SPINTRONIC TECHNOLOGY AND ADVANCE RESEARCH, BBSR
LESSON PLAN - MANUFACTURING PROCESSES (MEPC201)

Department	Mechanical Engineering
Faculty Name	Er. S. Parida
Course Code	MEPC201 TH:1

Sl.No	Lecture Topic	Period	Cumulative	Unit
1	Introduction to Cutting Fluids	1	1	I
2	Types of Cutting Fluids	1	2	I
3	Cutting Fluids in Turning	1	3	I
4	Cutting Fluids in Drilling	1	4	I
5	Selection of Cutting Fluids	1	5	I
6	Classification of Lubricants	1	6	I
7	Properties of Lubricants	1	7	I
8	Types of Lathes	1	8	I
9	Lathe Parts and Functions	1	9	I
10	Lathe Operations	1	10	I
11	Introduction to Broaching	1	11	II
12	Types of Broaching Machines	1	12	II
13	Broach Tool Elements	1	13	II
14	Broach Nomenclature	1	14	II
15	Tool Materials	1	15	II
16	Introduction to Drilling	1	16	II
17	Drilling Machine Parts	1	17	II
18	Drilling Operations	1	18	II
19	Types of Drills and Reamers	1	19	II
20	Classification of Welding	1	20	III
21	Gas Welding	1	21	III
22	Arc Welding	1	22	III
23	SMAW	1	23	III
24	TIG and MIG Welding	1	24	III
25	Resistance Welding	1	25	III
26	Welding Defects	1	26	III
27	Introduction to Milling	1	27	III
28	Milling Machines	1	28	III
29	Milling Operations	1	29	III
30	Milling Cutters	1	30	III
31	Gear Manufacturing Methods	1	31	IV
32	Gear Shaping	1	32	IV
33	Gear Hobbing	1	33	IV
34	Gear Finishing	1	34	IV
35	Gear Materials	1	35	IV
36	Press Working Operations	1	36	IV
37	Die Set Components	1	37	IV
38	Punch and Die Clearance	1	38	IV
39	Introduction to Grinding	1	39	V
40	Abrasives and Bonds	1	40	V
41	Grinding Wheel Selection	1	41	V

42	Grinding Machines	1	42	V
43	Centerless Grinding	1	43	V
44	Finishing Processes	1	44	V
45	Electroplating and Surface Coating	1	45	V

REFERENCES:

1. Manufacturing technology– P N Rao, Tata McGraw-Hill Publications
2. Elements of workshop Technology (Volume I & II) – S. K. Hajra Chaudary, Bose & Roy, Media Promoters and Publishers Limited.
3. Production Technology (Volume I & II) – O. P. Khanna & Lal, Dhanpat Rai Publications.
4. Fundamental of metal cutting andmachine tools– B. L. Juneja, New age international limited.
5. Manufacturing Technology, Metal Cutting & Machine tools– P. N. Rao, Tata McGraw-Hill Publications.

Faculty Signature:

HOD Signature: