LESSON PLAN.								
6TH SEMESTER W.E.F-14/02/2023 Total Period :- 60								
SUBJECT-ADVANCE MANUFACTURING PROCESSES (Sub code-TH 4b) Theory periods: 4 P/WEAKLY								
Teacher :- CHANDRASEKHAR DASH (PTGF, MECHANICAL ENGINEERING DEPT.)								
SL NO	**MONTH**	**Week**	**Date**	**UNIT NO/PERIOD ALLOTED**	**Topic to be covered as per Syllabus**	**Topic actually covered as per Syllabus**	**Short fall if any/syllabus**	**Remarks**
1	FEBRUARY	3RD	14-02-2023	20	**1.0 Modern Machining Processes:**	covered		
2			15-02-2023		Introduction – comparison with traditional machining.	covered		
3			17-02-2023		Ultrasonic Machining: principle, Description of equipment, applications.	covered		
4		4TH	20-02-2023		Electric Discharge Machining: Principle, Description of equipment, Dielectric fluid, tools (electrodes),	covered		
5			21-02-2023		Process parameters, Output characteristics, applications.	covered		
6			22-02-2023		Wire cut EDM: Principle, Description of equipment, controlling parameters; applications	covered		
7			24-02-2023		Abrasive Jet Machining: principle, description of equipment	covered		
8		5TH	27-02-2023		Material removal rate, application	covered		
9			28-02-2023		Laser Beam Machining: principle, description of equipment	covered		
10	MARCH	1ST	01-03-2023		Material removal rate, application	covered		
11			03-03-2023		Electro Chemical Machining: principle	covered		
12		2ND	06-03-2023		description of equipment	covered		
13			07-03-2023		Material removal rate, application	covered		
14			08-03-2023		Plasma Arc Machining	covered		
15			10-03-2023		principle, description of equipment, Material removal rate	covered		
16		3RD	13-03-2023		Process parameters, performance characterization, Applications	covered		
17			14-03-2023		Electron Beam Machining	covered		
18			15-03-2023		principle, description of equipment	covered		
19			17-03-2023		Material removal rate, Process parameters	covered		
20		4TH	20-03-2023		performance characterization, Applications	covered		
21			21-03-2023	10	**2.0 Plastic Processing**	covered		
22			22-03-2023		Processing of plastics	covered		
23			24-03-2023		Moulding processes: Injection moulding, Compression moulding	covered		
24		5TH	27-03-2023		Transfer moulding.	covered		
25			28-03-2023		Extruding; Casting	covered		
26			29-03-2023		Calendering	covered		
27			31-03-2023		Fabrication methods-Sheet forming	covered		

28	APRIL	2ND	03-04-2023		Blow moulding	covered		
29			04-04-2023		Laminating plastics (sheets, rods & tubes), Reinforcing	covered		
30			05-04-2023		Applications of Plastics.	covered		
31			07-04-2023	15	**3.0 Additive Manufacturing Process**	covered		
32		3RD	10-04-2023		Introduction, Need for Additive Manufacturing	covered		
33			11-04-2023		Fundamentals of Additive Manufacturing, AM Process Chain	covered		
34			12-04-2023		Advantages and Limitations of AM, Commonly used Terms	covered		
35			14-04-2023		Classification of AM process, Fundamental Automated Processes	covered		
36		4TH	17-04-2023		Distinction between AM and CNC, other related technologies.			
37			18-04-2023		Application in Design, Aerospace Industry			
38			19-04-2023		Automotive Industry, Jewelry Industry, Arts and Architecture			
39			21-04-2023		RP Medical and Bioengineering Applications			
40		5TH	24-04-2023		Web Based Rapid Prototyping Systems			
41			25-04-2023		Concept of Flexible manufacturing process			
42			26-04-2023		concurrent engineering			
43			28-04-2023		production tools like capstan and turret lathes			
44	MAY	1ST	01-05-2023		rapid prototyping processes			
45			02-05-2023		Revision			
46			03-05-2023	7	4.0 Special Purpose Machines (SPM)			
47			05-05-2023		Concept, General elements of SPM			
48		2ND	08-05-2023		Concept, General elements of SPM			
49			09-05-2023		Productivity improvement by SPM			
50			10-05-2023		Principles of SPM design			
51			12-05-2023		Revision			
52		3RD	15-05-2023		Revision			
53			16-05-2023	8	5.0 Maintenance of Machine Tools			
54			17-05-2023		Types of maintenance			
55			19-05-2023		Repair cycle analysis			
56		4TH	19-05-2023		Repair complexity, Maintenance manual,			
57			22-05-2023		Maintenance records, Housekeeping			
58			22-05-2023		Introduction to Total Productive Maintenance (TPM)			
59			23-05-2023		Revision			
60			23-05-2023		Revision			

Chandrasekhar Dash