

CBCS SCHEME

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15CV36

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

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions.

- 1 a. Write the Important Qualities of good Building stone. (05 Marks)
b. What are different types of Mortar and enumerate uses of mortar. (05 Marks)
c. Briefly explain the Sieve analysis of Fine aggregate. (06 Marks)
- 2 a. Briefly explain any two Field test on bricks. (05 Marks)
b. Why dressing of stone is done? Draw a neat sketch of any three types of dressing of stone. (05 Marks)
c. Briefly explain the following :
i) Cement concrete block ii) Specific gravity of coarse aggregate. (06 Marks)
- 3 a. Define Foundation and discuss various functions of foundation. (05 Marks)
b. Draw a neat sketch of i) Butt Joint ii) Lap Joint iii) Tongued and Grooved Joint. (06 Marks)
c. What are the points to be considered while construction of cavity walls and what are the advantages of cavity wall over solid wall. (05 Marks)
- 4 a. Draw the plan and elevation of one brick thick wall meeting at right angle. (05 Marks)
b. What are the causes of failure of foundations? (05 Marks)
c. With reference to masonry construction, briefly explain the following terms :
i) Header and Stretcher ii) Bond and Course iii) King closure and Queen closure. (06 Marks)
- 5 a. Draw a neat sketch and label the various parts of an arch. (05 Marks)
b. Define Roof. What are the requirements of a good roof? (05 Marks)
c. What are the factors affecting selecting of flooring materials? (06 Marks)
- 6 a. Explain with neat sketches, function of lintels, chejja and canopy. (05 Marks)
b. Compare the advantages and disadvantages of Flat roof and Sloppy roof. (05 Marks)
c. Mention different types of floorings. Explain any one flooring type. (06 Marks)
- 7 a. List any three types of stair-case and explain under what circumstances they are used. (05 Marks)
b. What are the factors considered while locating doors and windows? (05 Marks)
c. What do you understand by the term shoring? Under what circumstances it is necessary? Draw a neat sketch of raking shore. (06 Marks)
- 8 a. What are the requirements of a good stair? (05 Marks)
b. List any six types of window and explain any two of them. (06 Marks)
c. What are the requirements of a good frame works? (05 Marks)
- 9 a. What is Damp Proof Course? Explain its necessity in a building. (06 Marks)
b. What are the defects arise in plastering? (05 Marks)
c. Mention the characteristic of an Ideal paint. (05 Marks)
- 10 a. Explain the purpose of plastering. Explain the various types of mortars used for plastering. (06 Marks)
b. Explain the procedure of painting for iron and steel surfaces. (05 Marks)
c. What are the effect of dampness and mention the methods of damp proofing? (05 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.

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