

Code: CE3T2

**II B.Tech - I Semester–Regular/Supplementary Examinations –
November 2017**

**BUILDING MATERIALS AND CONSTRUCTION
(CIVIL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

PART – A

Answer *all* the questions. All questions carry equal marks
11x 2 = 22 M

1. a) Explain briefly about the methods of quarrying of stones.
- b) What is seasoning of timber?
- c) What is coefficient of hardness of stone?
- d) What do you understand by frog in a brick?
- e) Write short notes on Particle board, Veneers, & Artificial timber.
- f) List out any 10 miscellaneous materials.
- g) Describe the deterioration of paints and varnishes.
- h) What are the factors effecting the architectural acoustics?
- i) Illustrate the term underpinning.
- j) What are the properties of FAL - G masonry blocks?
- k) What are the primary factors that affect the choice of a foundation type for a building?

PART – B

Answer any **THREE** questions. All questions carry equal marks. 3 x 16 = 48 M

2. a) Explain methods of dressing of stone. 8 M

b) Explain in detail about Field and Lab tests of bricks. 8 M

3. a) What is seasoning of timber? Explain any two methods of artificial seasoning in detail. 8 M

b) Describe the various forms of structural steel available with sketches. 8 M

4. a) Is it necessary to paint on new wood work? Give the reasons and explain the process in detail. 8 M

b) What are the requirements of a good acoustic material & explain the absorption coefficients for building material and furnishing. 8 M

5. What do you understand by grillage foundation? Draw a neat sketch of steel grillage foundation for a steel stanchion. Explain the method of construction. 16 M

6. a) Explain with the reasons what type of floor finishing will be required for 8 M

- i) Ware houses
- ii) Industries
- iii) Laboratories
- iv) grain store
- v) Theatres
- vi) Educational buildings

b) Describe the method of damp proofing for the following:

8 M

- i) Foundations
- ii) Basement where water table is high
- iii) Floors
- iv) Walls