Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 09-10-2025 **Time:** 02.00pm to 03.30pm

School: SOCSE/ SOE	**Program:** B. Tech. (CSE/ CIV/ ECE/ EEE/ MEC/ PET/ VLSI)	
Course Code: CIV1200	**Course Name:** Foundations of Integrated Engineering	
Semester: I	**Max Marks**: 50	**Weightage**: 25%

CO - Levels	**CO1**	**CO2**
Marks	**50**	**-**

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

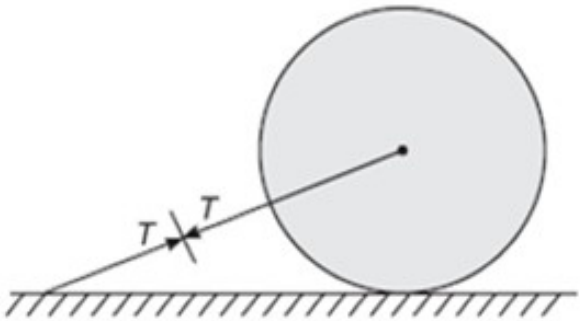
Answer ALL the Questions. Each question carries 2marks. **5Q x 2M=10M**

1	List any two engineering activities that have an impact on the environment	**2 Marks**	**L1**	**CO1**
2	Define Equity and Equality.	**2 Marks**	**L2**	**CO1**
3	Write the core Contributions of below mentioned Engineering Domains a) Computer Science b) Mechanical Engineering	**2 Marks**	**L1**	**CO1**
4	Define Equilibrium. For a coplanar concurrent force system, list the conditions of equilibrium	**2 Marks**	**L1**	**CO1**
5	Define Criteria along with an example.	**2 Marks**	**L1**	**CO1**

Part B

Answer the Questions. **Total Marks 40M**

6.	**a.**	Classify Different Force systems.	**10 Marks**	**L2**	**CO1**
		Or			
7.	**a.**	List the steps to draw Free body Diagram. Draw the FBD for the problem shown in figure below.	**10 Marks**	**L2**	**CO1**

8.	**a.**	With the help of a flowchart, explain the ethical decision-making framework.	**10 Marks**	**L2**	**CO1**
		Or			
9.	**a.**	Discuss the Implications of Unethical Conduct.	**10 Marks**	**L2**	**CO1**

10.	**a.**	List any four idea generation techniques and explain any one idea generation technique in detail.	**10 Marks**	**L2**	**CO1**
		Or			
11.	**a.**	Explain (i) SCAMPER and (ii) Design thinking Process.	**10 Marks**	**L2**	**CO1**

12.	**a.**	The engineering problem-solving cycle is a structured methodology designed to transform abstract problems into concrete solutions. Explain the step-by-step problem-solving methodology.	**10 Marks**	**L2**	**CO1**
		Or			
13.	**a.**	Discuss in detail about Environmental Monitoring Technologies.	**10 Marks**	**L2**	**CO1**