



Printed Pages : 3

ECE302

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 0022

Roll No.

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**B.Tech**

**(SEM III) ODD SEMESTER THEORY EXAMINATION 2009-10  
BUILDING MATERIALS & CONSTRUCTION**

*Time : 3 Hours]*

*[Total Marks : 100*

**Note :** *Attempt all questions.*

**1 Attempt any four parts : 5×4=20**

- (a) Classify bricks of various categories.
- (b) What do you mean by seasoning of timber ?  
What are its advantages ?
- (c) What are the forces responsible for causing natural defects in timber ?
- (d) What are the characteristics of good building stones ?
- (e) Explain properties of gypsum.
- (f) How is mortar classified on the basis of bulk density ?

**2 Attempt any four parts : 5×4=20**

- (a) Classify plastics and give their advantages.
- (b) Explain the mechanical properties of plastics and their use in construction.

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- (c) Explain the properties of common constituents of paint, varnish and distempers.
- (d) Explain the characteristics of reinforcing steel.
- (e) Describe use of glass in construction work.
- (f) Describe desirable properties of thermal and sound insulating materials.

3 Attempt any **two** parts :

10×2=20

- (a) (i) Describe the classification of different types of buildings as per national building code (NBC)
- (ii) What does the term "principles of planning of building" signify ? How would you select the site for building construction ?
- (b) What are the different types of upper and ground floors ? Describe them briefly.
- (c) (i) Explain various causes of dampness of buildings.
- (ii) Explain how pre construction and post construction anti termite treatment is carried out.

4 Attempt any **two** parts :

10×2=20

- (a) Compare wooden and steel doors. Draw detail of each type and discuss how the size of doors and windows are fixed.
- (b) Define various types of lintels and discuss their various uses.
- (c) Describe the term "functional efficiency of building".



5 Attempt any **two** parts :

10×2=20

- (a) Write down general rules for natural ventilation. Explain in brief various systems of mechanical ventilation.
- (b) Write short notes on :
  - (i) Mechanical lifts and escalators
  - (ii) Fire fighting
  - (iii) Acoustics
- (c) Explain the terms plastering, painting and distemping along with their advantages.