Code No: 114CK

R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech II Year II Semester Examinations, May - 2015
BUILDING MATERIALS, CONSTRUCTION AND PLANNING
(Common to CE, CEE)

Time: 3 Hours

Max. Marks: 75

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Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit.
Each question carries 10 marks and may have a, b, c as sub questions.

PART- A (25 Marks)

1.a) What do you mean by quarrying? [2M]
   b) Enumerate various uses of timber. [3M]
   c) Write short notes on Hydration of cement. [2M]
   d) What are various types of cement? [3M]
   e) Define the following terms; Head room, Landing, Nosing, Pitch and Step. [2M]
   f) Write various failures of an arch. [3M]
   g) What are the precautions to be taken in latarite masonry work? [2M]
   h) Explain the various types of strip footing. [3M]
   i) Write the Building bye-laws for offsets. [2M]
   j) Write short notes on Building bye-laws for lighting and ventilation. [3M]

PART-B (50 Marks)

2. With the help of a neat sketch, explain the working of Hoffman's kiln for the burning of bricks. [10]

OR

3.a) Explain different types of defects in timber.
   b) Explain defects due to seasoning. [5+5]

4. How the tensile strength of cement is determined in laboratory? [10]

OR

5. What is meant by proportioning of concrete? What are the various methods of proportioning concrete? Explain any two methods. [10]

6.a) Discuss in detail the types of roofs.
   b) How do you classify the foundations? Explain. [5+5]

OR

7. What are the essentials of Air -conditioning and explain the types? [10]

8. What are "breathing" and "non-breathing" types of paints? What are the considerations in application of these paints to the ceiling under the wet areas and wall surfaces? [10]

OR

9. Write short on the following:
   a) Scaffolding.
   b) Underpinning. [5+5]

10. Explain the building bye-laws with reference to:
    a) Open space requirements
    b) Plinth area regulations
    c) Height limitations. [4+3+3]

OR

11. Classify the buildings. Explain. [10]

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