

# CBCS SCHEME

USN

|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|

15CV36

## Third Semester B.E. Degree Examination, June/July 2018 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 requirements of good building stone? Explain the dressing of stones. (08 Marks)  
b. List the various tests conducted on coarse aggregate. Explain any one of them in brief. (08 Marks)

OR

- 2 a. Explain the different types of preservations commonly adopted in the preservation of stones. (08 Marks)  
b. What are the requirements of good bricks and explain the field and laboratory tests on bricks. (08 Marks)

### Module-2

- 3 a. Explain the essential requirements of a good foundation. (08 Marks)  
b. With the help of neat sketches explain the various types of Joints used in stone masonry. (08 Marks)

OR

- 4 a. What is safe bearing capacity (SBC) of a soil? Briefly explain various methods adopted to improve SBC. (08 Marks)  
b. Explain the following : (08 Marks)  
(i) Header, (ii) Flemish bond, (iii) Load bearing, (iv) Partition walls.

### Module-3

- 5 a. Define lintels and mention its function and classification. (08 Marks)  
b. Sketch a King post truss made of timber, which has to support tile roofing. Name the components. (08 Marks)

OR

- 6 a. Give the classification of arches and explain stability of an arch. (08 Marks)  
b. Discuss the various flooring materials used and explain any two of them in detail. (08 Marks)

### Module-4

- 7 a. Briefly explain the factors to be considered while locating the position of doors and windows. (08 Marks)  
b. With the help of a neat sketch briefly explain the dog legged staircase and its components. (08 Marks)

OR

- 8 a. With the help of a neat sketch explain the following : (08 Marks)  
(i) Wooden paneled door (ii) Collapsible door.  
b. Write a note on different types of stairs and explain the requirements of a good stair. (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.

**Module-5**

- 9 a. Briefly explain the purpose of plastering and explain the various methods of plasters. (08 Marks)  
b. Explain in brief causes and effects of dampers in a building. (08 Marks)

**OR**

- 10 a. What are the objects of plastering and painting. (08 Marks)  
b. Describe the different types of paints available in market and their specific usage. (08 Marks)

\* \* \* \* \*