

Lesson Plan

Name of the Faculty: Mr. Nitish Munjal (Theory & Practical)

Discipline: Department of Applied Sciences and Humanities

Semester: 1st

Subject: Engineering Drawing & Graphics (ME-105N)

Work Load (Lecture/Practical) per week (in hours): Lectures-01, Practicals-03

Week	Theory		Practical	
	Lecture day	Topic (including assignment/test)	Practical day	Topic
1 st	1 st	Introduction to Engineering Drawing.	1 st	Introduction to Engineering Equipments, Elements of Engineering Drawing, Types of Lines, Various types of projections, First and third angle systems of orthographic projections
2 nd	1 st	Introduction to Projections of points in different quadrants	1 st	Projections of points in different quadrants
3 rd	1 st	Introduction to projection of line	1 st	Projections of straight lines: parallel to one or both reference planes, contained by one or both planes, perpendicular to one of the planes, inclined to one plane but parallel to the other plane
4 th	1 st	Line inclined to both planes	1 st	Projections of straight lines: inclined to both the planes, true length of a line and its inclinations with reference planes, traces of line
5 th	1 st	Introduction to projection of plane	1 st	Projection of planes: Introduction, types of planes, Projection of planes by change of position method only, projection of plane perpendicular to a plane, with axis parallel to both planes
6 th	1 st	Projection of plane inclined cases	1 st	Projection of planes: with axis parallel to one plane and inclined to the other plane
7 th	1 st	Introduction of Projection of Solids	1 st	Projection of Solids: Types of solids, Projections of Polyhedra Solids and Solids of Revolution – in simple positions with axis perpendicular to a plane, with axis parallel to both planes
8 th	1 st	Projection of solid inclined cases	1 st	Projection of Solids: axis parallel to one plane and inclined to the other
9 th	1 st	Introduction to section of solid	1 st	Introduction - section planes - apparent section - true section - sectional view -

				need for sectional view - cutting plane - cutting plane line. Sectional view of simple solids such as Prism, Cylinders, Pyramids and Cones in simple positions Section plane perpendicular to one plane and parallel to the other
10th	1st	Section of solid inclined cases	1st	section plane perpendicular to one plane and inclined to the other
11th	1st	Development of solid	1st	Development of surface of various simple solids in simple positions such as cubes, cylinders, prisms, pyramids etc
12th	1st	Orthographic view of solids	1st	Three orthographic views of solids
13th	1st	Orthographic view of nut & bolt	1st	Orthographic Views of Nuts & Bolts.
14th	1st	Autocad basics	1st	AUTOCAD basics: Cartesian and Polar Co-ordinate system, Absolute and Relative Co-ordinates systems. Basic Commands: Line, Point, Rectangle, Polygon, Circle, Arc, Ellipse, Polyline
15th	1st	Editing commands used in autocad	1st	Basic editing Commands: Basic Object Selection Methods, Window and Crossing Window Erase, Move, Copy, Offset, Fillet, Chamfer, Trim, Extend, Mirror Display Commands: Zoom, Pan, Redraw, and Regenerate Simple dimensioning and text, simple exercises

Assignments:-

A1: Projection of points

A2: Projection of line

A3: Projection of plane

A4: Projection of Solid

A5: Development of solid

A6: Orthographic view of solid

A7: Commands used in Auto Cad