

LESSON PLAN OF PR-6 Engineering Graphics FOR THE SESSION 2026-27(WINTER-2026) BATCH-2026-29, GOVT. POLYTECHNIC, KANDHAMAL

Discipline: Math & Science	Semester: 1st	Name of the Teaching Faculty: Sweet Revelen Pradhan, GF in Civil Engg
Subject: PR-6 Engineering Graphics	No. of days/ per week class allotted: 2	Semester From Date : 17/08/2026 to Date: 17/04/2027 No. of Weeks: 32
Week	Class Day	Theory/ Practical Topics
1st	1st	Unit – I Introduction & Demonstration: Identify various sizes of drawing boards and drawing sheets as per BIS
	2nd	List the types of pencils, instruments, and scales (RF).
2nd	1st	List the types of pencils, instruments, and scales (RF).
	2nd	Demonstrate lying of drawing sheet, margin, standard layout and title block as per BIS, folding principle of drawings
3rd	1st	Demonstrate lying of drawing sheet, margin, standard layout and title block as per BIS, folding principle of drawings
	2nd	Doubt Clearing class
4th	1st	UNIT 2: Types Of Lines, Lettering & Dimensioning - • Demonstrate and explain the use of various types of lines
	2nd	Demonstrate and explain the use of various types of lines
5th	1st	Demonstrate the principle of single stroke, gothic lettering & numerals as per BIS.
	2nd	Demonstrate the principle of single stroke, gothic lettering & numerals as per BIS.
6th	1st	• Introduction to Dimensioning, Unit of Dimensioning, General Rules for Dimensioning
	2nd	• Introduction to Dimensioning, Unit of Dimensioning, General Rules for Dimensioning
7th	1st	Practice writing gothic alphabets and numerals. In straight and inclined line.
	2nd	doubt Clearing class, Assignment
8th	1st	Practical
	2nd	Practical
9th	1st	Unit -3- Scales - • Significance of scales in drawing; different scales.
	2nd	Significance of scales in drawing; different scales.
10th	1st	• Define and draw plain scale and diagonal scale.
	2nd	Practical
11th	1st	Practice Plain Scales using R.F.
	2nd	Practical
12th	1st	Practice Diagonal Scales using R.F.
	2nd	Practical
13th	1st	Practice Veri Scales using R.F.
	2nd	Practical
14th	1st	Doubt Clearing class, Assignment
	2nd	UNIT 4: Orthographic Projections - • Introduction of projections-orthographic, perspective, isometric and oblique: concept and applications.
15th	1st	• Introduction of projections-orthographic, perspective, isometric and oblique: concept and applications.
	2nd	• Introduction of projections-orthographic, perspective, isometric and oblique: concept and applications.

16th	1st	• Introduction to orthographic projection, First angle and Third angle method, their symbols.
	2nd	• Introduction to orthographic projection, First angle and Third angle method, their symbols.
17th	1st	Conversion of pictorial view into Orthographic Views – object containing plain surfaces, slanting surfaces, slots, ribs, cylindrical surfaces.
	2nd	Conversion of pictorial view into Orthographic Views – object containing plain surfaces, slanting surfaces, slots, ribs, cylindrical surfaces.
18th	1st	Doubt Clearing class, Assignment
	2nd	Practical
19th	1st	Practical
	2nd	Practical
20th	1st	Practical
	2nd	Unit- 5 Isometric Projections- - Draw isometric view & Isometric projection of prism & pyramid with axis horizontal and vertical with construction of isometric scales.
21th	1st	- Draw isometric view & Isometric projection of prism & pyramid with axis horizontal and vertical with construction of isometric scales.
	2nd	- Draw isometric view & Isometric projection of prism & pyramid with axis horizontal and vertical with construction of isometric scales.
22th	1st	- Draw isometric view & Isometric projection of prism & pyramid with axis horizontal and vertical with construction of isometric scales.
	2nd	Doubt Clearing class, Assignment
23th	1st	Practical
	2nd	Practical
24th	1st	Practical
	2nd	Practical
25th	1st	Draw a plan and Section of Building free HandSketch
	2nd	Practical
26th	1st	standard tool bar, menu bar, object properties tool bar, draw tool bar, modify tool bar, cursor cross hair. Command window, status bar, drawing area, UCS icon.
	2nd	object properties tool bar, draw tool bar, modify tool bar, cursor cross hair. Command window, status bar, drawing area, UCS icon.
27th	1st	File features: New file, Saving the file Setting up new drawing: Units, Limits, Grid, Snap. Undoing and redoing action. e, opening an existing drawing file, creating templates, Quit.
	2nd	File features: New file, Saving the file Setting up new drawing: Units, Limits, Grid, Snap. Undoing and redoing action. e, opening an existing drawing file, creating templates, Quit.
28th	1st	AutoCAD Commands: • Draw various entities by using commands (Line, circle, arc, polygon, ellipse, rectangle).
	2nd	Edit command, Dimension commands and Modify Commands for two dimensional
29th	1st	Using AutoCAD Draw a plan and Section of building
	2nd	Using AutoCAD Draw a plan and Section of building
30th	1st	Doubt Clearing class, Assignment
	2nd	Practical
31th	1st	Practical
	2nd	Practical
32th	1st	REVISION
	2nd	REVISION

Sweet Revelen Pradhan
Signature of Faculty

HG
30/07/2026
HOD
Dept. of Math and Sc.
Govt. Polytechnics, Kandhamal