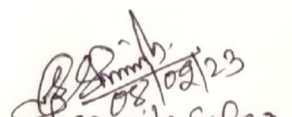



6th Year

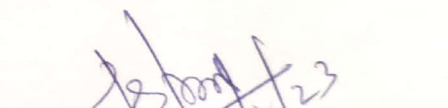
Discipline: MECHANICAL ENGG	Semester: 6th	Name of the Teaching Faculty: MISS SHARMILA SABAR
Subject: INDUSTRIAL ENGINEERING & MANAGEMENT	No. of days/per week class allotted: 04	Semester From date: 14.02.2023 To Date: 28.05.2023 No. of Weeks:15
Week	Class Day	Theory/Practical Topics
1 ST	1 ST	PLANT ENGINEERING: Selection of Site of Industry.
	2 ND	Define plant layout.
	3 RD	Describe the objective and principles of plant layout.
	4 TH	Explain Process Layout, Product Layout and Combination Layout.
2 ND	1 ST	Techniques to improve layout.
	2 ND	Principles of material handling equipment.
	3 RD	Plant maintenance. Importance of plant maintenance.
	4 TH	Break down maintenance.
3 RD	1 ST	Preventive maintenance.
	2 ND	Scheduled maintenance.
	3 RD	OPERATIONS RESEARCH: Introduction to Operations Research and its applications.
	4 TH	Define Linear Programming Problem,
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 PERT
5 TH	1 ST	Evaluation of Project completion time by Critical Path Method and PERT
	2 ND	Explain distinct features of PERT with respect to CPM.
	3 RD	Explain distinct features of PERT with respect to CPM.
	4 TH	Explain 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. (Solve numerical)
8 TH	1 ST	Explain and Derive economic order quantity for Basic model. (Solve 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.

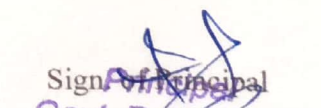
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9TH	1ST	Describe types of inspection.
	2ND	Advantages and disadvantages of quality control.
	3RD	Study of factors influencing the quality of manufacture.
	4TH	Explain the Concept of statistical quality control, Control charts (X, R, P and C - charts).
10TH	1ST	Methods of attributes.
	2ND	Concept of ISO 9001-2008.
	3RD	Quality management system, Registration /certification procedure.
	4TH	Benefits of ISO to the organization.
11TH	1ST	JIT, Six sigma, 7S, Lean manufacturing
	2ND	Numerical
	3RD	Numerical
	4TH	Numerical
12TH	1ST	Numerical
	2ND	PRODUCTION PLANNING AND CONTROL Introduction
	3RD	Major functions of production planning and control
	4TH	Methods of forecasting
13TH	1ST	Routing
	2ND	Scheduling
	3RD	Dispatching
	4TH	Controlling
14TH	1ST	Types of production
	2ND	Mass production
	3RD	Batch production
	4TH	Job order production
15TH	1ST	Principles of product and process planning.
	2ND	Principles of product and process planning.
	3RD	Principles of product and process planning.
	4TH	Principles of product and process planning.


 Sign. of Faculty


 Sign. of HOD


 Sign. of Academic Coordinator


 Sign. of Principal
 Govt. Polytechnic
 Malkangiri. (Odisha)