

MANUFACTURING TECHNOLOGY LESSON PLAN

Discipline : Mechanical Engg.	Semester : 4th	Name of the Teachnig Faculty : Sri Priyabrat Pradhan
Subject : MANUFACTURING TECHNOLOGY	No.of days/Per weeks Class Alloted Weeks :4	Semester From Date: 16th JAN 2024 To Date: 26 APR 2024
Weeks	Class day	Theory
3RD(JAN-2024)	1st	Composition of various tool materials
	2nd	Physical properties& uses of such tool materials.
	3rd	Cutting action of various and tools such as Chisel, hacksaw blade, dies and reamer
	4th	Turning tool geometry and purpose of tool angle
4TH(JAN-2024)	1st	Machining process parameters (Speed, feed and depth of cut)
	2nd	Coolants and lubricants in machining and purpose
	3rd	Construction and working of lathe and CNC lathe
	4th	Major components of a lathe and their function
1ST(FEB-2024)	1st	Operations carried out in a lathe(Turning, thread cutting, taper turning, internal machining, parting off, facing, knurling)
	2nd	Operations carried out in a lathe(Turning, thread cutting, taper turning, internal machining, parting off, facing, knurling)
	3rd	Capstan lathe and its Difference with respect to engine lathe
	4th	Major components of capstan lathe and their function
2ND(FEB-2024)	1st	Turret Lathe and its Difference with respect to capstan lathe ,Major components and their function
	2nd	Draw the tooling layout for preparation of a hexagonal bolt &bush
	3rd	Potential application areas of a shaper machine
	4th	Major components and their function of shaper
3RD(FEB-2024)	1st	Explain the automatic able feed mechanism
	2nd	Explain the construction &working of tool head
	3rd	Explain the quick return mechanism through sketch
	4th	State the specification of a shaping machine
	1st	Application area of a planer and its difference with respect to shaper

H(FEB-2024)	2nd	Major components of planning machine and their functions
	3rd	The table drive mechanism of planning Machine.
	4th	Working of tool and tool support
1ST(MAR-2024)	1st	Types of milling machine and operations performed by them and also same for CNC milling machine
	2nd	Explain work holding attachment of milling machine
	3rd	Construction & working of simple dividing head, universal dividing head
	4th	Construction & working of simple dividing head, universal dividing head
2ND(MAR-2024)	1st	Procedure of simple and compound indexing
	2nd	Illustration of different indexing methods
	3rd	Illustration of different indexing methods
	4th	Major components of slotter and their function
3RD(MAR-2024)	1st	Construction and working of slotter machine
	2nd	Construction and working of slotter machine
	3rd	Tools used in slotter
	4th	Significance of grinding operations
4TH(MAR-2024)	1st	Manufacturing of grinding wheels
	2nd	Criteria for selecting of grinding wheels
	3rd	Working of Cylindrical Grinder
	4th	Working of Surface Grinder
1ST(APR-2024)	1st	INTERNAL ASSESSMENT
	2nd	INTERNAL ASSESSMENT
	3rd	Working of Centreless Grinder
	4th	Classification of drilling machines
2ND(APR-2024)	1st	Working of Bench drilling machine
	2nd	Working of Pillar drilling machine
	3rd	Working of Radial drilling machine

3RD(APR-2024)	4th	Working of Radial drilling machine
	1st	Basic Principle of Boring
	2nd	Different between Boring and drilling
	3rd	Types of Broaching(pull type)
	4th	Push type Broaching
4TH(APR-2024)	1st	Advantages of Broaching and applications
	2nd	Advantages of Broaching and applications
	3rd	Definition of Surface finish
	4th	Description of lapping& explain their specific cutting.

Priyabrata Priyadarshi Pradhan
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