

Lesson Plan

Course - Building Construction (Th-1)

Semester- 3rd

Program- Civil Engineering

Institute - Govt. Polytechnic, Sonpur

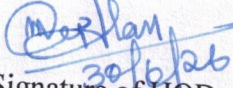
Session - 2026-2027

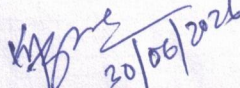
Total Load-45(3 /week)

Sl. No.	Week No.	Class No.	Topic to be Covered
1	1	Class 1	Unit I: Introduction to Building Components, Classification of Buildings as per NBC (Group A to I)
2	1	Class 2	Types of Construction – Load Bearing Structure, Framed Structure
3	1	Class 3	Composite Structure, Functions of Building Components
4	2	Class 1	Substructure – Foundation, Plinth
5	2	Class 2	Superstructure – Walls, Partition Wall, Cavity Wall
6	2	Class 3	Sill, Lintel, Doors, Windows, Floors, Mezzanine Floor, Roof, Columns, Beams, Parapet
7	3	Class 1	Unit II: Job Layout – Site Clearance
8	3	Class 2	Layout for Load Bearing Structure by Centre Line Method
9	3	Class 3	Layout for Framed Structure by Face Line Method, Precautions
10	4	Class 1	Earthwork – Excavation for Foundation
11	4	Class 2	Timbering and Strutting
12	4	Class 3	Earthwork for Embankment, Materials for Plinth Filling
13	5	Class 1	Tools and Plants used for Earthwork
14	5	Class 2	Functions of Foundation
15	5	Class 3	Types of Foundation – Shallow Foundation, Stepped Footing
16	6	Class 1	Wall Footing, Column Footing
17	6	Class 2	Isolated & Combined Column Footing
18	6	Class 3	Raft Foundation, Grillage Foundation
19	7	Class 1	Deep Foundation – Pile Foundation
20	7	Class 2	Well Foundation and Caissons
21	7	Class 3	Pumping Methods of Dewatering, Deep Wells, Well Points, Cofferdams (Introduction)
22	8	Class 1	Unit III: Stone Masonry – Terms used in Stone Masonry
23	8	Class 2	Rubble Masonry and Ashlar Masonry
24	8	Class 3	Joints, Selection and Precautions in Stone Masonry
25	9	Class 1	Brick Masonry – Terms used in Brick Masonry
26	9	Class 2	Brick Bonds – Header, Stretcher, English and Flemish Bond
27	9	Class 3	Requirements of Good Brick Masonry, Junctions and Precautions
28	10	Class 1	Comparison between Stone and Brick Masonry
29	10	Class 2	Tools and Plants for Stone and Brick Masonry
30	10	Class 3	Hollow Concrete Block Masonry and Composite Masonry
31	11	Class 1	Scaffolding – Purpose and Types

32	11	Class 2	Erection and Dismantling of Scaffolding
33	11	Class 3	Shoring, Underpinning, Formwork – Definition, Requirements, Materials, Types and Removal
34	12	Class 1	Unit IV: Doors – Components, Types and BIS Sizes
35	12	Class 2	Windows – Components, Types and BIS Sizes
36	12	Class 3	Ventilators, Fixtures and Fastenings
37	13	Class 1	Window Sill, Lintels, Shed/Chajja
38	13	Class 2	Vertical Communication – Staircase, Ramp, Lift, Elevator, Escalator
39	13	Class 3	Staircase Terms and Types of Staircases
40	14	Class 1	Unit V: Floor Finishes – Types and Suitability
41	14	Class 2	Laying, Construction, Finishing and Polishing of Floors
42	14	Class 3	Roofing Materials and Types of Roofs
43	15	Class 1	Wall Finishes – Plastering, Special Plasters, Wall Claddings
44	15	Class 2	Painting – Necessity, Surface Preparation, Methods of Application
45	15	Class 3	Precautions in Plastering, Defects in Plastering, Course Revision

Signature of Faculty
Civil Engg, GP Sonpur


Signature of HOD
Civil Engg, GP Sonpur


Academic Co-ordinator
Civil Engg, GP Sonpur