

Code No: 133AE

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech II Year I Semester Examinations, November/December - 2017

BUILDING MATERIALS, CONSTRUCTION AND PLANNING

(Civil Engineering)

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) List out the methods of stone quarrying. [2]
- b) State the requirements of good preservative for timber. [3]
- c) Explain why gypsum is added during the manufacture of cement. [2]
- d) List out the mineral admixtures and its uses. [3]
- e) Describe the uses of Damp Proof Course. [2]
- f) List out the fittings required for water distribution system. [3]
- g) Differentiate between lime and cement mortars. [2]
- h) Define shoring and give its uses. [3]
- i) List out the principles of building planning. [2]
- j) Explain the objectives of building bye-laws. [3]

## PART-B

(50 Marks)

2. a) Discuss about the factors affecting the strength of bricks. [5+5]
- b) List out the various properties of flyash and its uses. [5+5]

OR

3. a) Explain in detail the process of manufacturing glass. [5+5]
- b) Discuss in brief about the alternative materials for wood. [5+5]

4. a) List out the laboratory tests on cement and explain any one test. [5+5]
- b) List out the chemical admixtures and its uses. [5+5]

OR

5. a) Explain about the dry process of manufacture of cement with flow diagram. [5+5]
- b) List out the field tests on cement and explain any one in detail. [5+5]

6. a) List out types of staircases and explain anyone with a neat sketch. [5+5]
- b) Explain about the essential requirements for fire protection equipment. [5+5]

OR

7. a) List out types of doors and explain anyone with a neat sketch. [5+5]
- b) Explain about the functional requirements for systems of ventilations. [5+5]

8. a) Explain any one type of stone masonry with a neat sketch. [5+5]
- b) Explain about the properties and advantages of Aluminium Composite Panel. [5+5]

OR

9. a) Discuss about the properties of Reinforced brick. [5+5]
- b) Define underpinning and discuss about its uses. [5+5]

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10. Briefly explain the following:

a) Privacy b) Orientation c) Horizontal circulation d) Seclusion.

[10]

OR

11. a) Briefly explain about Bye-laws for plinth area requirements.

b) Explain about the classifications of buildings.

[5+5]

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