

PNS SCHOOL OF ENGINEERING & TECHNOLOGY, MARSHAGHAI, KENDRAPARA
LESSON PLAN

Discipline : MECHANICAL	Semester:1ST	Name of the Teaching Faculty : Er. R,K SWAIN,ER S.SWAIN	
Subject : ENGG GRAPHICS(PR-3A)	No. of Days / per week class allotted : 6	Semester From date : 06.08.2025 to Date :04.12.2025 Weeks : 10	No. of
Week	Class Day	Topics	
1ST	1st	Unit – I Basic elements of Drawing	
	2nd	Drawing Instruments and supporting materials:	
	3rd	Convention of lines and their applications.	
	4th	PRACTICE LINES	
	5th	chain, parallel ,coordinate dimensioning.	
	6th	PRACTICE DIMENSIONING & CHECKING	
2ND	1st	Engg Scales such as plain scale.	
	2nd	PRACTICE PLAIN SCALE	
	3rd	Diagonal scale.	
	4th	PRACTICE DIAGONAL SCALE	
	5th	Geometrical and Tangency constructions.(CURVES)	
	6th	PRACTICE CURVE& CHECKING	
3RD	1st	Unit – II Orthographic projections	
	2nd	orthographic projection, First angle and Third angle method,	
	3rd	PRACTICE POINT PROJECTION	
	4th	PRACTICE POINT PROJECTION	
	5th	Conversion of pictorial view into Orthographic Views	
	6th	PRACTICE ORTHOGRAPHIC VIEWS	
4TH	1st	PRACTICE ORTHOGRAPHIC VIEWS& CHECKING	
	2nd	PLAIN SURFACES, SLANTING SURFACES	
	3rd	PRACTICE OF PLAIN SCALES	
	4th	PRACTICE OF PLAIN SCALES	
	5th	PRACTICE OF SLANTING SURFACES	
	6th	PRACTICE OF SLANTING SURFACES& CHECKING	
5TH	1st	Unit – III Isometric Projections	
	2nd	isometric projections. Isometric scale and Natural scale.	
	3rd	Isometric view and isometric projection.	
	4th	Illustrative problems related to objects containing lines,	
	5th	PRACTICE PROBLEMS OF LINES	
	6th	PRACTICE PROBLEMS OF LINES	
6TH	1st	PRACTICE PROBLEMS OF LINES	
	2nd	PRACTICE PROBLEMS OF LINES& CHECKING	
	3rd	Unit – IV Free Hand Sketches of engineering elements	
	4th	Free hand sketches of machine elements: Thread profiles	
	5th	PRACTICE THREAD PROFILES	
	6th	nuts, bolts,	
7TH	1st	PRACTICE NUTS AND BOLTS	
	2nd	set screws, washer	
	3rd	PRACTICE SET SCREWS,WASHER	
	4th	Free hand sketches of orthographic view	
	5th	PRACTICE ORTHOGRAPHIC VIEWS	
	6th	PRACTICE ORTHOGRAPHIC VIEWS& CHECKING	
8TH	1st	Unit – V Computer aided drafting interface	
	2nd	Computer Aided Drafting: concept.	
	3rd	Hardware and various CAD software available.	
	4th	Components of AutoCAD : Title bar, standard tool bar	

	5th	Saving the file, Opening an existing drawing file,
	6th	PRACTICE AUTOCAD INTRODUCTION
9TH	1st	Setting up new drawing: Units, Limits
	2nd	PRACTICE AUTOCAD INTRODUCTION
	3rd	Unit – VI Computer aided drafting
	4th	Draw basic entities like Line, Circle, Arc, Polygon,
	5th	PRACTICE 2D DRAWINGS
	6th	Ellipse, Rectangle, Multiline, PolyLine
10TH	1st	PRACTICE OF RECTANGLE,POLYLINE
	2nd	Absolute coordinates& PRACTICE
	3rd	Dimensioning: Linear, Horizontal Vertical, Aligned,
	4th	PRACTICE OF DIMENSIONING
	5th	Radius, Diameter,Angular Dimensions.
	6th	PRACTICE OF ANGULAR DIMESION & SHEET SUBMISSDION
<div>Signature of Demonstrator</div> <div>Signature of H.O.D</div> <div>Signature of Principal</div>		