

31245 - BUILDING CONSTRUCTION AND DETAILING –II

DETAIL SYLLABUS.

UNIT- I FINISHES

Finishes – Plastering – Pointing – Cladding

UNIT- II R.C.C AND STEEL STRUCTURES

Pre – cast concrete construction – pre – stressed concrete construction – joints in concrete work. STEEL WORKS: Mild steel sections for grills and gates – Knowledge of various types of roof trusses and their selection for commercial and industrial buildings – rolling shutters – collapsible gate – metal doors and windows.

UNIT- III TEMPORARY STRUCTURES

Scaffolding – Types of Scaffolding – Shoring – Types of Shoring –Underpinning- Methods of Underpinning – Form work – Requirements of Form work – Materials for Form work – Construction of Form work for Columns, Beams and Floor Slabs – Centering for Arches. STAIRS Location of Stairs – Technical terms – Requirements of a good Stairs – Classification of Stairs – Stairs of different Materials.

UNIT- IV MISCELLANCE STRUCTURES FLAT SLAB CONSTRUCTION: types of shell roof structures – domes – ruled surface – folded plates (description of the structures only) – cost effective construction Techniques - Rat trap bond, Filler slab, Funicular shell – Use of Pre - cast Technology in construction. APPROVAL DRAWING: The basic criteria required for an approval drawing are to studied – The students have to prepare an approval drawing by showing all necessary details required for getting approval from the local authority concerned.

UNIT- V DETAILING

(Specifications to be given. Design not required)

REFERENCES

1. Building Construction - S.C.Rangwala
2. A text book of building construction – Arora & Bindra
3. Building construction – R.C.Mitchell
4. A Text book of Building Construction. - R.S. Deshpande
5. Building Construction - Richard Greenhaigh
6. Building Drawing - Shah & Kale