

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 3. Explain the essential requirements of a good foundation. (98 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:
    - (i) Header, (ii) Flemish bond, (iii) Load bearing, (iv) Partition walls.

(08 Marks)

## Module-3

5 a. Define lintels and mention its function and classification.

(08 Marks)

Sketch a King post truss made of timber, which has to support tile roofing. Name the components.

#### 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:
  - (i) Wooden paneled door
- (ii) Collapsible door.

(08 Marks)

b. Write a note on different types of stairs and explain the requirements of a good stair.

(08 Marks)



# 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 dampners in a building.

(08 Marks)

#### OF

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)

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