

II B. Tech I Semester Supplementary Examinations, January - 2023
BUILDING MATERIALS, CONSTRUCTION AND PLANNING
 (Civil Engineering)

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions, each Question from each unit
 All Questions carry **Equal** Marks

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 UNIT-I

- 1 a) Recall the different tests conducted on bricks and explain any two tests. [8M]  
 b) List out the properties of stone with the structural requirements. [7M]

Or

- 2 a) What points would you apply to ensure strength, pleasant and comfort in stone in masonry construction? [8M]  
 b) Recall the composition of good brick and various manufacturing methods with neat sketches. [7M]

UNIT-II

- 3 a) Explain the significance of bonding in brickwork. Explain by sketches the difference between the English bond and the Flemish bond. [8M]  
 b) State the Characteristics of good tile with examples. [7M]

Or

- 4 a) Sketch the alternative courses of the first-class brick wall in English bond and state its essential requirements. [8M]  
 b) What is the seasoning of timber? Discuss the defects in timber with neat sketches. [7M]

UNIT-III

- 5 a) Explain the importance of damp proofing and waterproofing materials in building construction. [8M]  
 b) List out Various ingredients of cement concrete and their importance. [7M]

Or

- 6 a) List the ingredients of lime. Describe various methods of manufacturing lime. [8M]  
 b) Discuss the alliterative materials for wood. [7M]

UNIT-IV

- 7 a) List various types of cement and various field and laboratory tests for cement. [8M]  
 b) What is the specific need for fibre-reinforced concrete? Brief different types of fibres used in concrete. [7M]

Or

- 8 a) List different types of floors. Explain Mosaic and Terrazzo floors with neat sketches. [8M]  
 b) Sketch King and Queen post Trusses with all components. [7M]

UNIT-V

- 9 a) List the ill effects of dampness in the building. Discuss with examples. [8M]  
 b) Discuss various defects in plastering. [7M]

Or

- 10 a) Explain the bulking of the sand phenomenon with examples. [8M]  
 b) Explain the Bulk Density, porosity and absorption and Moisture content of Aggregate. [7M]