NM INSTITUTE OF ENGINEERING & TECHNOLOGY BHUBANESWAR

Mechanical Engineering Department



LESSON PLAN
Session 2022-2023

Semester: 6th

Subject: INDUSTRIAL ENGINEERING & MANAGEMENT

Faculty Name: SANGRAM BEHERA

Subject: IEM No of Days/per week class allotted: 04

Semester from date: 15.09.22 to date: 21.01.22 No. of Weeks: 15

Week	Class Day	Theory topics
1	1	Selection of Site of Industry.
	2	Define plant layout
	3	Describe the objective and principles of plant layout.
	4	Explain Process Layout
2	1	Explain Product Layout .
	2	Explain Combination Layout.
	3	Techniques to improve layout.
	4	Principles of material handling equipment.
3	1	Plant maintenance,
	2	Importance of plant maintenance Break down maintenance.
	3	Preventive maintenance.
	4	Scheduled maintenance.
4	1	Introduction to Operations Research
	2	Applications
	3	Define Linear Programming Problem,
	4	Solution of L.P.P. by graphical method.
5	1	Solve numerical of LPP
	2	Introduction to Project completion time
	3	Evaluation of Project completion time by Critical Path Method
	4	Evaluation of Project completion time by PERT
6	1	Solve simple problems
	2	Introduction to INVENTORY CONTROL
	3	Classification of inventory.
	4	Objective of inventory control.
7	1	Describe the functions of inventories.
	2	Benefits of inventory control.
	3	Costs associated with inventory.
	4	Terminology in inventory control

Signature of Faculty

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Week	Class Day	Theory topics
8	1	Explain and Derive economic order quantity for Basic model
	2	Solve numerical
	3	Define and Explain ABC analysis.
	4	Define Inspection
9	1	Define Quality control.
	2	Describe planning of inspection
	3	Describe types of inspection.
	4	Advantages and disadvantages of quality control
10	1	Study of factors influencing the quality of manufacture.
	2	Explain the Concept of statistical quality control
	3	Explain the Concept of Control charts (X, R, P and C - charts)
	4	Methods of attributes
11	1	Concept of ISO 9001-2008.
	2	Quality management system
	3	Registration /certification procedure
	4	Benefits of ISO to the organization
12	1	JIT, Six sigma
	2	7S, Lean manufacturing
	3	Solve related problems.
	4	Introduction to PRODUCTION PLANNING AND CONTROL
13	1	Major functions of production planning
	2	production control
	3	Methods of forecasting Routing
	4	Scheduling
14	1	Dispatching
	2	Controlling
	3	Types of production
	4	Mass production
15	1	Batch production
	2	Job order production
	3	Principles of product and process planning
	4	Solve related problems.

Signature of Faculty