

GOVT DEGREE COLLEGE, JAMMALAMADUGU.
2021-22 Academic Year

Attainment of Program Outcomes, Program Specific Outcomes and Course Outcomes:

- The Program Outcomes (POs) and Program Specific Outcomes (PSOs) are accomplished through the CO attainment of all curriculum components.
- Course Outcomes (COs) are defined for each course based on the course content and learning objectives.
- COs are the statements of knowledge/ skills/ abilities that students are expected to know, understand and perform as a result from their learning experiences in each course
- Course Outcomes (CO1, CO2,...CO4) are mapped to POs (PO1, PO2, PO3,... PO10) and PSOs (PSO1, PSO2, PSO3).
- A set of performance evaluation criteria is used for quantitative assessment of CO .

Following are the different methods for Assessment, Evaluation and Measurement of POs/PSOs:

1. Direct Assessment method
2. Indirect Assessment method

Direct Assessment Method:

Direct Assessment is done based on the internal and External Evaluation which are explained below:

Continuous Assessment: COs are assessed through Internal Examinations, Assignment and Lab records. The COs are mapped against POs/PSOs.

COs-POs/PSOs Mapping with Weights:

The contributions/relations of COs are assessed and assigned to POs and PSOs in the form of weights.

COs-POs/PSOs Mapping with Weights

Relation of CO with POs and PSOs	Weightage Value
High	3
Moderate	2
Low	1

Semester-end Theory Examinations: The questions in semester-end examinations are tested pertaining to all COs, in varying Blooms Taxonomy Levels.

Laboratory Records: Both continuous and semester-end examinations are conducted to test the COs attainment.

Indirect Assessment Methods:

Programme – Exit survey: This survey is Conducted to the final year students and taken feedback from them at the completion of their under graduation degree. This comprehensive feedback collected from the students is used for the PO/PSO indirect assessment

Alumni Survey: This survey is conducted yearly through questionnaire with the Alumni and obtained inputs and suggestions on PO attainment and refinement.

Employer Survey: This survey is Conducted and collected feedback from the employer to measure the PO attainments.

At the end of each program, the PO/PSO attainment is calculated from the CO attainment of all courses for all semesters in a Program. In each Course, the level of CO attainment is compared with the predefined targets and gaps are identified. The gaps are identified from learner point of view at course level and programme level. To bridge the gaps and to imbibe qualities completely in a student an *Action Plan* is prepared and implemented to improve the performance of the student and to achieve the set target.

Methodology for Computation of CO PO/PSO Attainment

The following methodology is adopted for computation of CO-PO/PSO attainment:

Step 1: Defining of Programme Outcomes and Programme Specific Outcomes which the learner is able to acquire qualities and they are uniform for all Programmes offered by the institution.

Step 2: Specifying Outcomes for each Course based on the content.

Step 3: Fixing the Target as 60% i.e. 15 Marks for Continuous Internal Assessment or Direct Assessment (25 Marks).

$CO_DA = \text{Total Number of Students reached the target} / \text{Total number of students attended}$

Step 4: Fixing the Target as 60% i.e. 9 Marks for Indirect Assessment (15 Marks).

$CO_IA = \text{Total Number of Students reached the target} / \text{Total number of students attended}$

Step 5: Fixing the Target as 40% i.e. 24 Marks for Final Assessment (75 Marks).

$CO_FA = \text{Total Number of Students reached the target} / \text{Total number of students attended}$

Step 6: Mapping of COs with POs/PSOs by assigning weights.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	3	3							3
CO2	3	1	3							2
CO3	3	2	3							3
CO4	1	2	2							3
Average	2.25	1.75	2.75							2.75

Average of COs = (Sum of COs Weights / Number of COs)

SEMESTER-WISE DIRECT ASSESSMENT/ATTAINMENTS

PO_DA of PO1 = Sum (Average of COs X CO_DA of all Courses in a Semester of program) / Sum (Average of COs of all Papers in the Program of a Semester) Corresponding to PO1

PO_DA of PO2 = Sum (Average of COs X CO_DA of all Courses in a Semester of program) / Sum (Average of COs of all Papers in the Program of a Semester) Corresponding to PO2

.

.

PO_DA of PO10 = $\frac{\text{Sum (Average of COs X CO_DA of all Courses in a Semester of program)}}{\text{Sum (Average of COs of all Papers in the Program of a Semester)}}$ Corresponding to PO10

SEMESTER-WISE INDIRECT ASSESSMENT/ATTAINMENTS

PO_IA of PO1 = $\frac{\text{Sum (Average of COs X CO_DA of all Courses in a Semester of program)}}{\text{Sum (Average of COs of all Papers in the Program of a Semester)}}$ Corresponding to PO1
 PO_IA of PO2 = $\frac{\text{Sum (Average of COs X CO_DA of all Courses in a Semester of program)}}{\text{Sum (Average of COs of all Papers in the Program of a Semester)}}$ Corresponding to PO2

.

.

.

PO_IA of PO10 = $\frac{\text{Sum (Average of COs X CO_DA of all Courses in a Semester of program)}}{\text{Sum (Average of COs of all Papers in the Program of a Semester)}}$ Corresponding to PO10

SEMESTER-WISE FINAL ASSESSMENT/ATTAIMENT

PO_FA of PO1 = $\frac{\text{Sum (Average of COs X CO_DA of all Courses in a Semester of program)}}{\text{Sum (Average of COs of all Papers in the Program of a Semester)}}$ Corresponding to PO1
 PO_FA of PO2 = $\frac{\text{Sum (Average of COs X CO_DA of all Courses in a Semester of program)}}{\text{Sum (Average of COs of all Papers in the Program of a Semester)}}$ Corresponding to PO2

.

.

.

PO_FA of PO10 = $\frac{\text{Sum (Average of COs X CO_DA of all Courses in a Semester of program)}}{\text{Sum (Average of COs of all Papers in the Program of a Semester)}}$ Corresponding to PO10

PROGRAMME-WISE DITECT ASSESSMENT/ATTAIMENT

Programme-Wise DA = Average of Sem-Wise DA X 100

PROGRAMME-WISE INDITECT ASSESSMENT/ATTAIMENT

Programme-Wise IA = Average of Sem-Wise IA X 100

PROGRAMME-WISE FINAL ASSESSMENT/ATTAIMENT

Programme-Wise FA = Average of Sem-Wise FA X 100

For Example: The PO Attainment for a Program M.P.C for 2019-2022 Academic Year attained as follows:

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
DA	89.38	89.43	89.37	89.38	89.38	89.54	89.38	89.41	89.27	89.36
IA	84.34	84.36	84.32	84.34	84.33	84.42	84.34	84.37	84.28	84.34
FA	81.73	81.75	81.58	81.55	81.79	81.75	81.83	81.24	81.52	81.78