

Code No: H4CK

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

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 laterite 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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