

Discipline: Civil engineering	Sem: 1st	Name of Teaching faculty: Binod Jena (PTGF)
Subject: Engineering Drawing	No. of days/per week class allotted: 6	Semester From Date: 25/10/2022 To Date: 20/02/2023 No. of Weeks: 15
Week	Class Day	Theory/ Practical Topics
1st	1st	1.1 Identify various sizes of drawing boards, drawing sheets as per BIS
	2nd	1.2 List the types of pencils, instruments, and scales (RF).
	3rd	1.3 Demonstrate lying of drawing sheet, margin, standard layout and title block as per BIS, folding principle of drawings (blue prints, print outs etc).
	4th	2.1 Demonstrate and explain the use of various types of lines.
	5th	2.2 Demonstrate the principle of single stroke, gothic lettering & numerals as per BIS.
	6th	2.2 Demonstrate the principle of single stroke, gothic lettering & numerals as per BIS.
2nd	1st	3.1 Significance of scales in drawing; different scales
	2nd	3.2 Define and draw plain scale and diagonal scale
	3rd	3.2 Define and draw plain scale and diagonal scale
	4th	4.1 Explain Conic sections with illustration, Explain terms like focus, vertex, directrix and eccentricity.
	5th	4.2 Draw conics sections by eccentricity method – Ellipse, Parabola and Hyperbola.
	6th	4.3 Draw Ellipse by concentric circle method and arc of circle method
3rd	1st	4.3 Draw Ellipse by concentric circle method and arc of circle method
	2nd	4.4 Draw parabola by Rectangle Method and Tangent Method.
	3rd	4.4 Draw parabola by Rectangle Method and Tangent Method.
	4th	5.1 Demonstrate the principles of 1st angle and 3rd angle projections with the help of models and draw symbols
	5th	5.2 Draw projection of points.
	6th	5.2 Draw projection of points.
4th	1st	5.2 Draw projection of points.
	2nd	5.3 Draw projection of straight line (parallel to both planes, parallel to one and perpendicular to other, parallel to one and inclined to other and inclined to both reference planes).
	3rd	5.3 Draw projection of straight line (parallel to both planes, parallel to one and perpendicular to other, parallel to one and inclined to other and inclined to both reference planes).
	4th	5.3 Draw projection of straight line (parallel to both planes, parallel to one and perpendicular to other, parallel to one and inclined to other and inclined to both reference planes).
	5th	5.3 Draw projection of straight line (parallel to both planes, parallel to one and perpendicular to other, parallel to one and inclined to other and inclined to both reference planes).
	6th	5.3 Draw projection of straight line (parallel to both planes, parallel to one and perpendicular to other, parallel to one and inclined to other and inclined to both reference planes).
5th	1st	5.3 Draw projection of straight line (parallel to both planes, parallel to one and perpendicular to other, parallel to one and inclined to other and inclined to both reference planes).
	2nd	5.4 Draw plane figure such as squares, rectangles, triangles, circle, Pentagon and hexagon
	3rd	5.4 Draw plane figure such as squares, rectangles, triangles, circle, Pentagon and hexagon
	4th	5.4 Draw plane figure such as squares, rectangles, triangles, circle, Pentagon and hexagon
	5th	5.4 Draw plane figure such as squares, rectangles, triangles, circle, Pentagon and hexagon
	6th	5.4 Draw plane figure such as squares, rectangles, triangles, circle, Pentagon and hexagon
6th	1st	5.4 Draw plane figure such as squares, rectangles, triangles, circle, Pentagon and hexagon
	2nd	5.5 Draw projections of solids such as prism, cylinder, cone, tetrahedron and pyramid in simple position
	3rd	5.5 Draw projections of solids such as prism, cylinder, cone, tetrahedron and pyramid in simple position
	4th	5.5 Draw projections of solids such as prism, cylinder, cone, tetrahedron and pyramid in simple position
	5th	5.5 Draw projections of solids such as prism, cylinder, cone, tetrahedron and pyramid in simple position
	6th	5.5 Draw projections of solids such as prism, cylinder, cone, tetrahedron and pyramid in simple position

7th	1st	6.1 Draw the sectional projection & development of prism in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
	2nd	6.1 Draw the sectional projection & development of prism, cylinder in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
	3rd	6.1 Draw the sectional projection & development of prism, cylinder in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
	4th	6.1 Draw the sectional projection & development of cone and pyramid in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
	5th	6.1 Draw the sectional projection & development of cone and pyramid in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
	6th	6.1 Draw the sectional projection & development of cone and pyramid in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
8th	1st	6.1 Draw the sectional projection & development of cone and pyramid in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
	2nd	6.1 Draw the sectional projection & development of cone and pyramid in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
	3rd	6.1 Draw the sectional projection & development of cone and pyramid in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
	4th	6.1 Draw the sectional projection & development of cone and pyramid in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
	5th	6.1 Draw the sectional projection & development of cone and pyramid in simple position by a cutting plane perpendicular to one reference plane and inclined to other reference plane.
	6th	6.2 Draw true shape of the cutting sections.
9th	1st	6.2 Draw true shape of the cutting sections.
	2nd	6.2 Draw true shape of the cutting sections.
	3rd	6.2 Draw true shape of the cutting sections.
	4th	6.2 Draw true shape of the cutting sections.
	5th	6.2 Draw true shape of the cutting sections.
	6th	6.2 Draw true shape of the cutting sections.
10th	1st	6.2 Draw true shape of the cutting sections.
	2nd	6.2 Draw true shape of the cutting sections.
	3rd	6.2 Draw true shape of the cutting sections.
	4th	7.1 Draw isometric view & Isometric projection of prism, pyramid, cone & cylinder with axis horizontal and vertical with construction of isometric scales.
	5th	7.1 Draw isometric view & Isometric projection of prism, pyramid, cone & cylinder with axis horizontal and vertical with construction of isometric scales.
	6th	7.1 Draw isometric view & Isometric projection of prism, pyramid, cone & cylinder with axis horizontal and vertical with construction of isometric scales.
11th	1st	7.1 Draw isometric view & Isometric projection of prism, pyramid, cone & cylinder with axis horizontal and vertical with construction of isometric scales.
	2nd	7.1 Draw isometric view & Isometric projection of prism, pyramid, cone & cylinder with axis horizontal and vertical with construction of isometric scales.
	3rd	7.1 Draw isometric view & Isometric projection of prism, pyramid, cone & cylinder with axis horizontal and vertical with construction of isometric scales.
	4th	8.1 Explain terms related to building drawing
	5th	8.1 Explain terms related to building drawing
	6th	8.1 Explain terms related to building drawing
12th	1st	8.2 Draw plan, elevation of single room building with verandah
	2nd	8.2 Draw plan, elevation of single room building with verandah
	3rd	8.2 Draw plan, elevation of single room building with verandah
	4th	8.2 Draw plan, elevation of single room building with verandah
	5th	8.2 Draw plan, elevation of single room building with verandah
	6th	8.2 Draw plan, elevation of single room building with verandah
13th	1st	8.2 Draw plan, elevation of single room building with verandah
	2nd	8.2 Draw plan, elevation of single room building with verandah
	3rd	8.2 Draw plan, elevation of single room building with verandah
	4th	9.1 Introduction-Settings, Limits etc.
	5th	9.1 Introduction-Settings, Limits etc.
	6th	9.1 Introduction-Settings, Limits etc.

14th	1st	9.1 Introduction-Settings, Limits etc.
	2nd	9.1 Introduction-Settings, Limits etc.
	3rd	9.2 Auto CAD commands Draw commands (Line, circle, are polygon, ellipse, rectangle). Edit command, Dimension commands and Modify Commands for two dimensional drafting only.
	4th	9.2 Auto CAD commands Draw commands (Line, circle, are polygon, ellipse, rectangle). Edit command, Dimension commands and Modify Commands for two dimensional drafting only.
	5th	9.2 Auto CAD commands Draw commands (Line, circle, are polygon, ellipse, rectangle). Edit command, Dimension commands and Modify Commands for two dimensional drafting only.
	6th	9.3.1 Orthographic projections of lines, planes sand solids as per chapter 5.0.
15th	1st	9.3.1 Orthographic projections of lines, planes sand solids as per chapter 5.0.
	2nd	9.3.1 Orthographic projections of lines, planes sand solids as per chapter 5.0.
	3rd	9.3.2 Isometric projection as per Chapter 7.0.
	4th	9.3.2 Isometric projection as per Chapter 7.0.
	5th	9.3.2 Isometric projection as per Chapter 7.0.
	6th	9.3.2 Isometric projection as per Chapter 7.0.