

# SYNERGY SCHOOL OF ENGINEERING, DHENKANAL

## LESSION PLAN

Session 2023-24 (S)

Discipline: Mechanical Engineering	Semester: 6 <sup>TH</sup>	Name of the Teaching Faculty: Mihir Kumar Swain
Subject: Industrial Engineering Management (TH I)	No. Of Days/ Per week Class Allotted: 04	Semester From Date: 16/01/24 to 26/04/24 No. Of weeks: 15
Week	Class Day	Topic to be taught (Theory)
1st	1	Selection of Site of Industry. Define plant layout.
	2	Describe the objective and principles of plant layout
	3	Explain Process Layout, Advantages & Disadvantages
	4	Product Layout and Combination Layout.
2nd	5	Techniques to improve layout.
	6	Principles of material handling equipment.
	7	Plant maintenance. Importance of plant maintenance.
	8	Break down maintenance.
3rd	9	Preventive maintenance.
	10	Scheduled maintenance.
	11	Introduction to Operations Research and its applications.
	12	Define Linear Programming Problem,
4th	13	Solution of L.P.P. by graphical method.
	14	Solution of L.P.P. by graphical method
	15	Evaluation of Project completion time by Critical Path Method
	16	Evaluation of Project completion time by PERT Method
5th	17	PERT & CPM Problems
	18	PERT & CPM Problems
	19	PERT & CPM Problems
	20	Explain distinct features of PERT with respect to CPM.
6th	21	explain inventory, Classification of inventory
	22	Objective of inventory control.
	23	Describe the functions of inventories.
	24	Benefits of inventory control.
7th	25	Costs associated with inventory.
	26	Terminology in inventory control
	27	Explain and Derive economic order quantity for Basic model.
	28	Solve numerical

8th	29	Solve numerical
	30	Define and Explain ABC analysis.
	31	Define Inspection and Quality control.
	32	Describe planning of inspection.
9th	33	Describe types of inspection.
	34	Advantages and disadvantages of quality control.
	35	Study of factors influencing the quality of manufacture.
	36	Explain the Concept of statistical quality control,
10th	37	Control charts (X, R, P and C - charts).
	38	Methods of attributes.
	39	Concept of ISO 9001-2008
	40	Quality management system, Registration /certification procedure
11th	41	Benefits of ISO to the organization.
	42	JIT, Six sigma,
	43	7S, Lean manufacturing
	44	Solve related problems.
12th	45	Solve related problems.
	46	Introduction to production planning and control
	47	Major functions of production planning and control
	48	Major functions of production planning and control
13th	49	Discuss Methods of forecasting
	50	Routing
	51	Scheduling
	52	Dispatching
14th	53	Controlling
	54	Types of production, Mass production
	55	Batch production
	56	Job order production
15th	57	Principles of product and process planning
	58	Probable questions solved
	59	Probable questions solved
	60	Probable questions solved

MKS 2024  
12/11/24  
Teaching Faculty

12/01/2024