

# Lesson Plan

Subject: **AMP** (Th -4(b))


Name of faculty: SANGRAM BISWAL


Semester: 6<sup>TH</sup> Class allotted: 4p/week

Branch: Mechanical

Session: 2024(S)

Discipline	Semester	From date:	To date:	Teaching Aid
Subject:	No. of days/ per week	Theory/ Practical –Topics/Lesson		
Week	Date/Period			
1	16/01/ 2024  TO  20/01/2024	<b>Modern Machining Processes:</b> Introduction – comparison with traditional machining. Ultrasonic Machining: principle, Description of equipment, applications.		White Board Marker Smart board
2	22/01/ 2024  TO  27/01/2024	Electric Discharge Machining: Principle, Description of equipment, Dielectric fluid, tools (electrodes), Process parameters, Output characteristics, applications. Wire cut EDM: Principle, Description of equipment, controlling parameters; applications.		White Board Marker Smart board
3	29/02/ 2024  TO  03/02/2024	Abrasive Jet Machining: principle, description of equipment, Material removal rate, application. Laser Beam Machining: principle, description of equipment, Material removal rate, application.		White Board Marker Smart board
4	05/02/ 2024  TO  10/02/2024	Electro Chemical Machining: principle, description of equipment, Material removal rate, application.  Plasma Arc Machining – principle, description of equipment, Material removal rate, Process parameters, performance characterization Applications.		White Board Marker Smart board

  
Signature of HOD


  
Signature of faculty

Week	Date Period	Theory/ Practical - Topics/Lesson	Teach Aid
5	12/02/2024 TO 17/02/2024	Electron Beam Machining - principle, description of equipment, Material removal rate, Process parameters, performance characterization, Applications.	White Board Marker Smart board
6	19/02/2024 TO 24/02/2024	Processing of plastics. Moulding processes: Injection moulding, Compression moulding,	White Board Marker Smart board
7	26/02/2024 TO 02/03/2024	Transfer moulding. Extruding; Casting; Calendering. Fabrication methods-Sheet forming, Blow moulding,	Marker White Board
8	04/03/2024 TO 09/03/2024	Laminating plastics (sheets, rods & tubes), Reinforcing. Applications of Plastics.  Introduction, Need for Additive Manufacturing	White Board Marker Smart board
9	11/03/2024 TO 16/03/2024	Fundamentals of Additive Manufacturing, AM Process Chain Advantages and Limitations of AM, Commonly used Terms	White Board Marker Smart board
10	18/03/2024 TO 23/03/2024	Classification of AM process, Fundamental Automated Processes, Distinction between AM and CNC, other related technologies. Application –Application in Design, Aerospace Industry, Automotive Industry, Jewelry Industry, Arts and Architecture.	Marker White Board Smart board
11	27/03/2024 TO 30/03/2024	RP Medical and Bioengineering Applications. Web Based Rapid Prototyping Systems. Concept of Flexible manufacturing process, concurrent engineering, production tools like capstan	White Board Marker Smart board
12	02/04/2024 TO 06/04/2024	Turret lathes, rapid prototyping processes.  Concept, General elements of SPM,	Marker White Board Smart board
13.	08/04/2024 TO 13/04/2024	Productivity improvement by SPM, Principles of SPM design.	White Board Marker Smart board

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14	15/04/2024 TO 20/04/2024	Types of maintenance, Repair cycle analysis, Repair complexity, Maintenance manual,	White Board Marker Smart board
15	22/ 04/2024 TO 26/04/2024	Maintenance records, Housekeeping. Introduction to Total Productive Maintenance (TPM).	White Board Marker Smart board

  
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