Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 07-10-2025 **Time:** 11.45am to 01.15pm

School: SOE	**Program:** B.Tech (Civil Engineering)	
Course Code : CIV2100	**Course Name:** Building Material and Concrete Technology	
Semester: III	**Max Marks**: 50	**Weightage**: 25%

CO - Levels	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Marks	**16**	**20**	**14**		

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	What is meant by a stretcher bond?	**2 Marks**	**L1**	**CO1**
2	What is meant by "seasoning of stones"?	**2 Marks**	**L1**	**CO1**
3	Write two advantages of hollow concrete blocks	**2 Marks**	**L1**	**CO1**
4	Name the four major Bogue's compounds in Portland cement.	**2 Marks**	**L1**	**CO3**
5	List the stages of hydration of cement.	**2 Marks**	**L1**	**CO3**

Part B

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

6.	**a.**	Describe the constituents of brick earth and their functions.	**10 Marks**	**L2**	**CO1**
		Or			
7.	**a.**	Explain the classification of aggregates based on size, unit weight, shape, and source with suitable examples.	**10 Marks**	**L2**	**CO1**

8.	**a.**	Demonstrate how the mechanical properties of aggregates (strength, hardness, toughness, durability) influence the performance of concrete.	**10 Marks**	**L3**	**CO2**
		Or			
9.	**a.**	Analyze how the moisture content in aggregates affects the properties of concrete and explain the different moisture conditions of aggregates in detail.	**10 Marks**	**L3**	**CO2**

10.	**a.**	Explain how AAC blocks are made and discuss their advantage.	**10 Marks**	**L2**	**CO2**
		Or			
11.	**a.**	Discuss the properties, types, uses, and challenges of timber as a building material.	**10 Marks**	**L2**	**CO2**

12.	**a.**	Explain the manufacturing process of Portland cement by the dry process with a neat flow diagram.	**10 Marks**	**L2**	**CO3**
		Or			
13.	**a.**	Write short explanatory notes on the following types of cement: (a) Rapid hardening cement; (b) Low heat cement; (c) White cement; (d) Pozzolanic cement.	**10 Marks**	**L2**	**CO3**