

USN 

--	--	--	--	--	--	--	--	--	--

15CV36

## Third Semester B.E. Degree Examination, Feb./Mar. 2022 Building Materials and Construction

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- 1 a. What are the qualities of good building stones? Explain them briefly. (08 Marks)  
b. Explain different types of dressing done for stones with neat sketch. (08 Marks)

OR

- 2 a. Explain the classification of bricks. (08 Marks)  
b. List various tests conducted on bricks and explain any two of them. (08 Marks)

### Module-2

- 3 a. Explain different types of foundations. (08 Marks)  
b. What do you mean by preliminary investigation of soil? (04 Marks)  
c. What is safe bearing capacity of soil? (04 Marks)

OR

- 4 a. Explain the requirements of good brick masonry. (08 Marks)  
b. Explain the features of one brick thick English bond with a neat sketch. (08 Marks)

### Module-3

- 5 a. Explain different types of Lintels used in construction. (08 Marks)  
b. With a neat sketch the elements of an arch. (08 Marks)

OR

- 6 a. Explain the requirements of a good flooring material. (08 Marks)  
b. Write with a neat sketch of a king post truss and mention its components. (08 Marks)

### Module-4

- 7 a. Draw typical sketch of formwork provided for an RCC slab. (08 Marks)  
b. Explain the factors considered in positioning doors and windows in a building. (08 Marks)

OR

- 8 a. Explain with neat sketches (i) Collapsible door (ii) Bay window. (08 Marks)  
b. Plan a dog legged staircase for a residential building with a room size 2.5m × 5m provided for staircase and vertical distance between the floor is 3.3m. Sketch plan and sectional elevation. (08 Marks)

### Module-5

- 9 a. Explain preparation and application of paint to old and new surfaces. (08 Marks)  
b. Explain in brief different types of plastering. (08 Marks)

OR

- 10 a. What are different methods of damp proofing in a building? Explain them briefly. (08 Marks)  
b. Explain the functions of the ingredients of paint. (08 Marks)

\* \* \* \* \*