

DETAILED TEACHING PLAN

No	Unit no	Topic to be covered	Planned Date	Execution Date	Remarks
	Unit-1.0 Intersection of Solids	1.1 Curves of intersection of surfaces of the regular solids - introduction		9-9-24	
		1.2 Prism with prism (Tri- angular and square), Cylinder with cylinder, Square Prism with Cylinder when	9-9-24	11-9-24	
		i- intersectin of Rectangle prism-the axes are at 90degree and intersecting	to	17-9-24	
		ii- intersection of cylinder-the axes are at 90degree and intersecting	25-9-24	17-9-24	
		iii-intersection of square prism and cylinder-the axes are at 90degree and intersecting		18-9-24	
		iv- intersectin of Rectangle prism-the axes are offset and intersecting		19-9-24	
		v- intersection of cylinder-the axes are offset and intersecting		23-9-24	
		vi-intersection of square prism and cylinder-the axes are offset and intersecting		24-9-24	
		1.3 Cylinder with Cone: when axis of cylinder is parallel to both the reference planes and cone resting on base on HP with axis intersecting and offset from axis of cylinder.		25-9-24	
		Unit-2.0 Developme nt of surfaces	2.1 Development of Lateral surfaces of objects - Introduction	26-9-24	26-9-24
	2.1.1. prism				
	i-rectangle		to	27-9-24	
	ii- hexagonal			28-9-24	
	iii-pentagonal		7-10-24	30-9-24	
	2.1.2- pyramid				
	i-rectangle			3-10-24	
	ii- hexagonal			4-10-24	
	iii-pentagonal		7-10-24		
	iv-cone				
	Unit-3.0 Convention al Representat ions	3.1 Standard convention as per BIS [SP - 46 (1988)]	8-10-24	8-10-24	
		3.2 Materials- C.I., M.S, Brass, Bronze, Aluminum, wood, Glass, Concrete and Rubber	to		
		3.3 Long and short break in pipe, rod and shaft.			
		3.4 Ball and Roller Bearings.	15-10-24	9-10-24	
		3.5 Pipe joints, cocks, valves.			
		3.6 Internal / external threads, Knurling			

1,2		3.7 Serrated shafts, splined shafts, and keys and key ways		14-10-24	
2,3		3.8 Springs with square and flat ends 3.9 Gears, sprocket wheel, chain wheels 3.10 Countersunk & counter bored holes 3.11 Tapers		15-10-24	
1,2	Unit-4.0 Limits-fits-tolerance, surface finish and welding symbols in Production drawing	4.1 Limits, fits and tolerances: Definitions, Introduction to ISO system of tolerances - unilateral and bilateral tolerance and its representation on drawing, dimensional tolerances, elements of interchangeable system, hole & shaft base systems, tolerance diagram, Selection of fit (clearance, transition and interference) for engineering applications.	19-10-24	19-10-24	
2,3		4.2 Geometrical tolerances Definitions, Tolerances of form and position and its geometric representation-tolerance frame, datum feature, magnitude of tolerance and symbol, interpretation of a given symbol on drawing, simple examples.	to	21-10-24	
1,2		4.3 General welding symbols, length and size of weld, surface contour and finish of weld, all round and site weld, symbolic representation in Engineering practices and its interpretation.	22-10-24	22-10-24	
1	Unit-5.0 Assembly to Detail drawing	4.4 Characteristics of surface roughness Indication of machining symbol showing direction of lay, roughness grades, machining allowances, manufacturing methods, using ISO code. Relation of surface roughness values with manufacturing processes.			
1,2		5.1 Introduction, types of assembly drawing, accepted norms to be observed for assembly drawings, sequence for preparing assembly drawing. Bill of Material.	11-Nov	11-11-24	
1,2		5.2 Exploded view of :	24		
2,3		i. Flange coupling	-	14-11-24	
3,4		ii. Bushed Bearing	22-Nov	16-11-24	
4,5		iii. Plummer Block	24	18-11-24	
4,5	iv. Lathe Square Tool Post		19-11-24		
	v. Knuckle Joint		20-11-24		
	vi. Cast Iron Pulley		22-11-24		
1,2	Unit-6.0 Assembly to Details	6.1 Introduction, types of assembly drawing, accepted norms to be observed for assembly drawings, sequence for preparing assembly drawing. Bill of Material.	25-Nov	25-11-24	
2,3		6.2 Flange coupling	24		
2,3		6.3 Plummer Block	to	26-11-24	
			6-Dec-	27-11-24	
			24		

	6.4 Lathe Square Tool Post		28-11-24	
	6.5 Knuckle Joint		29-11-24	
	6.6 Cast Iron Pulley		30-11-24	} Praedice
Unit-7.0 Isometric and Orthographic Sectional views	7.1 Recall Isometric and orthographic projections.	7 dec 24	2-11-24	
	7.2 Conversion of pictorial view into Orthographic views and Conversion of orthographic views into isometric View/projection.	-24 dec 24	3-11-24	
	i-example practice		5-11-24	
	ii-example practice		7-12-24	
	iii-example practice		9-12-24	
	7.3 Need for sectional views, Cutting plane and line, Sectioning conventions and section lines.	} →	14-12-24	
7.4 Types of sections: Full, Half, Broken, Removed, Revolved and Offset	21-12-24			
7.5 Recall AutoCAD Draw, Modify, Edit and Plot commands.	} →	23-12-24		
7.6 Isometric and Orthogonal drawings using any computer aided drafting software(AutoCAD).		24-12-24		
			31-12-24	

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