

SYNERGY SCHOOL OF ENGINEERING, DHENKANAL



LESSON PLAN

Session (2025-2026)

Discipline: Mechanical Engineering	Semester: 6th, Summer/2025	Name of the Faculty: Mr Mihir Kumar Swain Lecturer Email ID: rmihirswain13@gmail.com
Subject: IEM, Theory-1	No. of Days/week: 04	Start Date: 22/12/2025 End Date: 18/04/2026

Week	Class Day	Theory Topics
1st	1st	Selection of Site of Industry, Define plant layout.
	2nd	Describe the objective and principles of plant layout.
	3rd	Explain Process Layout, Advantages and Disadvantages
	4th	Product Layout and Combination Layout.
2nd	1st	Techniques to improve layout.
	2nd	Principles of material handling equipment.
	3rd	Plant maintenance, Importance of plant maintenance.
	4th	Break down maintenance
3rd	1st	Preventive maintenance.
	2nd	Scheduled maintenance
	3rd	Introduction to Operations Research and its applications
	4th	Define Linear Programming Problem

4th	1st	Solution of L.P.P. by graphical method.
	2nd	Solution of L.P.P. by graphical method.
	3rd	Evaluation of Project completion time by Critical Path Method
	4th	Evaluation of Project completion time by Evaluation of PERT Method
5th	1st	PERT and CPM Problems
	2nd	PERT and CPM Problems
	3rd	PERT and CPM Problems
	4th	Explain distinct features of PERT with respect to CPM.
6th	1st	Explain inventory, Classification of inventory
	2nd	Objective of inventory control
	3rd	Describe the functions of inventories.
	4th	Benefits of inventory control.
7th	1st	Costs associated with inventory.
	2nd	Terminology in inventory control
	3rd	Explain and Derive economic order quantity for Basic model.
	4th	solve simple problems
8th	1st	solve simple problems
	2nd	Define and Explain ABC analysis.
	3rd	Define Inspection and Quality control.
	4th	Describe planning of inspection.
9th	1st	Describe types of inspection

2nd	Probable Question Solve
3rd	Probable Question Solve
4th	Probable Question Solve

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19/12/25
Concern Faculty

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