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# PRESIDENCY UNIVERSITY

BENGALURU

## Mid - Term Examinations – October 2025

Date: 29-10-2025

Time: 02.30pm to 04.00pm

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	C01	C02
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	Define Moment of a Force	2 Marks	L1	C01
2	Define Constraint along with an example	2 Marks	L2	C01
3	Write the core Contributions of below mentioned Engineering Domains a) Electronics and communication b) Civil Engineering	2 Marks	L1	C01
4	Define a stakeholder in the context of an Engineering project.	2 Marks	L1	C01
5	List any two barriers to creativity	2 Marks	L1	C01

### Part B

Answer the Questions.

Total Marks 40M

6.	a.	Explain the seven-step problem solving process.	10 Marks	L2	C01
Or					
7.	a.	Explain the need for Multidisciplinary Engineering and list the Key Drivers for Multidisciplinary Engineering.	10 Marks	L2	C01
8.	a.	What is Design Thinking. Explain the steps involved in Design Thinking Process	10 Marks	L2	C01
Or					

<b>9.</b>	<b>a.</b>	With the help of an example, explain the SCAMPER method, which can be used to stimulate creative solutions to challenging problems.	<b>10 Marks</b>	<b>L2</b>	<b>CO1</b>
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<b>10.</b>	<b>a.</b>	Discuss the Integration Challenges in while working on Projects with multiple engineering fields. Also briefly list the best practices to overcome these challenges.	<b>10 Marks</b>	<b>L2</b>	<b>CO1</b>
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**Or**

<b>11.</b>	<b>a.</b>	Discuss the role of modern technologies in environmental mitigation, with reference to pollution control methods and clean technology solutions.	<b>10 Marks</b>	<b>L2</b>	<b>CO1</b>
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**Or**

<b>12.</b>	<b>a.</b>	Discuss the importance of ethics in Engineering. Also, describe the ethical responsibilities of engineers.	<b>10 Marks</b>	<b>L2</b>	<b>CO1</b>
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<b>13.</b>	<b>a.</b>	Discuss about the common ethical dilemmas faced by engineers. Also, Describe the professional conduct and duties that engineers should follow to adhere to ethical practices.	<b>10 Marks</b>	<b>L2</b>	<b>CO1</b>
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