

Lesson Plan


Subject: **MFT** (Th -2)

Name of faculty: **Er.SATYABRATA MOHARANA**

Semester: **4TH** Class allotted: **4p/week** Branch: **Mechanical**


Session: **2025(S)**

Discipline	Semester	From date:	To date:	Teaching Aid
Subject:	No. of days/ per week	Theory/ Practical –Topics/Lesson		
Week	Date/Period			
1	04/02/2025 TO 08/02/2025	CUTTING TOOLS Cutting action of various and tools such as Chisel, hacksaw blade, dies and reamer Turning tool geometry and purpose of tool angle Machining process parameters (Speed, feed and depth of cut) Coolants and lubricants in machining and purpose		White Board Marker Smart board
2	10/02/2025 TO 15/02/2025	LATHE Construction and working of lathe and CNC lathe Major components of a lathe and their function Operations carried out in a lathe(Turning, thread cutting, taper turning, internal machining, parting off, facing, knurling)		White Board Marker Smart board
3	17/02/2025 TO 22/02/2025	Safety measures during machining Capstan lathe Difference with respect to engine lathe Major components and their function		White Board Marker Smart board
4	24/02/2025 TO 01/03/2025	Define multiple tool holders Turret Lathe Difference with respect to capstan lathe Major components and their function		White Board Marker Smart board
5	03/03/2025 TO 08/03/2025	Draw the tooling layout for preparation of a hexagonal bolt & bush SHAPER. Potential application areas of a shaper machine Major components and their function.		White Board Marker Smart board
6	10/03/2025 TO 15/03/2025	Explain the automatic able feed mechanism Explain the construction & working of tool head Explain the quick return mechanism through sketch State the specification of a shaping machine.		White Board Marker Smart board
7	17/03/2025 TO 22/03/2025	PLANNING MACHINE Application area of a planer and its difference with respect to shaper Major components and their functions The table drive mechanism		White Board Marker Smart board


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8	24/03/2025 TO 29/03/2025	Working of tool and tool support Clamping of work through sketch. MILLING MACHINE Types of milling machine and operations performed by them and also same for CNC milling machine	White Board Marker Smart board
9	31/03/2025 TO 05/04/2025	Explain work holding attachment Construction & working of simple dividing head, universal dividing head INTERNAL ASSESMENT TEST	White Board Marker Smart board
10	07/04/2025 TO 12/04/2025	Procedure of simple and compound indexing Illustration of different indexing methods SLOTTER Major components and their function Construction and working of slotter machine Tools used in slotter	Marker White Board Smart board
11	14/04/2025 TO 19/04/2025	GRINDING Significance of grinding operations Manufacturing of grinding wheels Criteria for selecting of grinding wheels	White Board Marker Smart board
12	21/04/2025 TO 26/04/2025	Specification of grinding wheels with Cylindrical Grinder Surface Grinder Centreless Grinder.	Marker White Board Smart board
13	28/04/2025 TO 03/05/2025	DRILLING Classification of drilling machines. Bench drilling machine Pillar drilling machine Radial drilling machine	White Board Marker Smart board
14	05/05/2025 TO 10/05/2025	BORING Basic Principle of Boring Different between Boring and drilling BROACHING Types of Broaching(pull type, push type)	White Board Marker Smart board
15	12/05/2025 TO 17/05/2025	Advantages of Broaching and applications Surface finish, LAPPING Description of lapping& explain their specific cutting	White Board Marker Smart board


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