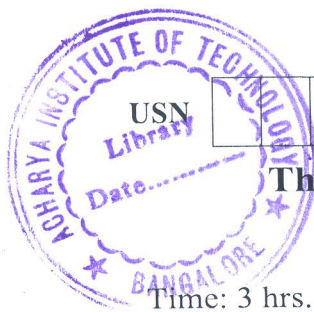


CBCS SCHEME

18CV34



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Third Semester B.E. Degree Examination, July/August 2021 Building Materials and Construction

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions.

- 1 a. What are the requirements of good building stones? Explain. (06 Marks)
b. Describe the constituents of good brick earth along with their importance. (06 Marks)
c. Explain the importance of shape, size and texture of coarse aggregates in cement concrete making. (08 Marks)
- 2 a. Explain bulking of sand with its practical importance. (06 Marks)
b. Which are the factors causing deterioration of stone? And write about preservation of stones. (06 Marks)
c. Describe the construction and working of Bull's Trench Kiln with sketch. (08 Marks)
- 3 a. Explain the functions of foundation. (06 Marks)
b. How piles are classified based on function? Explain with sketches. (06 Marks)
c. Draw the plan of one and half brick thick English bond. Mention its salient features. (08 Marks)
- 4 a. Differentiate between strip footing and strap footing with sketch. (06 Marks)
b. Write a note on Ashlar type of stone masonry. (06 Marks)
c. Describe the construction and necessity of Grillage foundation with its plan sketch. (08 Marks)
- 5 a. Draw the sketch of an elementary arch and level its parts. (06 Marks)
b. Write a note on : i) Stone lintel ii) RCC lintel. (06 Marks)
c. What are requirements of a good floor? Draw the sketch of ground floor marble flooring with its components. (08 Marks)
- 6 a. Explain various modes of failure of an arch with its remedial measures. (06 Marks)
b. Differentiate between sloped roof and flat roof with reference to advantages. (06 Marks)
c. Draw the sketch of King post wooden roof truss (half part) and label its parts. (08 Marks)
- 7 a. Differentiate brick layer's scaffolding over Mason's Scaffolding. (06 Marks)
b. What are the requirements of good stair? Briefly explain the types of stairs. (06 Marks)
c. With a neat sketch, explain i) Bay window ii) Dormer window. (08 Marks)
- 8 a. Explain Raking shore with a neat sketch. (06 Marks)
b. Write the requirements of locating door and window. (06 Marks)
c. Explain salient features of framed and paneled double shutter door with sketch. (08 Marks)
- 9 a. What are the objects and requirements of good plaster? (06 Marks)
b. Name and explain constituents of oil paint. (06 Marks)
c. Explain procedure of painting i) New wood surface ii) New plastered surface. (08 Marks)
- 10 a. Explain the defects in plastering. (06 Marks)
b. Explain the procedure adopted in cement – lime plastering. (06 Marks)
c. Briefly explain the methods of damp proofing. (08 Marks)

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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.