RGPV (DIPLOMA WING) BHOPAL

OBE CURRICULUM FOR THE COURSE

Sheet No.

				TONT	IE COURSE	<u> </u>	_	
Branch			Me	chanical Engineer	ing	Semester	I	V
Course Code 40		1 Course Name Machine drawing and Computer Aided Drafting					ded	
Course Outcome 1			ibe Projection, M nal views.	ulti view representati	on and	Teach Hrs	Marks	
Learning Outcome 1			ibe concepts of entation.	f projections and	multi-view	1+4	05	
Contents		Projection: orthographic projection. First and third angle projection, superfluous view, choice of views, auxiliary views- views -full and partial, conversion of pictorial views in to orthographic views, conventional representation as per IS: 696.						
Method of	Asse	essment	Paper	pen test				
Learning Outcome 2		Explain Sectional views.				3+7	10	
Contents		Sectional Views : Full section, half section, partial or broken section, revolved section, removed section, offset section. Sectioning conventions, section lines. Hatching procedure for different materials as per IS code 686 1972. Sectional views of assembled parts. Choosing from IC engine parts, couplings, clutches, brackets, bearing etc. (Use 1st angle projection)						
Method of	Asse	essment		ng Examination				1
Course (Dutc	ome 2	symbo	ols	erance, machining a	nd welding	Teach Hrs	Marks
т ·	~		Draw	concents of dimen	ioning and talaranga		2+5	10
Learning	Outo	come 1	Diaw	concepts of dimen	sioning and tolerance.		213	10
	Outo		Types (use o hints o arcs o etc. A	of dimensions (s f I.S.Code 696 &2 on dimensioning sy f circle narrow sp pplication of tolera	ize and location) dime 2709) general rules f rstems of dimensioning ace, angles, counter s nces. (Use I.S. Code	or dimension g. Dimension unk hole, scr	ns and no ing and p of cylind	otations. practical ler holes
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	assemblies on drawing sheets.						
Contents	Preparation of production drawing for pattern shop, forgin,	g shon	machine				
Contents	shop, preparation of assembly drawing from detailed drawing. Exploded views, sectional pictorial views, plummer block, flange coupling, stepped pulleys, foot-step bearing, universal coupling, connecting rod and piston of I.C. engines, cotter joint and knuckle joint. Preparation of detailed drawing from assembly drawings and assembled pictorial views, Interpretation of production drawing						
Method of Assessment	Drawing Examination						
Course Outcome 4	Draw different components of a Pipe line.	Teach	Marks				
		Hrs					
Learning Outcome 1	Draw symbols used in pipe drafting.	2+1	05				
Contents	Symbols used in pipe line work as per IS code of practice.						
Method of Assessment	Drawing Examination.						
Learning Outcome 2	Draw various joints/bends/ pipe supports in pipe drafting.	2+2	10				
Contents	C.I. flanged joint, socket and spigot joint, gland and stuffing box,						
	expansion joint, pipe fitting typical pipe bends, pipe	supports	and				
	accessories.						
Method of Assessment	Drawing Examination.						
Course Outcome 5	Construct individual and assembly drawing using a CAD	Teach	Marks				
	Software.	Hrs					
Learning Outcome 1	Execute draw and modify commands used in CAD	2+4	10				
	software.						
Contents	Coordinate system, Draw command-line, arc, circle rect						
	point, ellipse, hatch. erase, copy, offset, array, trim, extend, break, join, chamfer, fillet, move, rotate, scale, stretch, lengthen.Dimensioning Tray settings: snap, grid, ortho, polar, osnap						
Method of Assessment	Lab work						
		0.1	10				
Learning Outcome 2	Execute format and construction commands used in CAD software.	2+4	10				
Contents	Format commands: line type, point style, units, layers, drawing limit,						
	dimension style, text and text styles, formatting dimension style and multi-						
	leader style						
Method of Assessment	Lab work						
Learning Outcome 3	Construction of drawing using CAD.	5+16	30				
Contonta	Practice of assembly drawings using CAD block creating	ng lavor	t incomt				
Contents	Practice of assembly drawings using CAD, block, creating layout, insert						
	layout, plotting/printing.						
Method of Assessment	Laboratory test by observation						