

2.6.2. Attainment of program outcomes and course outcomes are evaluated by the institution.

Describe the method of measuring attainment of PO's, PSO's and CO's in not more than 500 words and the level of attainment of PO's, PSO's and CO's.

CO attainment level is set for the program and courses based on the continuous internal assessment and semester end examinations.

Semester end examination: From the semester end examinations, the number of students who scored more than 60% from the total appeared was considered and calculated to get the attainment level on scale 3.

For example:

Calculation

$$\frac{\text{Number of students scoring 60\% and more than 60\%}}{\text{Total number of students appeared}} \times 3$$

80% of semester end examinations to be considered

Direct Assessment:

Each question of sessional examination is mapped with course outcomes of that particular course and based on the question attempted by the students from the total, students who scored 60% and more than 60% of the particular question was computed and analyzed for the attainment. From the computed value, 80% is considered for direct attainment of course outcomes.

Indirect Assessment: Students, Staff, Alumni, Employer and Parent's feedback was collected for all courses at the end of semester. From the collected data, high, moderate and low grades/scores were counted and computed. 20% of indirect assessment was taken. Accordingly each course outcome of all courses is computed and analyzed.

Overall attainment from sessional examination performance was calculated by considering 80% of direct assessment and 20% of indirect assessment.

In the direct measurement of course outcomes attainment, the results of the sessional and external examination were considered. In indirect assessment, student's, Staff, Alumni,

Employer and Parent's feedback survey was conducted and their average responses on each course outcome was collected and computed.

Calculation of course attainment:

In each sessional, the number of students who achieved a set target for the course outcomes that mapped for each question in the question paper was identified and computed. Based on sessional examinations conducted in each semester (either 2 or 3), the average of these values are computed to decide the attainment level. From the obtained value, 80% was considered and the remaining 20% was taken from the feedback survey (Indirect assessment).

The course attainment for semester end/year end examinations is also done by mapping the questions of the external examination papers against course outcomes. Students who score 60% or more than 60% of the particular question was computed and analyzed for attainment. From the attained score, 80% of the value is considered which is to be added for 20% of internal attainment received from sessional examinations and indirect feedback. The overall result received from this internal and external course attainment is applied for Programme Outcome (PO) attainment.

Internal Assessment

Accordingly the attainment of each course outcome for both sessional examinations was calculated for strongly mapped questions and an average value was taken. 80% of the sessional average and 20% of feedback on course outcomes (Indirect assessment) was taken as internal assessment.

University Assessment

In case of semester end examination results, the percentage of students who attained the set average percentage (60% of maximum marks) was identified and computed.

PO assessment: Programme outcomes are evaluated by direct and indirect assessment methods. Direct assessment is calculated based on CO attainment from student's performances (80%). Indirect assessment (20%) was calculated by taking surveys from staff, alumni, employer's, student exit surveys, parents and average attainment of each PO's calculated. It is observed that programme attainments for all programmes was satisfactory (1.48 to 2.26). Finally the overall course outcome attainment was computed by considering 80% of university assessment and 20% of internal assessment.