

31234- BUILDING CONSTRUCTION AND DETAILING – I

DETAIL SYLLABUS

UNIT- I MASONRY – STONE, BRICK & COMPOSITE

STONE MASONRY: Definition – Technical terms – Dressing of Stones – Joints in Stone Masonry – Classification of Stone Masonry.

BRICK MASONRY: Technical terms – Bonds in Brick Work (English and Flemish bond up to two brick wall) – Bonds in Pier – Tee junction – Squint junction

MASONRY AND PARTITION WALL Masonry – load Bearing Wall – Partitions – Retaining Walls and Breast wall – cavity wall construction – reinforced brick work.

UNIT- II FOUNDATION

Types of Soils – Types of Loads – Bearing Power of Soil – Types of Foundation – Causes of Failure of Foundation and measures to prevent such failures – Dewatering of Foundation Trenches – Pile Foundation – Types of Pile Foundations.

FLOORS & ROOFS FLOORS: – Types of Flooring- Timber, P.C.C, R.C.C., Stone, Tile, Ribbed Flooring ROOFS & ROOF COVERINGS - Technical terms - Classification of Roofs – Pitched Roof — Types of Pitched Roof (excluding Steel Trussed Roof) – Flat Roofs – Roof coverings for Pitched Roofs – FRP, PVC,AC sheet, Aluminum Sheets and country & Mangalore tiled roofing

UNIT- III CEMENT CONCRETE CONSTRUCTION (P.C.C. & R.C.C.)

Definition of P.C.C. & R.C.C. – Water Proofing of Concrete – Reinforcement – Advantages of R.C.C. – Causes of Failure, Rehabilitation of R.C.C. Structures Various Building Components in a Single Storied Building and their functions

DAMP PROOFING: Source of dampness- Causes of dampness – Methods of Damp Proofing – Materials used for Damp Proofing – Selection of Material for D.P.C. – Damp Proofing Treatment in Buildings (Foundations, Floors, Walls, Roofs, and Parapet Walls & Basement)

UNIT- IV TIMBER JOINTS, DOORS & WINDOWS

TIMBER JOINTS: Technical terms – Classification of Joints. DOORS & WINDOWS: Technical terms – Location of Doors – Size of Doors – Types of Doors & Windows – Fixtures and Fastenings for Doors and Windows

ARCHES & LINTELS, DAMP PROOFING ARCHES & LINTELS: Technical terms – Types of Arches – Materials used for Construction – Types of Lintels.

UNIT- V DETAILING

(Specification to be given for each detail. Design not required)

LIST OF PLATES

1. Plan, Elevation and Isometric view of stone masonry(Sketch only).
2. Plan, Elevation and Isometric view of alternate courses for English bond (Sketch only).
3. Plan, Elevation and Isometric view of alternate courses for Flemish bond (Sketch only).
4. Plan, elevation and section of Partition walls using timber, glass to half full size scale detailing. Details shall be prepared to half full size scale.
5. Plan and sectional elevation of Spread Footing (Stone and Brick), Plan and sectional elevation of Isolated Footing, Combined Footing (R.C.C)
6. Cross section of different types of floors and Cross section of different types of Roof coverings.
7. Elevation of all types of Arches and Cross section of Lintels.
8. Damp proofing of Foundations, Basement wall, Floors, Roofs, and Parapet Walls (Sketch only).
9. Plan and Cross section of a single storied building showing various building components.
10. Plan, Elevation, Section and Construction details of Wooden Paneled Door and Flush Door. Details shall be prepared to full size scale.
11. Plan, Elevation, Section and Construction details of Partly Paneled and Partly Glazed Door. Details shall be prepared to full size scale.
12. Plan, Elevation, Section and Construction details of Aluminum Glazed door / Window. Details shall be prepared to full size scale.
13. Plan, Elevation, Section and Construction details of Steel door / Steel Glazed Window. Details shall be prepared to full size scale.
14. Plan, Elevation, Section and Construction details of Wooden Paneled window and Glazed window. Details shall be prepared to full size scale.

REFERENCES

1. Building Construction - S.C.Rangwala
2. A text book of building construction – Arora & Bindra

Diploma, Anna University-UG, PG., HSC & SSLC

Notes

Syllabus

Question Papers

Results and Many more...

Available @

www.AllAbtEngg.com

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