

CBCS SCHEME

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18ARC82

Eighth Semester B.Arch. Degree Examination, June/July 2023 Materials and Methods in Building Construction - VIII

Time: 4 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Explain prefabrication, its advantages and disadvantages. (10 Marks)
b. Elaborate on comparative analysis between aluminium form work and conventional timber form work. (10 Marks)

OR

- 2 Write short notes on box Caisson's and Cofferdam. (20 Marks)

Module-2

- 3 a. What is Data Silo and Cloud collaboration? (10 Marks)
b. What do you understand by the term simulation? Explain its benefits. (10 Marks)

OR

- 4 a. What is 3D printing and explain its advantages. (10 Marks)
b. What is BIM? Elaborate on the use of BIM in construction management. (10 Marks)

Module-3

- 5 a. Explain Life Cycle Analysis. (05 Marks)
b. Describe the four stages that are assessed in a life cycle assessment. (15 Marks)

OR

- 6 a. Differentiate between repairs and retrofits. (10 Marks)
b. Explain two techniques for each on repairs and retrofits. (10 Marks)

Module-4

- 7 What do you understand by GRIHA? Explain any three major components that result in points for GRIHA rating. (20 Marks)

OR

- 8 Explain methods of Harvesting and Conserving energy to achieve a Net Zero Energy Building. (20 Marks)

Module-5

- 9 Explain in detail any four smart materials and its application in the construction industry. (20 Marks)

OR

- 10 Explain in detail any four Nano material and its application in the construction industry. (20 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.