

LESSON PLAN.							
Academic Session :- SUMMER 2024							
Subject :- Manufacturing Technology , Subject code - Th-2 W.E.F : 16/01/24						Total Period :- 60 per Sem	
Teacher :-		CHANDRA SEKHAR DASH (GF, MECHANICAL ENGINEERING DEPT.)				Theory :- 4p/week	
SEMESTER:-4th							
MONTH	Week	CLASS DAY	UNIT NO/PERIOD ALLOTTED	Syllabus to be covered	Syllabus actually covered	Short fall	Signature
J A N U A R Y	1st	1st	4	1.0 Tool Materials 1.1 Composition of various tool materials.			
		2nd		1.0 Tool Materials 1.1 Composition of various tool materials.			
		3rd		1.2 Physical properties& uses of such tool materials.			
		4th		1.2 Physical properties& uses of such tool materials.			
	2nd	1st	6	2.1 Cutting Tools 2.1 Cutting action of various and tools such as Chisel, hacksaw blade			
		2nd		2.1 Cutting Tools 2.1 Cutting action of various and tools such as Chisel, hacksaw blade			
		3rd		2.3 Turning tool geometry and purpose of tool angle			
		4th		2.3 Turning tool geometry and purpose of tool angle			
	3rd	1st	6	2.5 Machining process parameters (Speed, feed and depth of cut)			
		2nd		2.6 Coolants and lubricants in machining and purpose			
		3rd		3.0 Lathe Machine 3.1 Construction and working of lathe			
		4th		Major components of a lathe and their function			
F E B R U A R Y	4th	1st	8	Operations carried out in a lathe(Turning, thread cutting, taper turning, internal machining, parting off, facing, knurling)			
		2nd		Safety measures during machining			
		3rd		3.2 Capstan lathe ,Difference with respect to engine lathe, Major components and their function,Define multiple tool holders			
		4th		3.2 Capstan lathe ,Difference with respect to engine lathe, Major components and their function,Define multiple tool holders			
	5th	1st	6	3.3 Turret Lathe ,Difference with respect to capstan lathe ,Major components and their function			
		2nd		3.4 Draw the tooling layout for preparation of a hexagonal bolt &bush			
		3rd		4.0 Shaper 4.1 Potential application areas of a shaper machine			
		4th		4.2 Major components and their function			
	6th	1st	6	4.3 Explain the automatic able feed mechanism			
		2nd		4.4 Explain the construction &working of tool head			
		3rd		4.5 Explain the quick return mechanism through sketch			
		4th		4.6 State the specification of a shaping machine.			
	7th	1st	6	5.0 Planning Machine 5.1 Application area of a planer and its difference with respect to shaper			
		2nd		5.1 Application area of a planer and its difference with respect to shaper			
		3rd		5.2 Major components and their functions			
		4th		5.3 The table drive mechanism			
8th	1st	6	5.4 Working of tool and tool support				
	2nd		5.5 Clamping of work through sketch.				
	3rd		6.0 Milling Machine				
	4th		6.1 Types of milling machine and operations performed by them and also same for CNC milling machine				
		1st		6.2 Explain work holding attachment			

M A R C H	9th	2nd	8	6.3 Construction & working of simple dividing head			
		3rd		6.3 Construction & working of universal dividing head			
		4th		6.4 Procedure of simple and compound indexing			
	10th	1st	6	6.5 Illustration of different indexing methods			
		2nd		6.5 Illustration of different indexing methods			
		3rd		7.0 Slotter			
		4th		7.1 Major components and their function			
	11th	1st	6	7.1 Major components and their function			
		2nd		7.2 Construction and working of slotter machine			
		3rd		7.2 Construction and working of slotter machine			
		4th		7.3 Tools used in slotter			
	12th	1st	6	8.0 Grinding 8.1 Significance of grinding operations			
		2nd		8.2 Manufacturing of grinding wheels			
		3rd		8.3 Criteria for selecting of grinding wheels			
		4th		8.4 Specification of grinding wheels with example Working of Cylindrical Grinder			
	13th	1st	6	8.4 Specification of grinding wheels with example Working of Surface Grinder			
2nd		8.4 Specification of grinding wheels with example Working of Centreless Grinder					
3rd		9.0 Internal Machining operations Classification of drilling machines					
4th		9.1 Working of Bench drilling machine					
A P R I L	14th	1st	6	9.1 Working of Pillar drilling machine			
		2nd		9.1 Working of Radial drilling machine			
		3rd		9.2 Boring Basic Principle of Boring Different between Boring and drilling			
		4th		9.3 Broaching Types of Broaching(pull type, push type) Advantages of Broaching and applications			
	15th	1st	4	10 Surface finish, lapping 10.1 Definition of Surface finish			
		2nd		10 Surface finish, lapping 10.1 Definition of Surface finish			
		3rd		10.2 Description of lapping& explain their specific cutting.			
		4th		10.2 Description of lapping& explain their specific cutting.			

Chandrasekhar Dash