

09ARC 4.2 – BUILDING CONSTRUCTION & MATERIALS – IV

Written by Administrator
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CONTACT PERIODS : 6 (1 LECTURE + 5 STUDIO) PER WEEK

VIVA MARKS : 100

PROGRESSIVE MARKS : 50

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Objective:

To study construction systems with focus on roofing and techniques of pile foundation and metal doors, windows and partitions.

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Outline:

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Construction – Mild steel and Aluminium doors and windows and partitions. Details of RC framed structures with reinforcements, beams including cantilever beams, columns, flat slab, ribbed filler slabs, waffle roof.

Pile foundation – Precast piles, cast-in-situ piles, types of piles, method of driving piles, pile caps etc.,

Materials – Anti-termite treatment to foundation, masonry walls and wood work (pre construction) water proofing materials and weather proofing materials like chemical admixtures and surface applications. Lime and brick bats etc., Pest control treatment.

Note – Minimum one plate on each construction topic. Site visits to be arranged by studio teachers. Study of material application in the form of portfolio. The entire portfolio on construction and materials shall be presented for viva exam.

References:

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1) “Construction Technology” by Chudley

2) “Building Materials” by Duggal SK