LESSON PLAN

SPINTRONIC TECHNOLOGY AND ADVANCE RESEARCH, BBSR

Department: Mechanical Engineering

Subject- Industrial engineering & management
Semester: 5th Semester
Faculty Name: Er. G.S. BARIK
Academic Session: 2026-27
Total Periods: 45

Sl.No	Unit	Lecture Topic	Period	Cumulative
1	Unit-I	Introduction to Plant Engineering	1	1
2		Selection of Site for Industry	1	2
3		Plant Layout and Objectives	1	3
4		Principles of Good Layout	1	4
5		Types of Plant Layout	1	5
6		Material Handling Equipment	1	6
7		Plant Maintenance	1	7
8		Breakdown & Preventive Maintenance	1	8
9		Plant Safety & Accident Causes	1	9
10		Factories Act 1948 & Revision	1	10
11	Unit-II	Productivity & Work Study	1	11
12		Method Study Introduction	1	12
13		Process Charts	1	13
14		Flow Process Chart	1	14
15		Two Handed Process Chart	1	15
16		Man Machine Chart	1	16
17		String Diagram & Flow Diagram	1	17
18		Work Measurement	1	18
19		Time Study & Rating Factor	1	19
20		Standard Time Numerical	1	20
21	Unit-III	Production Planning & Control	1	21
22		Forecasting Methods	1	22
23		Routing & Scheduling	1	23
24		Dispatching & Controlling	1	24

25		CPM Introduction	1	25
26		Types of Production	1	26
27		Economic Batch Quantity	1	27
28		Quality Control Concepts	1	28
29		Statistical Quality Control	1	29
30		ISO 9001 & Revision	1	30
31	Unit-IV	Principles of Management	1	31
32		Taylor Principles	1	32
33		Fayol Principles	1	33
34		Functions of Manager	1	34
35		Types of Organization	1	35
36		Leadership & Motivation	1	36
37		TQM & Quality Circle	1	37
38		5S Concept	1	38
39		Personnel Management	1	39
40		Wage Payment Plans	1	40
41	Unit-V	Financial Management	1	41
42		Sources of Capital	1	42
43		Factory Costing	1	43
44		Depreciation Methods	1	44
45		Material Management & Revision Test	1	45

REFERENCES:

1. IndustrialEngineering& Management, S.C. Sharma, KhananBookPublishing Co(P) Ltd., New Delhi

2. IndustrialEngineering and Management,O.P.Khanna,Revised Edition, Dhanpat Rai Publications (P) Ltd., New Delhi – 110002.

3. Management, Aglobalperspective, Heinz Weihrich, Harold Koontz, 10th Edition, McGraw Hill International Edition 1994.

4. Essentials ofManagement, 4thEdition,JosephL.Massie, Prentice-HallofIndia,New Delhi 2004.

5. Principles andPractices of Management,PremvirKapoor,KhannaPublishing House, N. Delhi

Faculty Signature HOD Signature