologies
- xiv. All the above mechanisms ensure that the quality of evaluation meets the accepted standards world- wide.

