

CBCS Scheme

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15CT33

Third Semester B.E. Degree Examination, Dec.2016/Jan.2017

Materials of Construction

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

- 1 a. With a neat sketch explain various methods of stone quarrying. (06 Marks)
b. Explain briefly artificial seasoning of timber. (05 Marks)
c. What are the advantages of timber construction? (05 Marks)

OR

- 2 a. Compare clamp burning and kiln burning of bricks. (05 Marks)
b. With the help of neat sketch, briefly explain manufacturing process of common tiles. (08 Marks)
c. What are plywood's? Mention their advantages. (03 Marks)

Module-2

- 3 a. Explain the classification of lime. (06 Marks)
b. Describe briefly any four important laboratory tests conducted on cement. (06 Marks)
c. State the properties of good mortar. (04 Marks)

OR

- 4 a. Differentiate between fat lime and hydraulic lime. (08 Marks)
b. Explain with flow chart the manufacturing process of ordinary cement by modern technology. (08 Marks)

Module-3

- 5 a. Explain the properties and uses of cast iron, copper and zinc. (06 Marks)
b. Briefly, explain the process of hardening, tempering and annealing of metal. (06 Marks)
c. Write a short note on plaster of paris. (04 Marks)

OR

- 6 a. List the desirable properties and used of commercial glass, common glass and boro silicate glass. (06 Marks)
b. Briefly explain vulcanization and compounding of rubber. (06 Marks)
c. Compare asphalt, Bitumen and tar. (04 Marks)

Module-4

- 7 a. Explain the properties of a good electrical insulator. (05 Marks)
b. Briefly, explain the ingredients of an oil borne paint. (05 Marks)
c. Write a short note on electroplating, enamellings and metal spraying. (06 Marks)

OR

- 8 a. Explain the properties of good thermal and sound insulators. (08 Marks)
b. What is a varnish? What are the characteristics of an ideal varnish? Briefly, explain the types and uses of varnish. (08 Marks)

Module-5

- 9 a. How plastic are classified? Explain briefly. (08 Marks)
b. What is meant by the term refractories? Mention the desired properties. Explain low quality and high quality refractory materials. (08 Marks)

OR

- 10 a. Explain different types of thermo plastic resins. (08 Marks)
b. State the properties and uses of acidic, central and basic refractories. (08 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.