


Discipline: MECHANICAL	Semester: 6TH	Name of the Teaching Faculty: MISS SHARMILA SABAR
Subject: INDUSTRIAL ENGINEERING & MANAGEMENT	No. of days/week class allotted: 4	Semester From date: 24.12.25 To Date: 18.04.2026 No. of Weeks: 15
Week	Class Day	Theory/Practical Topics
1 ST	1 ST	plant engineering: selection of site of industry. Define plant layout.
	2 ND	Describe the objective and principles of plant layout.
	3 RD	Explain Process Layout, Product Layout
	4 TH	Combination Layout.
2 ND	1 ST	Techniques to improve layout.
	2 ND	Principles of material handling equipment.
	3 RD	Principles of material handling equipment.
	4 TH	Plant maintenance.
3 RD	1 ST	Importance of plant maintenance. Break down maintenance.
	2 ND	Preventive maintenance. Scheduled maintenance.
	3 RD	operations research: introduction to operations research and its applications.
	4 TH	Define Linear Programming Problem :Solution of L.P.P. by graphical method.
4 TH	1 ST	Solution of L.P.P. by graphical method.
	2 ND	Solution of L.P.P. by graphical method.
	3 RD	Evaluation of Project completion time by Critical Path Method
	4 TH	Evaluation of Project completion time by Critical Path Method
5 TH	1 ST	Evaluation of Project completion time by Critical Path Method
	2 ND	PERT (Simple problems)-
	3 RD	PERT (Simple problems)-
	4 TH	distinct features of PERT with respect to CPM.
6 TH	1 ST	inventory control: classification of inventory.
	2 ND	Objective of inventory control.
	3 RD	Describe the functions of inventories.
	4 TH	Benefits of inventory control.
7 TH	1 ST	Costs associated with inventory.
	2 ND	Costs associated with inventory.
	3 RD	Terminology in inventory control
	4 TH	Explain and Derive economic order quantity for Basic model. numerical
8 TH	1 ST	numerical
	2 ND	Define and Explain ABC analysis.
	3 RD	inspection and quality control: define inspection and quality control.
	4 TH	Describe planning of inspection. Describe types of inspection.
9 TH	1 ST	Advantages and disadvantages of quality control.
	2 ND	Study of factors influencing the quality of manufacture.
	3 RD	Explain the Concept of statistical quality control,
	4 TH	Control charts (X, R, P and C – charts)
10 TH	1 ST	Control charts (X, R, P and C – charts)
	2 ND	Control charts (X, R, P and C – charts)
	3 RD	Methods of attributes.
	4 TH	Concept of ISO 9001-2008.

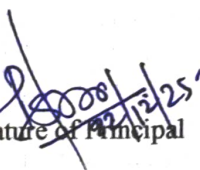
Q&P

11 TH	1 ST	Quality management system, Registration /certification procedure.
	2 ND	Benefits of ISO to the organization.
	3 RD	3 JIT, Six sigma
	4 TH	7S, Lean manufacturing
12 TH	1 ST	Solve related problems
	2 ND	production planning and control. introduction
	3 RD	Major functions of production planning and control
	4 TH	Major functions of production planning and control
13 TH	1 ST	Methods of forecasting
	2 ND	Routing
	3 RD	Scheduling
	4 TH	Dispatching
14 TH	1 ST	Controlling
	2 ND	Types of production
	3 RD	Mass production
	4 TH	Batch production
15 TH	1 ST	Job order production
	2 ND	Principles of product and process planning.
	3 RD	Principles of product and process planning.
	4 TH	Principles of product and process planning.


Signature of Faculty


Signature of HOD


Signature of Academic Coordinator


Signature of Principal