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B.Arch. (Sem.-2)
BUILDING CONSTRUCTION & MATERIAL-II
Subject Code : AR-124
M.Code : 45011

Time : 4 Hrs.

Max. Marks : 70

INSTRUCTION TO CANDIDATES :

- 1. Attempt TWO questions from Unit-I and TWO questions from Unit-II.**

UNIT-I

1. Answer the following
 - a. Differentiate between hardwood and softwood (3)
 - b. Describe the process of seasoning of timber (7)
2. List various types of paints and their properties. Also, write about the applications of these paints. (5,5)
3. List down all possible water proofing materials and process of application. Support your answer with neat sketches showing the placement and thickness of their water proofing material. (6,4)

UNIT-II

4. A room of $3.0\text{m} \times 5.0\text{m}$ of height 3.0m has a window opening on the longer face. The opening is 1.5m wide and 1.5m in height. Design a window that is partially fixed, and partially casement, for this opening. Draw plan, section, elevation (scale 1:20) of the window, showing its details (scale 1:5). (25)
5. Draw plan and section of an isolated footing (scale 1:20) for an RCC column of $0.45\text{m} \times 0.75\text{m}$ size. Draw details (1:5) of the same showing reinforcement, the material specifications, including DPC. (25)
6. A passageway has an opening of $1.8\text{m} \times 2.1\text{m}$. There is a plinth of 15cm protruding 30cm from the wall opening. Design a door system that allows ventilation at certain times of the day and allows safety using solid door. Draw plan, section, elevation (scale 1:20) of the door including details (1:5) at junctions of door shutter and frame. (25)
7. Draw details of various types of flat roof constructions. Also highlight insulation strategies for roofs. (25)

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.