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Code No: 133AE

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech II Year I Semester Examinations, November/December - 2018

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) Define the terms: Dressing and Quarrying. [2]
- b) What are the constituents of glass? [3]
- c) Define consistency and initial setting time of cement. [2]
- d) List out the chemical admixtures. [3]
- e) List out the types of foundations. [2]
- f) What are the objectives of fire protection? [3]
- g) Differentiate between plastering and pointing. [2]
- h) What do you understand by scaffolding? [3]
- i) What are building bye-laws? [2]
- j) List out the classification of buildings. [3]

PART-B

(50 Marks)

- 2.a) Describe the characteristics of good building stones. [5+5]
- b) What are the various tests for stones? Explain any one in detail. [5+5]
- 3.a) Define seasoning of timber and explain any one method of seasoning. [5+5]
- b) State the properties, uses and simple classification of glass. [5+5]
- 4.a) Describe with flow diagram the wet process of manufacture of cement. [5+5]
- b) List out the field tests on cement and briefly explain any one test. [5+5]
- OR**
- 5.a) List out the laboratory tests on cement and explain any one test. [5+5]
- b) Discuss about mineral admixtures and its uses. [5+5]
- 6.a) Differentiate between lintel and an arch. [5+5]
- b) List out the types of roofs and explain anyone with a sketch. [5+5]
- OR**
- 7.a) Discuss about the essential requirements of good acoustic material. [5+5]
- b) Define air-conditioning and explain any one method of air-conditioning. [5+5]
- 8.a) Explain the various uses of cement mortar. [5+5]
- b) List out types of bonds and explain anyone with a neat sketch. [5+5]
- OR**
- 9.a) Differentiate between brick masonry and stone masonry. [5+5]
- b) List out the desirable requirements of form work. [5+5]

10.a) Classify the buildings based on occupancy and type of construction.

b) Explain the principles underlying building bye-laws.

[5+5]

OR

11. Briefly explain the following:

a) Roominess b) Circulation c) Flexibility d) Grouping.

[10]

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