

Roll No. _____

[Total No. of Pages : 2]

3E1622

3E1622

B.Tech. III Semester (Main/Back) Examination Dec. - 2016

Civil Engg.

3CE2A Civil Engg. Materials

Time : 3 Hours

Maximum Marks : 80

Min. Passing Marks : 26

Instructions to Candidates:

Attempt any five questions, selecting one question from each unit. All questions carry equal marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)

Unit - I

1. a) What are the tests to which a stone should be subjected before it is selected for Building purposes. (8)
- b) Write about the material of quarrying by Blasting. (8)

OR

1. a) Describe briefly geological classification of building stone (Rocks). Give examples of two building stones falling in each geological group of rocks. (8)
- b) What are the different methods used in dressing of building stones. (8)

Unit - II

2. a) Explain different types of tiles with neat sketch. (8)
- b) Write down the use of fly - Ash in manufacturing of bricks & cement. (8)

OR

2. a) Explain with the help of neat sketches, construction & working of Allahabad kiln for burning of bricks. (8)
- b) Discuss the classification of bricks in detail. (8)

Unit - III

3. What is portland cement? Explain manufacturing method of portland cement by dry process. (16)

OR

3. a) Write a short note on slaking of lime. (8)
b) Compare Fat lime and hydraulic lime. (8)

Unit - IV

4. a) Explain the bulking of sand & method to determine bulking of sand. (8)
b) Describe in detail the process of preparing a lime mortar for use in different situations in a building. (8)

OR

4. Describe the various types of defects in Timber with the help of neat sketches. (16)

Unit - V

5. a) Write a short note on supplementary cementitious materials. (8)
b) Write about energy used in transportation & construction process. (8)

OR

5. a) Explain different types & use of Asbestos. (8)
b) Write in detail about types & uses of glass. (8)

