

Discipline: Mech. Engg.	Semester:5TH	Name of the Teaching Faculty: BANESWAR MUNDA Designation: Senior Lecturer
Subject: CAD Lab. (Pr.2)	No. of days/week class allotted:02	Semester From date: 01.07.2026 To date: 05.11.2026 No. of weeks: 15
Week	Class Day	Theory/Practical Topics
1 ST	1st	Experiment No.- 01 :Introduction to CAD software: Interface overview, File management, Templates and layers,
	2nd	Model space and layout space, Absolute and relative coordinates, Units and limits
2 ND	1st	Record submission and Viva-voice.
	2nd	Experiment No.- 02 :Drawing aids and editing tools: Grid and snap settings, Ortho and polar tracking,
3 RD	1st	Object snaps (OSNAP), Selection methods,
	2nd	Modify commands (move, copy, mirror, offset, trim, extend, rotate, scale, array)
4 TH	1st	Record submission and Viva-voice.
	2nd	Experiment No.- 03 :Annotation, hatching and blocks: Dimensioning (linear, aligned, angular, radius), styles and settings, Text styles and leaders,
5 TH	1st	Hatching patterns, Creating and inserting blocks, Creating W-blocks Dimension
	2nd	Record submission and Viva-voice.
6 TH	1st	Experiment No.- 04 :Isometric drawing, printing and plotting: Creating isometric drawings using isoplane, Setting up viewports, Plotting to scale
	2nd	Using paper space and model space, Plot styles and layout setup
7 TH	1st	Record submission and Viva-voice
	2nd	Experiment No.- 05 :Machine drawing practice and assembly: Sectional and plain elevation drawings, Standard drawing conventions (BIS/ISO),
8 TH	1st	Generating part lists and bill of materials (BoM), Creating exploded views
	2nd	Practice on Sleeve & Cotter Joint,
9 TH	1st	Practice on Sleeve & Cotter Joint,
	2nd	Practice on Knuckle Joint
10 TH	1st	Practice on Knuckle Joint
	2nd	Practice on Screw Jack
11 TH	1st	Practice on Screw Jack
	2nd	Practice on Universal Coupling,
12 TH	1st	Practice on Machine Vice
	2nd	Practice on Connecting Rod,
13 TH	2nd	Experiment No.- 06 :3D Drawing Basics and Modeling: Introduction to 3D workspace, UCS and view controls,
	1st	Creating 3D primitives (box, cylinder)
14 TH	2nd	Creating 3D primitives (cone, sphere), models
	1st	Extrude, revolve, Generating 2D orthographic views from 3D sweep,
15 TH	2nd	Loft, Union and subtract operations, Creating isometric views from 3D models,
	1st	Record submission and Viva-voice.

Prepared by,

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