MECHANICAL ENGINEERING DEPARTMENT

Session 2024-2025(4th semester)

Subject:-CAD/CAM **Load:-4 hrs Practical**

Lesson Plan

WEEK	PRACTICALS	
		TOPIC
1st	2	1. Computer Aided Design (CAD) 1.1 Introduction to Computer Aided Drafting (2D) commands of any one software (Auto CAD, ProE, Solid works, Unigraphics etc.) 1.2 Introduction to CAD Software, Installing CAD Software, Familiarization with software, coordinate system (Absolute, Relative and Polar), snap, grid, and ortho mode and setting of units and layout
2nd	4	1.3 Exercises on preparing drawings of some machine elements using: Drawing commands – point, line, arc, circle, ellipse, Editing commands – scale, erase, copy, stretch, lengthen and explode. 1.4 Dimensioning and placing text in drawing area, sectioning and hatching, Inquiry for different parameters of drawing entity, Create layers within a drawing
3rd	6	1.5 Some exercise on simple drawings.
4th	8	2. Prepare assembly drawing of the following using Drafting Software (2D) 2.1 Plummer Block 2.2 Stepped pulley, V-belt pulley
5th	10	2.3 Machine tool Holder 2.4 Wall Bracket
6th	12	Isometric Drawing by CAD using any part modeling Software (3D) Introduction: Part modelling: Datum Plane; constraint; sketch; dimensioning; extrude; revolve; sweep; blend; protrusion;
7th	14	etrusion; rib; shell; hole; round; chamfer; copy; mirror; assembly; align
8th	16	Exercises for 3D Drawings: 3.1. Flanged coupling
9th	18	Exercises for 3D Drawings: 3.2. Bearing Block
10th	20	Exercises for 3D Drawings: 3.3. Bushed bearing
11th	22	4. Computer Aided Manufacturing (CAM) 4.1. Introduction to CAM software, steps in using CAM software
12th	24	4.2 Generate part program using CAM software (Master CAM/EdgeCAM or any other CAM software) for turning job
13th	26	4.3 Generate part program using CAM software (MasterCAM/EdgeCAM or any other CAM software) for milling jobs
14th	28	Revision
15th	30	Revision

Subject Incharge:Ms Reena **O/I Mechanical -Mr Amit attri**