



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

PAPER ID : 100312

Roll No.

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B. Tech.

(SEM. III) (ODD SEM.) THEORY
EXAMINATION, 2014-15

BUILDING MATERIAL & CONSTRUCTION

Time : 3 Hours]

[Total Marks : 100

- Note:** (1) Attempt all questions.
(2) All questions carry equal marks.

1. Attempt any four parts: **5x4=20**

- Explain different characteristics of stones and their method of testing?
- What are the constituent materials & properties of cement concrete. Also discuss the methods of curing of cement concrete
- What do you mean by seasoning of Timber? What are its advantages and fundamental Engineering Properties of Timber?
- Discuss the manufacturing process of Clay Bricks and their uses ?
- Write down the process of manufacturing of cement and their uses.
- Discuss the problem of lime bursting and efflorescence in bricks?

2. Attempt any four parts : **5x4=20**

- Discuss the properties, ingredients & uses of Glass used in building construction?
- Explain constituents, desirable properties & types of Paints.
- Write note on the following :
 - Thermosetting and thermoplastic
 - Common terms used in brick masonry

- Explain the properties & characteristic of reinforcing steel.
- Discuss the properties & uses of the following
 - Aluminum
 - Cast iron
- Write short note on the following :
 - Types of sound insulating material
 - Types of thermal insulating material

3. Attempt any two parts : **10x2=20**

- Discuss in detail the following :
 - Staircase construction (neat sketch)
 - Cavity wall and hollow block
- Explain the classification of Stone Masonry and Bonds used in Brick Masonry?
- What are the different types of Ground Floor? Describe them briefly.

4. Attempt any two parts : **10x2=20**

- Discuss different types of Roofs? Write a short note on Queen Post Truss with neat sketch.
- What is the function of Linters and its classification?
- Explain the different type of Doors and Windows?

5. Attempt any two parts : **10x2=20**

- Define the term Ventilation? Discuss the factors which affect Ventilation? Which point should be kept in mind while planning ventilation in public building?
- Explain the following :
 - Mechanicals Lifts and Escalators
 - Acoustics
 - Water supply system and Fixtures
- Explain the following :
 - Plastering and pointing
 - Drains.