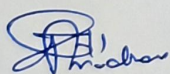


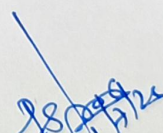
LESSON PLAN: CEPC307 PR:2.Building planning & drawing Lab-II FOR THE SESSION 2026-27(WINTER-2026) BATCH-2024-27, GOVT. POLYTECHNIC,KANDHMAL



Discipline: Civil Engineering	Semester: 5th	Name of the Teaching Faculty : GOURANG CHARAN PRADHAN, Sr Lecturer in Civil Engg
Subject: CEPC307 PR:2.Building planning & drawing Lab-II	No. of days/ per week class allotted: 4	Semester From Date : 1/07/2026 to Date: 5/11/2026 No. of Weeks: 15
Week	Class Day	Theory/ Practical Topics
1st	1st	Module I – Introduction to AutoCAD (18 Periods) Course Introduction-CAD applications, lab rules, software interface
	2nd	AutoCAD Interface-Ribbon, Toolbars, Command Line, Navigation
	3rd	Drawing Setup-Units, Limits, Grid, Snap, Ortho, Object Snap
	4th	Coordinate System-Absolute, Relative, Polar Coordinates
2nd	1st	Basic Drawing Commands-Line, Polyline, Circle, Arc, Rectangle
	2nd	Drawing Commands Practice-Polygon, Ellipse, Spline, Point
	3rd	Editing Commands-Erase, Move, Copy, Rotate
	4th	Editing Commands-Mirror, Offset, Trim, Extend
3rd	1st	Editing Commands-Scale, Stretch, Break, Join
	2nd	Hatch and Section Lines-Hatch patterns and editing
	3rd	Dimensioning-Linear, Aligned, Angular, Radius, Diameter
	4th	Text Writing-Single-line and Multi-line Text
4th	1st	Layers>Create, Edit, Freeze, Lock, Colors, Line Types
	2nd	Blocks>Create, Insert, Edit Blocks
	3rd	Object Properties-Match Properties, Object Selection
	4th	Display Controls-Zoom, Pan, Viewports
5th	1st	Practical Exercise-Complete 2D drawing using all commands
	2nd	Assessment-Practical test and viva
	3rd	Module II – Building Drawing using AutoCAD (16 Periods) RCC Water Tank-Introduction to SP-34 detailing
	4th	Water Tank Plan-Drawing plan
6th	1st	Water Tank Section-Reinforcement details
	2nd	Water Tank Details-Dimensioning and annotations
	3rd	Two-Storey Building-Introduction and planning
	4th	Floor Plan-Ground floor drawing
7th	1st	First Floor Plan-Drawing and editing
	2nd	Elevation-Architectural elevation
	3rd	Section-Building section
	4th	Load Bearing Wall Footing-Detailing
8th	1st	RCC Isolated Footing-Reinforcement detailing
	2nd	Column Layout-Structural detailing
	3rd	Combined Drawing-Plan, Elevation and Section
	4th	Annotation-Text, dimensions, symbols
9th	1st	Plot Preparation-Sheet layout and printing
	2nd	Practical Assessment-Submission and viva
	3rd	Module III – Structural Detailing (14 Periods)-Steel Roof Truss-Introduction to truss components
	4th	Roof Truss Drawing-Line diagram preparation

10th	1st	Bolted Connections-Detailing
	2nd	Welded Connections-Detailing
	3rd	Steel Column Base-Foundation details
	4th	Complete Roof Truss-Final detailing
11th	1st	Steel Building Frame-Two-storey frame introduction
	2nd	Frame Drawing-Column and beam layout
	3rd	Beam Connections-Bolted and welded joints
	4th	Column Base Details-Foundation connection
12th	1st	Structural Annotation-Notes and dimensions
	2nd	Editing & Revision-Drawing corrections
	3rd	Structural Drawing Completion-Final drawing
	4th	Practical Evaluation-Assessment
13th	1st	Module IV – Plotting and 3D Modelling (8 Periods)-Plotting-Paper space, Model space
	2nd	Architectural Views-Layout preparation
	3rd	Drafting Views-Viewports and scales
	4th	3D Modelling-Wireframe and Surface models
14th	1st	Solid Modelling-Extrude, Revolve, Sweep
	2nd	Rendering-Materials, Lighting, Rendering
	3rd	Revit/Fusion 360-Introduction and solid modelling
	4th	Practical Exercise-Create a simple 3D model
15th	1st	Module V – Project Planning using MS Project (4 Periods)-MS Project Interface-Introduction and project creation
	2nd	Scheduling-Activities, Dependencies, Gantt Chart
	3rd	Resource Assignment-Resource allocation and tracking
	4th	Final Project & Assessment-CAD drawing submission, plotting, MS Project schedule, viva


 26/06/2026
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