

COURSE OUTCOME ASSESSMENT AND ATTAINMENT(R16)

COURSE NAME: DYNAMICS OF MACHINES

CODE: R1631031

COURSE OUTCOMES: Students are able to

CO	STATEMENT
C01	Discuss the clutches, brakes and dynamometers & analyze the gyroscopic effects on different vehicles.(K6)
C02	Design the turning moment diagram for different engines and energy storage in the flywheels. (K6)
C03	Analyze the speed regulations in various types of governors.(K6)
C04	Contrast the balancing of the moving parts (rotating & reciprocating) statically and dynamically.(K4)
C05	Solve the concepts of various types of vibrations for mechanical systems.(K3)

MAPPING CO'S WITH PO'S

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C01	3	2	3	1	0	0	0	1	1	0	0	2	0	1
C02	3	2	3	1	0	0	0	0	0	0	0	1	0	0
C03	3	2	3	1	0	0	0	0	1	0	0	1	0	0
C04	3	2	1	1	0	0	1	0	1	0	0	2	0	0
C05	3	3	2	2	2	1	1	0	0	0	0	3	0	1
C06	3	2	3	1	0	0	0	1	1	0	0	2	0	1
Avg.	3	2.16	2.5	1.16	0.33	0.166	0.33	0.33	0.66	0	0	1.833	0	0.5

MAPPING COURSE WITH PO'S

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
DOM	3	2.16	2.5	1.16	0.33	0.166	0.33	0.33	0.66	0	0	1.833	0	0.5

COURSE OUTCOME RUBRIC

Course	Assessment Methods with weightage	Method	Attainment Level 1 (Average)	Attainment Level 2 (Good)	Attainment Level 3 (Excellent)
Theory Course Outcome	University Average Mark (70%)	Direct	60% students scoring more than or equal to 16 marks out of the maximum 30 marks	70% students scoring more than or equal to 16 marks out of the maximum 30 marks	80% students scoring more than or equal to 16 marks out of the maximum 30 marks
	Lab Internal Test (30%)	Direct	50% students scoring more than or equal to grade D	60% students scoring more than or equal to grade D	70% students scoring more than or equal to grade D

MEASURING CO ATTAINMENT THROUGH INTERNAL ASSESSMENTS		
INTERNAL TEST		
Attainment	:	74 Out of 77 students got more than 16(60% of max internal Marks30) marks. So96.1% of students got marks more than target marks 3
Attainment level	:	3
MEASURING COURSE OUTCOMES ATTAINED THROUGH UNIVERSITY EXAMINATIONS (DIRECT METHOD)		
Attainment	:	59 out of 77 students got more than 24(70% of University Max Marks 70) marks. So 76.6 % of students got marks more than target marks
Attainment level	:	0

Total Attainment of Theory Course

Assessment Tool with weightage	Method	Level of attainment			
		3	2	1	0
Internal Exam (40%)	Direct	3			
University Exam (60%)	Direct	3			

Course Attainment = $0.4 \times 3 + 0.6 \times 3 = 3$. Since the attained level (**1.2**) is more than the target level (**2**), all specified outcomes are achieved.

Course-PO Attainment for DYNAMICS OF MACHINES:

$$\text{Final PO attainment value} = \frac{\text{CO-PO Mapping Average} \times \text{Course Attainment Value}}{3}$$

Final COURSE Attainment WITH PO'S**Final Course PO attainment**

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Co average	3	2.16	2.5	1.16	0.33	0.166	0.33	0.33	0.66	0	0	1.833	0	0.5
DOM	3	2.16	2.5	1.16	0.33	0.166	0.33	0.33	0.66	0	0	1.833	0	0.5