

- Q.17 What are the proportions of mortar for different building works?
- Q.18 What is concrete? Explain its workability.
- Q.19 What are the characteristics of hard wood and soft wood?
- Q.20 Write the names of common Indian Timber and its uses.
- Q.21 What are the benefits of using glass as a building material?
- Q.22 Explain the properties of concrete M20.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Draw the details of a casement window.
- Q.24 Explain a door frame with its fixing details.
- Q.25 Explain the different type of windows with sketches.

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3rd Sem / Architectural Assistantship
Subject:- Building Materials & Construction - II

Time : 3Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Which of the following is the primary reason to add lime to a cement mortar mix?
- To increase the setting time
 - To improve workability and plasticity
 - To enhance compressive strength
 - To reduce water absorption
- Q.2 Which of the following is a common application for lime mortar?
- Structural beams
 - Concrete foundations
 - Interior plastering

Q.3 Which of the following is not a typical type of aggregate used in construction?

- a) Crushed stone b) Gravel
- c) Sand d) Clay

Q.4 The term "bulking of sand" refers to:

- a) Increase in sand volume due to moisture content
- b) Decrease in sand volume due to compaction
- c) The process of separating sand particles by size
- d) The weight of a unit volume of dry sand

Q.5 Which of the following is NOT a common type of concrete aggregate?

- a) Gravel b) Sand
- c) Crushed stone d) Clay

Q.6 Which type of concrete is specifically designed for high strength applications?

- a) Normal weight concrete
- b) Lightweight concrete
- c) High performance concrete
- d) Mass concrete

SECTION-B

Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)

Q.7 What is the primary compound that constitutes the majority of lime, a key ingredient in cement?

Q.8 What should be the initial setting time for ordinary Portland cement as per BIS specification?

Q.9 Which apparatus is used to test Soundness of cement?

Q.10 Which type of wood is commonly used for structural support in building construction due to high strength and stiffness?

Q.11 What is the primary property of glass that makes it suitable for windows and curtain walls in buildings?

Q.12 Which foundation type is used for the construction of building on black cotton soil?

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Describe the different types of cement in brief.

Q.14 What are the things to keep in mind about storage of stock of cement?

Q.15 What are the uses of lime?

Q.16 Differentiate the fine and coarse aggregates.