Lesson Plan

Name of the Subject   : Computer Aided Engineering Drawing -14BT1ES03

Class & Semester   : I B.Tech (Common to all branches)

S. No.	Topic	No. of periods	Book(s) followed	Topics for self-study
1.	Introduction, Drawing Instruments and their uses, BIS conventions, Lettering, Dimensioning and free hand practicing. Computer screen, layout of the software, standard tool bar/menus	4	T1 & T2	1. Geometrical Constructions- Line, Circle, Polygon, Division of line
2.	Coordinate system and reference planes. Definitions of HP, VP, RPP & LPP. Creation of 2D/3D environment. Selection of drawing size and scale. Commands and creation of Lines,	4	T1 & T2	
3.	Co-ordinate points, axes, poly-lines, square, rectangle, polygons, splines, circles, ellipse, text, move, copy, off-set, mirror, rotate, trim, extend, break, chamfer, fillet,	8	T2	
4.	Dimensioning, line convention, material conventions and lettering.	4	T2	
Total periods required:		**20**		

UNIT – I: INTRODUCTION TO COMPUTER AIDED SKETCHING (spanning the table above)

S. No.	Topic	No. of periods	Book(s) followed	Topics for self-study
UNIT – II: ORTHOGRAPHIC PROJECTIONS				
5	Introduction, Definitions- Planes of projection	4	**T1**	
6	reference line and conventions employed, Projections of points in all the four quadrants,	4	**T1**	
7	Projections of straight lines	4	**T1**	
8	Projection of lines inclined to one plane	4	**T1**	
9	Projection of lines inclined to both the planes	4	**T1**	
Total periods required:		**20**		

	UNIT-III: *ORTHOGRAPHIC PROJECTIONS OF PLANE SURFACES*			
10	Introduction, Definitions-projections of plane surfaces	4	**T1**	1. Geometrical construction of simple planes
11	-projections of plane surfaces-triangle, square	4	**T1**	
12	projections of plane surfaces- rectangle, rhombus	4	**T1**	
13	projections of plane surfaces- pentagon, hexagon and circle,	4	**T1**	
14	planes in different positions by change of position method	4	**T1**	
Total periods required:		**20**		
	UNIT – IV: *PROJECTIONS OF SOLIDS*			
15	Introduction to projection of solids	4	**T1**	1. Geometrical construction of simple solids
16	Projections of right regular prisms, pyramids	6	**T1**	
17	Projections of pyramids, cylinders and cones	6	**T1**	
18	Isometric Projections and Isometric Views	4	**T1**	
Total periods required:		**20**		
	UNIT – V: *SECTIONS AND DEVELOPMENT OF LATERAL SURFACES OF SOLIDS*			
19	Introduction to section of solids	4	**T1**	1. Geometrical construction of simple solids
20	Section planes and sectional views of right regular solids	4	**T1**	
21	Section planes and sectional views of prisms, cylinder, pyramids and cone resting with base on HP	8	**T1**	
22	Development of Surfaces: Right regular solids – prisms, cylinder, pyramids, cone and their sectional parts.	8	**T1**	
Total periods required:		**20**		
Grand total periods required:		**100**		

TEXT BOOKS:

T1.N D Bhat & V M Panchal, *Engineering Drawing*, Charotar Publishing House, Gujarat, 51st edition, 2013.

T2.Sham Tickoo, *AutoCAD 2013 For Engineers And Designers*, Dreamtech Press, 2013

REFERENCE BOOKS:

R1. M H Annaiah & Rajashekar Patil, *Computer Aided Engineering Drawing*, New Age International Publishers, 4th Edition, 2012.

R2.T Jeyapoovan, *Engineering Drawing and Graphics Using Autocad*, Vikas Publishing House, 3rd Edition, 2010.

R3.Jolhe, *Engineering Drawing*, Tata McGraw Hill Education Private Limited, 1st Edition, 2007.

R4.Basant Aggarwal, *Engineering Drawing*, Tata McGraw Hill Education Private Limited, 1st Edition, 2008.

Signature of the faculty Member   **Signature of the Chairman**

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