

# CBCS SCHEME



18CV34

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Third Semester B.E. Degree Examination, Dec.2024/Jan.2025

## Building Materials and Construction

Time: 3 hrs.

Max. Marks:100

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

### Module-1

- 1 a. Mention the importance of stones bricks and Timber as construction materials. (06 Marks)
- b. Explain the manufacture process of brick with necessary flow chart. (08 Marks)
- c. What is Bulking of Sand? Explain its importance in construction field. (06 Marks)

OR

- 2 a. What are the requirements of good building stones? (06 Marks)
- b. What are the constituents of good brick earth? Explain. (06 Marks)
- c. Which are the methods of seasoning of Timber? Describe them brief. (08 Marks)

### Module-2

- 3 a. Explain the functions of foundation. (06 Marks)
- b. How piles are classified based on function? Explain with sketches. (06 Marks)
- c. Draw the plan of one and half brick thick english bond. Mention its salient features. (08 Marks)

OR

- 4 a. Differentiate between strip footing and strap footing with sketch. (06 Marks)
- b. Write a note on Ashlar type of stone masonry. (06 Marks)
- c. Describe the construction and necessity of Grillage foundation with its plan sketch. (08 Marks)

### Module-3

- 5 a. Draw a neat sketch of an arch and explain the technical terms used. (08 Marks)
- b. Explain i) Chejja ii) Canopy iii) Balcony iv) Lintel. (08 Marks)
- c. Write a note on stability of arch. (04 Marks)

OR

- 6 a. List the types of flooring and explain the method of laying of cement concrete flooring in detail. (08 Marks)
- b. List the classification of pitched roof. With neat sketches explain any two of them. (08 Marks)
- c. What are the factors to be considered while selecting a roof covering? (04 Marks)

### Module-4

- 7 a. Differentiate brick layer's scaffolding over Mason's Scaffolding. (06 Marks)
- b. What are the requirements of good stair? Briefly explain the types of stairs. (06 Marks)
- c. With a neat sketch, explain i) Bay window ii) Dormer window. (08 Marks)

OR

- 8 a. Explain Raking shore with a neat sketch. (06 Marks)
- b. Write the requirements of locating door and window. (06 Marks)
- c. Explain salient features of framed and paneled double shutter door with sketch. (08 Marks)

### Module-5

- 9 a. What are the objectives of plastering? Explain the defects in plastering. (10 Marks)
- b. Briefly explain the methods of damp proofing. (10 Marks)

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- 10 a. Explain the method of laying stucco plastering and lathe plastering. (10 Marks)
- b. Explain the constituents of a paint and explain the procedure of painting on new wood works. (10 Marks)

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