PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF ENGINEERING & TECHNOLOGY, BARGARH

LESSON PLAN

Session-2023-2024

Discipline: Mechanical **Engg.** **Semester:** 6th

Subject: Advance Manufacturing Process (MST)

Name of the Teaching Faculty: Dr. Bharat Bhusan Satapathy

Subject: AMP No. of Days/per week class allotted : 04

Semester From Date :16-01-2024 To Date :26-04-2024 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
01	1	Defination of Manufacturing Process.
	2	Traditional & Non-Traditional M/cing.
	3	Need & Importance of Non-Traditional
	4	Machining Processes
02	5	Diff. b/n Conventional & Non-Conventional M/cing Process.
	6	Description of Conventional M/cing Process
	7	Idea about Non-Traditional Machining
	8	Principle of Abrasive Jet M/cing Process.
03	9	Effect of MRR with Various Parameters
	10	Applications.
	11	Principle of USM, Description of
	12	all equipment / Application of USM.

Bharat Bhusan Salepathy
Signature of the Faculty

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Semester From Date :16-01-2024 To Date :26-04-2024 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
04	13	Principle of EDM
	14	Description & Dielectric Fluid etc
	15	Principle of Wire EDM.
	16	Diagram & Complecated Section to be Cut
05	17	Principle of Plasm Arc Maching
	18	Description of Equipment (PAM)
	19	Class Test (MCQ)
	20	Principle of Electrochemical Maching
06	21	MRR, Application
	22	LASER, Uses of LASER.
	23	Pricuple / Descriptions of equipments
	24	Laser Beam Machining

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Week	Class Day	Theory /Practical Topics
07	25	Electron Beam Machining
	26	MRR, Process Parameter / Application
	27	Graph MRR Vs Parameters.
	28	Inter Action Class.
08	29	Written Exam (Class Test)
	30	Discussion of Important Question & Previous Topics.
	31	
	32	Plastic Processing
09	33	Plastic moulding Processess like
	34	injection moulding / compression moulding
	35	Transfer Moulding.
	36	Extruding Processes.

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Week	Class Day	Theory /Practical Topics
10	37	Plastic Casting / Calandercing
	38	Sheet Forming / Blow moulding
	39	Laminating Plastics (Sheet / Tube)
	40	Rainforcing & Applications
11	41	Additive Manufacturing Processes.
	42	Fundamentals of Additive Manufacturing
	43	Adv & Dis Adv of AM
	44	CNC & Other Technologies.
12	45	Applications of AM.
	46	Design / Aerospace Industry
	47	Automotive Industry / Jewellary Industry. R.P.
	48	Rapid Prototypes.

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Week	Class Day	Theory /Practical Topics
13	49	Types of M/c Maintenance
	50	Repair Cycle Analysis
	51	Maintenance Manual.
	52	Brake down Maintenance.
14	53	House Keeping
	54	Class Test (Last).
	55	TPM (Total Productive Maintenance).
	56	Last year Question Papers Discussion.
15	57	Special Purpose M/c (SPM)
	58	Concept & Elements of SPM.
	59	Principle of SPM Design.
	60	Inter Action Class (Discussion).

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