

BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY

Question Bank (K-Scheme)

Name of subject: Building Materials Construction
Subject code: 312328

Unit Test: I
Course: CE
Semester: II

CHAPTER 1 (Overview of Construction Materials)

(2 Marks)

- State any two building components with their function.
- State any one function of parapet & bean plinth roof.
- Define the terms Substructure and Superstructure used in building construction.
- State any four roles of civil engineering in human life.
- State different types of construction materials.
- Define quarrying of stones? State any two methods of quarrying.
- State any two defects that occur in timber.
- State any two properties and uses of bitumen.

(4 Marks)

- Differentiate between load bearing structure and framed structure (any four points).
- Classify the buildings as mentioned in 'National Building code' (2016) with an example of each.
- List any four criteria for selection of construction materials.
- State any one example of the following construction materials. (i) Natural (ii) Artificial (iii) Special (iv) Finishing
- Define seasoning of timber? Explain natural seasoning method.
- Compare asphalt and tar with respect to (i) setting time (ii) use c. Define soil?
- State the suitability of sand, silt, and clay in construction work.
- State the various types of tar used in civil engineering work and state their two uses.
- State any properties of good timber.
- State any four properties of hydraulic lime.

CHAPTER 2 (Special Purpose Building Construction Materials.)

(2 Marks)

- a. Name different water proofing Materials. Also give their brand names in the market.
- b. Name different termite proofing materials.
- c. Name the thermal insulating Materials. State their brand names.
- d. State uses of Geopolymer Cement.
- e. State Properties of Geopolymer Cement.
- f. State the types of fibers and Uses.

(4 Marks)

- a. Define water proofing materials. Give their properties and uses.
- b. What is the necessity of termite proofing materials? Name a few of them, also give its uses.
- c. Name a few Sound Insulating Materials. Give their properties and uses.
- d. What are fibers ? How are they Useful in Construction.

CHAPTER 3 (Construction of Superstructure and Substructure)

(2 Marks)

- a. Define i) Weathering ii) Trough stone.
- b. Define the terms Facing and Hearting in Stone masonry.
- c. State the importance of Fog.
- d. State any two purposes of foundation.
- e. What is timbering & strutting?
- f. Define job layout and site clearance.
- g. State any four precautions to be taken while marking layout on ground.

(4 Marks)

- a. Describe any eight characteristics of good stone masonry.
- b. Differentiate between Brick masonry and Stone masonry.
- c. Explain the necessity of scaffolding and shoring.
- d. Explain English bond and Flemish bond in brick work with neat sketches.

- e. State any four advantages of hollow concrete block masonry.
- f. What is meant by composite masonry? State its different types.
- g. Draw neat sketch of under reamed pile foundation & state situation under which it is adopted.
- h. State the precautions to be taken while constructing a foundation in Black cotton soil.
- i. Write down necessity of dewatering of foundation trenches and methods used.
- j. Explain pile foundation and caisson with neat sketches.
- k. State any essential requirements of good foundation.
- l. Classify the piles as per function and materials.
- m. What is Shallow foundation? State the situation where combined footing & raft foundation are suitable.

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