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| SUBJECT TITLE | : CADD LAB |
| SUBJECT CODE | : 488 |
| COURSE CATEGORY | : A |
| PERIODS/WEEK | : 4 |
| PERIODS/SEMESTER | : 72 |
| CREDITS | : 2 |

TIME SCHEDULE

TOPICS

| | | |
|-------|------------------------------|-----------|
| I | Introduction to AutoCAD | 6 |
| II | Creation of auto cad drawing | 36 |
| III | Layout and plotting | 6 |
| Total | | <u>48</u> |

CONTENT DETAILS I

1.1 Introduction to computers-hard ware and software-operating system

Compute aided drafting softwares --**AutoCAD** --history—hardware requirements—installation- of AutoCAD-different configuration—file types-- —cad work station—

1.2 Getting in to AutoCAD—menu bar, screen menu, toolbars, pull down menu-tool bar customization—Basic settings—units—limits—snap—Lt scale—snap settings.

II

2.1 Creation of first Drawing—coordinate geometry and AutoCAD—point—line—circle—arc—ellipse-polygons—plotline- spline-Bhatch etc—controlling the drawing—Zoom—pan-reign-redraw etc.—drawing tools aids and tools—Snap settings –point filters-enquiry commands—UCS concept.

2.2 modifying commands—erase-undo-redo—copy—move—rotate mirror—offset—fillet—chamfer—array—scale—trim—extent—break—explode—stretch—align—change of properties etc.

2.3 Creation of blocks and symbols –hatches-fills—and wipers--dimensioning—adding text to drawing—editing texts

2.4 Layer management—create new layers—naming layer— assigning layer color --assigning line type assigning line weight—frozen-thawed-- locked state of layers—isometric drawings

2.5 3D drawing by Autocadd-

Develop an isometric drawing

3D wire frame modeling

, socket and spigot joint, knuckle joint gig and cotter joint. Exercises in assembly and detailed drawing of coupling such as Flanged coupling - protected pin type flexible - half - lap muff coupling,Plummer Block etc.

III

2.5 Drawing layout and plotting —model space and paper space—tiled view port—floating view ports—scaling the drawing—freezing of layers in view ports—plotting -- Plotting drawings of different scales in same sheet.—3- Dimension drawings—rendering-lighting

TEXT BOOKS

1. Engineering drawing using AutoCAD

By P.DAYANITHI, TTTI, Chennai.

2. AutoCAD

Ajit Singh

3. AutoCAD

George Omer

4. Computer applications for Project Management

By P.DAYANITHI, TTTI, Chennai.