



CBCS SCHEME

17CT33

Third Semester B.E. Degree Examination, Dec.2019/Jan.2020 Materials of Construction

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. List the qualities of a good building stone. (10 Marks)
b. Explain the structure of the timber with the help of a neat sketch. (10 Marks)

OR

- 2 a. Compare clamp burnt bricks and kiln burnt bricks. (10 Marks)
b. Explain different methods of artificial seasoning of timber. (10 Marks)

Module-2

- 3 a. With the help of a flow chart, explain the manufacturing of cement by Dry process. (10 Marks)
b. Compare Fat Lime and Hydraulic Lime. (10 Marks)

OR

- 4 a. Compare intermittent Flame Kiln and intermittent Flair Kiln. (10 Marks)
b. Explain the procedure to conduct the following laboratory test on cement.
i) Fineness of cement ii) Normal consistency. (10 Marks)

Module-3

- 5 a. Explain Hardening, Tempering and Annealing method of heat treatment. (12 Marks)
b. List the properties and uses of the following: i) Commercial Glass ii) Common Glass. (08 Marks)

OR

- 6 a. List the properties and application of
i) Wrought Iron ii) Stainless steel iii) Copper iv) Lead. (12 Marks)
b. Briefly explain compounding of rubber. (08 Marks)

Module-4

- 7 a. List the desirable properties of electrical insulators. Give example. (10 Marks)
b. Explain the ingredients of oil borne paint. (10 Marks)

OR

- 8 a. List the desirable properties of thermal insulators. Give example. (10 Marks)
b. What is a varnish? List characteristics of an ideal varnish. Explain the ingredients of a varnish. (10 Marks)

Module-5

- 9 a. Briefly explain the properties of plastic. (10 Marks)
b. What are refractories? List the desirable properties of refractories. (10 Marks)

OR

- 10 a. Briefly explain the various classification of plastic. (12 Marks)
b. Write a note on : i) Neural Refractory materials ii) Cer – met. (08 Marks)

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.