



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.														
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Mid - Term Examinations – October 2025

Date: 08-10-2025

Time: 11.45am to 01.15pm

School: SOE	Program: B.Tech	
Course Code :MEC4002	Course Name: Kinematics of Machines	
Semester: V	Max Marks:50	Weightage:25%

CO - Levels	C01	C02	C03	C04	C05
Marks	24	26			

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

5Q x 2M=10M

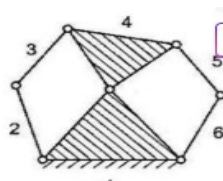
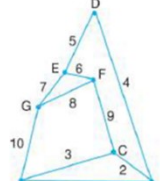
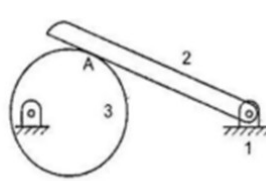
1	Define kinematic pair with an example.	2 Marks	L1	C01
2	What is a kinematic chain? Give one example	2 Marks	L1	C01
3	Define structure	2 Marks	L1	C01
4	Define Mobility of a mechanism	2 Marks	L1	C02
5	Write kutzbach formula	2 Marks	L1	C02

Part B

Answer the Questions.

Total Marks 40M

6.	With a neat sketch explain the kinematic pair based on the nature of relative motion	10 Marks	L2	C01
Or				
7.	With a neat sketch explain the classification of constrained motion	10 Marks	L2	C01

<p>8.</p>	<p>Calculate the DOF for the following problems</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div>	<p>10 Marks</p>	<p>L3</p>	<p>C01</p>
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