

CBCS SCHEME

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15CV36

Third Semester B.E. Degree Examination, Dec.2018/Jan.2019 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 a good building stone should possess when it is used for construction purpose. (04 Marks)
- b. Describe the construction and working of Bull's trench kiln. (06 Marks)
- c. What is bulking of sand? Mention its practical importance. Explain the size of sand grain on bulking of sand. (06 Marks)

OR

- 2 a. Describe the constituents of good brick earth along with their importance. (04 Marks)
- b. Explain the factors causing deterioration of stone work and preservation of stone work. (06 Marks)
- c. Briefly explain the importance of shape, size and texture of coarse aggregates in concrete work. (06 Marks)

Module-2

- 3 a. What is foundation and what are its functions? (04 Marks)
- b. Differentiate between strip footing and strap footing with sketches. (06 Marks)
- c. Describe salient features of English bond with an elevation sketch of burnt brick masonry wall. (06 Marks)

OR

- 4 a. Explain the importance of load bearing wall and partition wall in construction of buildings. (04 Marks)
- b. Describe the types of Ashlar type of stone masonry with sketches. (06 Marks)
- c. Explain the construction and importance of Grillage foundation with its plan view. (06 Marks)

Module-3

- 5 a. Differentiate between stone lintel and RCC lintel with sketches. (04 Marks)
- b. Explain the construction of marble flooring in ground floor of building with sketch. (06 Marks)
- c. Differentiate between lean-to-roof and couple roof with sketches. (06 Marks)

OR

- 6 a. Sketch king post roof truss label its parts (half portion). (04 Marks)
- b. Mention the requirements of good floor. What are the factors affecting selection of flooring material. (06 Marks)
- c. Explain the factors affecting stability of arches. (06 Marks)

Module-4

- 7 a. Mention the requirements of good stair. (04 Marks)
b. Explain raking shore with a neat sketch. (06 Marks)
c. Differentiate between flush door and louvered door with sketches. (06 Marks)

OR

- 8 a. Briefly explain types of stairs. (04 Marks)
b. Explain with neat sketches : (06 Marks)
(i) Bay window (ii) Corner window
c. Differentiate between brick layers scaffolding and Mason's scaffolding. (06 Marks)

Module-5

- 9 a. Explain the procedure of painting of newly plastered wall surface. (04 Marks)
b. Write the objectives of plastering and requirements of good plaster. (06 Marks)
c. Briefly explain the methods of damp proofing. (06 Marks)

OR

- 10 a. Explain the procedure adopted in stucco plastering. (04 Marks)
b. Explain the importance of constituents of a paint. (06 Marks)
c. Describe the defects in plastering. (06 Marks)

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