

The institute adopted OBE in true sense since the A.Y.2012-13. The prescribed procedures for computing the assessments of COs, POs and PSOs with suitable examples at our college are given here for your perusal.

Attainment of Course Outcomes (COs) and correlation between the courses and the Program Outcomes (POs) & Program Specific Outcomes

- The COs are framed through discussion with course instructor, course coordinator, module coordinator, Department academic committee, and finally approved in BOS meetings.
- Each course has defined course outcomes that are linked to the program outcomes and a set of performance criteria that are used to provide quantitative measurement of how well course outcomes are achieved.
- The COs of each course are mapped to POs & PSOs with weights of 1 (low), 2 (medium) and 3 (high) to indicate the degree of correlation.
- The attainment of COs correlates to the attainment of POs& PSOs.
- The program outcomes and program specific outcomes are achieved through a curriculum that offers several courses.
- The final attainment levels of POs and PSOs for a batch of students of a branch in all four years indicate the effectiveness of the program implemented.

i). Assessment tools for attainment of Course Outcomes (COs)

a) CIE-Cumulative Internal Examinations-

- Mid-semester examination- Assessment is carried out after the mid examinations which are held twice in a semester.
- Assignments and
- Quiz exams

b) SEE-Semester End Examinations- Focused on attainment of course outcomes and program outcomes using a descriptive exam.

- Each question in mid-semester examination, semester end examination, assignment and quiz are tagged to a specific CO.
- The attainment of each CO is computed as percentage of students above a target level set as maximum of class average mark and 60% of marks allocated to the question. The overall CO attainment of CIE and SEE are separately computed as the average of all attainments of all contributions from all questions in CIE and SEE separately.
- The overall attainment of each CO is computed as follows:

$$\text{Assignment Overall CO Attainment} = 0.4 * \text{CIE} + 0.6 * \text{SEE}$$

At the beginning of each semester, the expected target level of COs is set by Program Assessment Committee (PAC) and Department Academic Committee (DAC) based on the previous batch CO attainment levels. The performance of the students in the examinations during the semester in each course is used to compute the level of attainments of the COs.

ii). Assessment tools and processes used for measuring the attainment of each Program Outcome and Program Specific Outcomes

a) Direct assessment:

- The COs of each course are mapped to POs/PSOs with weights of 1, 2 and 3.
- The attainments of the PO/PSO is computed as a weighted average attainment of the COs that are mapped to the given PO/PSO.

b) Indirect assessment:

The following indirect assessment tools are used for calculating PO & PSO attainments.

- **Program Exit Survey**
- **Student Portfolio** includes Co-curricular, Extra Curricular, Extension activities, placements, and higher studies.

The overall PO & PSO attainments are evaluated by considering the following.

- ✓ 70% of direct assessment
- ✓ 30% of indirect assessment through various surveys (10% for program exit survey and 20% for student portfolio)