Techno India NJR Institute of Technology



Building Drawing Lab (4CE4-23)

Rakesh Yadav (Associate Professor) **Department of CE**





RAJASTHAN TECHNICAL UNIVERSITY, KOTA

SYLLABUS

II Year-IV Semester: B.Tech. (Civil Engineering)

4CE4-23: BUILDING DRAWING

Credit: 1.5 Max. Marks: 75 (IA:45, ETE: 30)

OL+OT+3P

- 1- To plan and draw working drawing of a Residential building with following detail.
 - (a) Site plan
 - (b) Foundation plan
 - (c) Plan
 - (d) Two sectional elevations
 - (e) Front elevation
 - (f) Furniture plan
 - (g) Water supply and sanitary plan
 - (h) Electric fitting plan
- 2- To design and draw a Primary Health Center
- 3- To design and draw a Primary School
- 4- To design and draw a Rest House
- 5- To design and draw a Post Office
- 6- To design and draw a Bank
- 7- To design and draw a College Library
- 8- To design and draw a Cinema Theatre

For Techno India NJR Institute of Technology

Undia NJR Institute of Technology

Or. Pankaj Kumar Porwai

(Principal)

Course Overview:

Drawing is the language of Engineers and Architects. Building Planning and Drawing is the foundation subject for Civil Engineering students. reader is empowered with an in-depth knowledge in the subject of Building Planning and Drawing. The entire subject is canvassed in the chapters like: Fundamentals of Building Drawing; Fundamentals of Buildings; Site Selection for Residential Buildings; Climate and Its Influence on Building Planning; Orientation of Buildings; Principles of Planning Of Buildings; Building Bye-Laws; Planning of Residential Buildings; Planning of Public Buildings; Different Methods of Construction; Prefabricated Construction; Economical Measures in Building Construction; Green Buildings; Anthropometric Studies; Intelligent Buildings; Construction Management Techniques; Basic Concepts of the Building Elements; Nomenclature of Building Planning and Construction; Standard Guidelines for Building Drawing; Guidelines for Planning and Drawing of Residential Building; Drafting Materials and their Utilization; Conventional Signs and B.I.S. Code Colours; A Few Facts of the Vaastu Sastra; Perspective Drawings; Computer Aided Building Drawings; Typical Building Drawings; Question Bank. The Appendix gives University Examination Questions

Course Outcomes:

CO.NO.	Cognitive Level	Course Outcome
1	Synthesis	Learner can sketch, plan and do drawing of residential building with details of site plan, foundation plan, furniture plan, water supply and sanitary plan
2	Analysis	Learner can sketch, plan and do drawing of institutional building with details of site plan, foundation plan, furniture plan
3	Application	Learner can sketch and do the drawing of commercial building with details of site plan, foundation plan, furniture plan
4	Synthesis	Draw the details of parts of buildings.
5	Application	State the scope and provisions for building components and services.



Prerequisites:

1. Fundamentals Knowledge of Different types of Civil EngineeringDrawings.

Course Outcome Mapping with Program Outcome:

Course	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PO1	PO1	PSO	PSO	PSO
Outcome	1	2	3	4	5	6	7	8	9	0	1	2	1	2	3
CO249.1	3	2	2	2	2	2	2	1	2	1	1	1	2	2	2
CO249.2	2	2	2	2	1	2	2	1	2	1	2	1	2	2	2
CO249.3	3	2	2	2	2	2	2	1	2	1	1	1	2	2	2
CO249.4	2	2	1	2	2	2	3	1	2	1	1	2	3	2	2
CO249.5	2	1	1	1	2	2	1	1	2	1	1	2	3	2	2
CO249 (AVG)	2.4	1.8	1.6	1.8	1.8	2	2	1	2	1	1.2	1.4	2.4	2	2

Course Coverage Module Wise:

Lab	Experiments List According to RTU Syllabus					
No.						
1	Drawing of walls					
	a. Brick and Stone masonry					
2	Cross section of external wall from foundation to parapet					
3	Partition wall, cavity wall and					
4	Pointing, Arches, Lintels and Floors					
5	Doors and Windows					
6	Doors and Windows					



7	Stairs, Cross section of Dog legged stairs
8	Stairs, Cross section of Dog legged stairs
9	Roofs: Flat and Pitched roof (Steel truss)
10	Development of Front Elevation and Sectional Elevation from a given plan
11	Development of Front Elevation and Sectional Elevation from a given plan
12	Development of Plan, Front Elevation and Sectional Elevation from linediagram
13	Development of Plan, Front Elevation and Sectional Elevation from line diagram

Faculty Lab Manual Link

1. https://r.search.yahoo.com/ ylu=Y29sbwNzZzME https://grammita.edu.in%2fsites%2fdefault%2ffiles%2fCE%25208211%2520Computer%2520Aided%2520Building%2520Drawing%2520Lab%2520Manual 0.pdf/RK=2/RS=Ru1cHXxZLtDjqo3YvwrmZkk31So-

Assessment Methodology:

- 1. Practical exam using Hand drawing
- 2. Internal examsand Viva Conduct.
- 3. Final Exam (practical paper) at the end of the semester.

