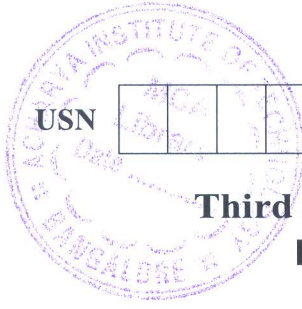


CBCS SCHEME



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18CV34

Third Semester B.E. Degree Examination, June/July 2023 Building Materials and Construction

Time: 3 hrs.

Max. Marks: 100

**Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. Assume missing data suitably.**

Module-1

- 1 a. Write the requirements of good building stones. (06 Marks)
b. Briefly explain the causes of decay of stones. (06 Marks)
c. Briefly explain the process of manufacturing of clay bricks. (08 Marks)

OR

- 2 a. Briefly explain size, shape and texture of coarse aggregates. (06 Marks)
b. Explain specific gravity test and moisture content on fine aggregates. (06 Marks)
c. Mention the various tests conducted on bricks and explain any two of them. (08 Marks)

Module-2

- 3 a. Write the functions and requirements of good foundation. (04 Marks)
b. With the help of sketch, explain (i) Combined footing (ii) Strap footing (08 Marks)
c. With the help of sketches, explain salient features of English Bond and Flemish Bond. (08 Marks)

OR

- 4 a. Briefly explain the classification of size stone masonry. (06 Marks)
b. With neat sketches, explain types of joints in stone masonry. (08 Marks)
c. Explain the following: (i) Load bearing wall (ii) Partition wall (06 Marks)

Module-3

- 5 a. Briefly explain classification of Lintels. (06 Marks)
b. Draw a neat sketch of a Segmental Arch and explain various technical terms used in arch work. (08 Marks)
c. Write the requirements of good floor. (06 Marks)

OR

- 6 a. Explain the procedure for laying of flooring for the following types of floors:
(i) Terrazzo flooring (08 Marks)
(ii) Granite flooring (04 Marks)
b. Write the requirements of good roof. (08 Marks)
c. With the help of neat sketch, explain king post truss. (08 Marks)

Module-4

- 7 a. Write the important considerations for location of Doors and Windows. (04 Marks)
b. With neat sketch, explain (i) Collapsible Door (ii) Rolling Steel Door (08 Marks)
c. With neat sketch, explain (i) Bay window (ii) Dormer Window (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.

OR

- 8 a. Write the requirements of good stairs. (06 Marks)
b. Design an RCC stair located in a stair case hall measuring 2.5 m × 5.5 m. The vertical distance between the floors is 4m. Draw a section showing details of reinforcement. (08 Marks)
c. What is underpinning? With sketch, explain pit method of underpinning. (06 Marks)

Module-5

- 9 a. Explain the following: (i) Stucco plastering (ii) Lath Plastering (08 Marks)
b. Explain defects of plastering. (06 Marks)
c. Explain various methods of damp proofing. (06 Marks)

OR

- 10 a. Explain the constituents of a good paint and their purposes. (06 Marks)
b. Explain the procedure for painting of wood surface and plastered surface. (08 Marks)
c. Write the defects of painting. (06 Marks)
