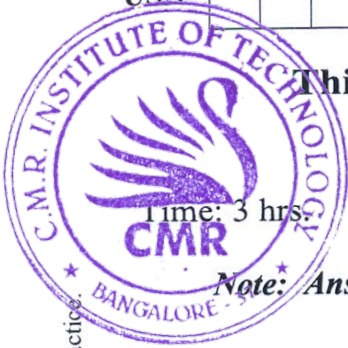


USN

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



Third Semester B.E. Degree Examination, Jan./Feb. 2023 Building Materials and Construction

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. What are the requirements of good building stones? (05 Marks)
- b. What are the requirements of good building bricks? (05 Marks)
- c. What are the tests conducted on bricks in the field and in laboratory? Explain any one test conducted on brick in laboratory. (10 Marks)

OR

- 2 a. What are the requirements of good timber? (05 Marks)
- b. Explain what is meant by bulking of sand and specify gravity. (05 Marks)
- c. Write a note on the importance of the following : (10 Marks)
 - (i) Coarse aggregate
 - (ii) Shape and texture.
 - (iii) M-sand
 - (iv) Impact and abrasion test.
 - (v) Sieve analysis.

Module-2

- 3 a. What are the requirements of good foundation? (05 Marks)
- b. Name different types of foundation. (05 Marks)
- c. With sketch explain combined footing and pile foundation. (10 Marks)

OR

- 4 a. Compare brick masonry work with stone masonry work. (05 Marks)
- b. Name types of bonds in brick work and write neat sketch of any two of bonds in brick work. (05 Marks)
- c. What are the requirements of good partition wall? Name different types of partitions used. (10 Marks)

Module-3

- 5 a. What is lintel? Name different types of lintel and write any one lintel sketch. (05 Marks)
- b. What are the materials used for flooring? Explain any one of them in brief. (05 Marks)
- c. Mention factors to be considered in selection of flooring material and explain any 5 of them. (10 Marks)

OR

- 6 a. What are the requirements of good roof and name the classification of roofs? (05 Marks)
- b. What are the advantages and disadvantages of flat roof? (05 Marks)
- c. Draw neat sketch of combination of king-post and queen-post trusses. Label all the parts. (10 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-4

- 7 a. Name different types of doors depending on materials and construction methods. (05 Marks)
b. What are the advantages of steel window over wooden window? (05 Marks)
c. Draw neat sketch of door and name all the parts with explanation. (10 Marks)

OR

- 8 a. List the technical terms used in stairs. (05 Marks)
b. What are the points to be considered in the scaffolding work? (05 Marks)
c. Explain in brief requirements of a good stair. (10 Marks)

Module-5

- 9 a. Explain briefly defects found in plastering? (05 Marks)
b. Explain Sandfaced plastering and metal lathe plastering. (05 Marks)
c. What are the effects of dampness in building? (10 Marks)

OR

- 10 a. List the points to be considered for painting of new steel surface. (05 Marks)
b. What are the points to be considered for repainting of old wood work? (05 Marks)
c. Explain in brief defects found in painting work. (10 Marks)
