

K.D.K.COLLEGE OF ENGINEERING, NAGPUR

Format F1 :-Teaching Plan (Session 2021-22)

Department :- Mechanical Engineering

Semester :- V

Subject :- Advanced Production Processes

Subject Code :-BEME503T

Periods/Week :- 4

Lecture No.	Unit Teaching Code	Contents	Date	No. of Students Present	Remark
	UNIT-I	Non Conventional Machining Processes			
1	ME30101	Introduction and classification			
2	ME30102	EDM , working principles, Applications, advantages & limitations			
3	ME30103	ECM , working principles, Applications, advantages & limitations			
4	ME30104	USM, working principles, Applications, advantages & limitations			
5	ME30105	LBM , working principles, Applications, advantages & limitations			
6	ME30106	EBM , working principles, Applications, advantages & limitations			
7	ME30107	Water Jet Machining , Abrasive Jet Machining working principles, Applications, advantages & limitations			
8	ME30108	Revision			
	UNIT-II	Advanced Joining Processes			
9	ME30201	Introduction and Classification of Welding techniques			
10	ME30202	TIG Welding and MIG Welding			
11	ME30203	Plasma Arc Welding			
12	ME30204	Oxy Acetylene Welding			
13	ME30205	Atomic Hydrogen Welding			
14	ME30206	Laser Beam Welding			
15	ME30207	Electron Beam Welding , Electro Slag Welding			
16	ME30208	Revision			
	UNIT-III	Advanced Machining Processes			
17	ME30301	Introduction and Classification			
18	ME30302	Capstan Lathe & Turret Lathe, Difference			
19	ME30303	Tool Layout for Capstan & Turret			
20	ME30304	Machining Centre			
21	ME30305	Introduction & concept of Micromachining			
22	ME30306	Introduction & concept of Nanofabrication			
23	ME30307	High Energy Rate Forming			
24	ME30308	Revision			
	UNIT-IV	Die Cutting Operations			
25	ME30401	Introduction, Sheet metal cutting			
26	ME30402	Sheet metal Forming			

27	ME30403	Sheet Metal drawing			
28	ME30404	Defects in Drawn Parts			
29	ME30405	Metal Spinning			
30	ME30406	Selection and Capacity of press.			
31	ME30407	Die and Punch			
32	ME30408	Revision			
	UNIT-V	Jigs & Fixtures			
33	ME30501	Introduction of Jigs and fixtures			
34	ME30502	Important of Jigs and Fixture Design			
35	ME30503	Principle of jigs & Fixtures			
36	ME30504	Principles of Locations			
37	ME30505	Jig Bush, Drilling jigs			
38	ME30506	Clamping and Clamping devices			
39	ME30507	Classification of Fixtures			
40	ME73508	Revision			
	UNIT-VI	Super Finishing Processes			
41	ME30601	Introduction, Principles of Super Finishing processes			
42	ME30602	Lapping operation and application, advantages, limitations			
43	ME30603	Honing operation and application, advantages, limitations			
44	ME30604	Buffering operation and application, advantages, limitations			
45	ME30605	Electroplating operation and application, advantages, limitations			
46	ME30606	Lapping operation and application, advantages, limitations			
47	ME30607	Application of LASER in surface modification			
48	ME30608	Revision			

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8	ME30108	Revision			
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37	ME30505	Jig Bush, Drilling jigs			
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