

Total No. of Pages : 01

Total No. of Questions : 07

B. Architecture (Sem.-6)

BUILDING CONSTRUCTION AND MATERIALS-VI

Subject Code : AR-324

Paper ID : [A0933]

Time : 4 Hrs.

Max. Marks : 75

INSTRUCTION TO CANDIDATES :

1. Attempt any TWO questions from each UNIT.
2. Assume suitable scale for drawing/details if not mentioned.
3. Assume any missing data/dimension. Draw neat sketches where necessary.

UNIT-I

- Q1. Discuss the manufacturing process of cast iron. (12.5)
- Q2. Discuss aluminium as building construction material with reference to properties, form and uses. (12.5)
- Q3. Explain casting and uses of stainless steel as building construction material. (12.5)

UNIT-II

- Q4. Design and draw all the relevant details of a window using steel sections in an opening of $3\text{m} \times 1.5\text{m}$ (assuming lintel level as 2.1m) (25)
- Q5. Design and detail out a sliding door in aluminium for an opening of size $1\text{m} \times 2.1\text{m}$. (25)
- Q6. Draw all the relevant details of a north light truss to a suitable scale. Also explain patent glazing. (25)
- Q7. Write short notes on the following :
 - a. Steel flooring. (6)
 - b. Steel columns. (6)
 - c. Pre stressed steel frames. (6)
 - d. Grillage foundation. (7)