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Roll no. 204/LE/95

III SEMESTER

B.TECH CIVIL ENGINEERING

CE 201 CIVIL ENGINEERING BASICS AND APPLICATIONS

TIME: 1.30 HOURS **MAX. MARKS: 20**

NOTE: ALL QUESTIONS ARE COMPULSORY
ALL QUESTIONS CARRY EQUAL MARKS
ASSUME SUITABLE MISSING DATA, IF ANY

1. Enumerate the chief characteristics of first class building bricks. Describe the common defects in clay bricks. (4)CO-1

2. What is geological classification of rocks? Name the tests to which a stone should be subjected before it is selected for building purpose. (4) CO-1

3. State the function and limits of ingredients of ordinary Portland cement. Explain how initial and final setting times of cement are determined in the laboratory. Discuss its significance. (4)CO-1

OR

3. State the function of constituents of glass. Describe the use of glass as a building material. (4)CO-1

4. Define fineness modulus and its significance. The results of sieve analysis of fine aggregate are as follows. Determine the average size of the particles.

Sieve size (mm)	10	4.75	2.36	1.18	0.600	0.300	0.150
Weight of soil retained (gm)	Nil	32.34	41.60	90.54	101.39	74.99	59.14

(4)CO-3

OR

4. Describe the characteristics of good timber. Explain any one method of timber preservation. (4)CO-1

5. Define flakiness index and elongation index. Explain how they are determined in the laboratory. (4)CO-3

OR

5. With a neat sketch describe various defects in timber. (4)CO-1