

WEEK	Practicals		
	Lecture No	Topic	Drawing Sheet
1st	1		
	2		

WEEK	Practicals		
	Lecture Day	Topic	Drawing Sheet
1st	1	Introduction to use and care of drawing instruments, drawing materials, layout and sizes	2
	2	Conventions of Engineering Materials, Sectional Breaks and Conventional lines. Civil Engineering Sanitary fitting symbols Electrical fitting symbols for domestic interior installations.	
2nd	3	Geometrical construction-geometrical figures such as triangles, rectangles, circles, ellipses and curves,	2
	4	hexagons, pentagons bisecting a line and arc , division of line and circle with the help of drawing instruments	
3rd	5	Definition and classification of lettering, Free hand (of height of 5,8,12 mm) and instrumental, lettering (of height 20 to 35 mm) : upper case and lower case, single and double stroke,	2
	6	vertical and inclined (Gothic lettering) at 75 degree to horizontal and with suitable height to width ratio 7:4.	
4th	7	Necessity of dimensioning, method and principles of dimensioning (mainly theoretical instructions).	2
	8	Dimensioning of overall sizes, circles, threaded holes, chamfered surfaces, angles, tapered surfaces, holes, equally spaced on P.C.D., countersunk holes, counter bored holes, cylindrical parts, narrow spaces and gaps, radii, curves and arches	
5th	9	Scales –Needs and importance (theoretical instructions), Type of scales, Definition of Representative Fraction (R.F.) and Length of Scale.	2
	10	To draw/construct plain and diagonal scales.	
6th	11	Theory of orthographic projections, Three views of orthographic projections of different objects of given pictorial view of a block in 1st and 3rd angle.	2
	12	Projection of Points in different quadrant	
7th	13	Projection of Straight Line.	2
	14	Line parallel to both the planes. Line perpendicular to any one of the reference plane and parallel to others Line inclined to any one of the references and parallel to another plane.	
8th	15	Projection of Plane – Different lamina like square rectangular, triangular	2
	16	circle and Hexagonal pentagon. Trace of planes (HT and VT).	
	17	Identification of surfaces.	

9th	18	Drawing of full section, half section, partial or broken out sections, Offset sections, revolved sections and removed sections (theoretical only).	2
10th	19	Orthographic sectional views of different objects.	2
	20	Revision	
11th	21	Introduction of projection of right solids such as prism & pyramid (square, Pentagon, Hexagonal) cube, cone & cylinder (Axes perpendicular to H.P and parallel to V.P.)	2
	22	Introduction of sections of right solids - Section planes, Sections of Hexagonal prism, pentagon pyramid, cylinder and cone (Section plane parallel to anyone reference planes and perpendicular to V.P. and inclined to H.P.)	
12th	23	Development of Surfaces – Development of lateral surfaces of right solids like cone, cylinder, pentagonal prism, pyramid and hexagonal pyramid (Simple problems)	2
	24	Revision	
13th	25	Fundamentals of isometric projections and isometric scale. Isometric views of different laminas like circle, pentagon and hexagon.	2
	26	Isometric views of different regular solids like cylinder, cone, cube, cuboid, pyramid and prism.	
14th	27	Isometric views from given different orthographic projections (front, side and top view)	2
	28	Basic introduction and operational instructions of various commands in AutoCAD.	
15th	29	Revision	
	30	Revision	