

Code: ME5T6FE4

III B.Tech - I Semester – Regular Examinations - November 2014

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

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1. a) Explain with neat sketch about “Hoffman’s Kiln”. 7 M
b) List out commonly used building stones and state their suitability in construction. 7 M
2. a) Discuss the defects in Timber. 7 M
b) Write the notes on “Hydrate Hardening”. 7 M
3. a) Illustrate different forms of steel. 7 M
b) Define “Pigment volume concentration” and discuss its importance. 7 M
4. a) How do you compare the effectiveness of different acoustical material? 7 M
b) What are the requirements of an ideal material for Damp proofing? 7 M

5. a) Explain the situations in which pile foundations are preferred. 7 M
- b) What are the good requirements of a Foundation? 7 M
6. a) State general principles to be kept in my mind while supervising 7 M
- (i) Stone work
- (ii) Brick work under water construction.
- b) What is the significance of bonding in brick masonry explain English bond and Flemish bond by sketches. 7 M
7. a) Describe the constructing cement concrete flooring including its merits and demerits. 7 M
- b) Discuss the various factors which require due consideration while selecting a roof covering of a building. 7 M
8. a) What is Scaffolding? Mention its various components. 7 M
- b) Define “Underpinning”? Under what situation the use of underpinning is warranted. 7 M