## CO Attainment Calculation

$>$ Attainment of program outcomes and program specific outcomes are measured through direct and indirect attainment methods. Direct Attainment: Direct attainment is calculated from internal examination (CIE) and University examination for all courses which is called course outcome attainment.

## > Course Outcome (CO) attainment calculation method for Internal Examination

Every question in the internal examination is mapped to one CO. attainment of that CO depends on the student's performance in that question. The process is described below and is done for all questions.
$\mathrm{Na}=$ number of students attempted the question
Ns = number of students who scored above $60 \%$ marks
$X=\%$ of students scoring above $60 \%$ marks $=(\mathrm{Ns} / \mathrm{Na})$

1. If $X>50$ and $<=60 \mathrm{CO}$ attainment level is 1
2. If $X>60$ and $<=70$ CO attainment level is 2
3. If $X>70 \mathrm{CO}$ attainment level is 3

Note: If there are four sections, CO attainment for a course is NOT done separately four times. In single excel sheet we will put marks of students from all sections and apply the mentioned procedure. If more than one question is mapped to same CO then average value is taken as CO attainment. Similarly CO attainment for all CO's is calculated.

- Average of these attainments will give Course Outcome Attainment of the course, in Internal Examinations.
- If internal examination is conducted twice, then Course Attainment is the average of the both internal examination attainments.


## > CO attainment calculation method for University Examination

University examination papers are not prepared by the institute and hence it cannot be mapped to course outcomes. Therefore the overall pass percentage of the students in a given course will be used for attainment calculation, as described below.

If pass percentage is $>50 \%$ and $<=60 \%$ then CO attainment of the course is 1
If pass percentage is $>60 \%$ and $<=70 \%$ then CO attainment of the course is 2
If pass percentage is $>70 \%$ then CO attainment of the course is 3

## > OVERALL COURSE OUTCOME ATTAINMENT CALCULATION:

$80 \%$ of attainment in university examination $+20 \%$ of attainment in internal examination


PRINCIPAL

