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Total No. of Printed Pages: 1

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B. Tech Civil Engg. (Semester – 5th)
BUILDING MATERIALS & CONSTRUCTION
Subject Code: BCIED1521
Paper ID: 18110735

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

- a) Name the constituents of good brick earth.
- b) Differentiate between exogenous and endogenous trees.
- c) Differentiate between 'hydraulic lime' and 'fat lime'.
- d) Write four types of cement.
- e) What is the significance of bonding in brick work?
- f) What are 'Ashlar Joints' in Stone masonry?
- g) What are the constituents of distemper?
- h) Where do you prefer 'Kota Stone' over 'Tiles' for flooring?
- i) Define 'Stretcher' and 'Header'.
- j) What are the objectives of 'Plastering'?

Section – B **(5 marks each)**

Q2. What are the characteristics of good timber?

Q3. Describe the compressive strength and water absorption test for ascertaining the quality of bricks.

Q4. Explain briefly manufacture of cement.

Q5. What are hollow blocks? What are their advantages and disadvantages?

Q6. Discuss types of floors used in buildings.

Section – C **(10 marks each)**

Q7. Give in detail about any TWO laboratory tests of cement.

Q8. Discuss preventive measures for dampness in buildings.

Q9. Write short note on (a) Special material for plastered surface (b) Market forms of Timber.