

## LESSON PLAN

<b>DISCIPLINE:</b> Mechanical engineering	<b>Semester:</b> 4TH	<b>Name of the Teaching Faculty:</b> ER.M.MMOHANTY
<b>Subject :</b> MANUFACTURING TECHNOLOGY	<b>No. of Days / per week class allotted : 4</b>	<b>Semester From date:</b> 16-01-2024 To Date:26-04-2024 No.of Weeks : 15
<b>Week</b>	<b>Class Day</b>	<b>Topics</b>
1st	1st	<u>PLANTE NGINEERING</u> :Selection of Site of Industry
	2nd	Defineplantlayout
	3rd	Describetheobjectiveandprinciplesofplantlayout
	4th	ExplainProcessLayout,ProductLayoutandCombinationLayout
2nd	1st	Techniques toimprovelayout
	2nd	Principlesofmaterialhandlingequipment.
	3rd	Plant maintenance Importanceofplantmaintenance.
	4th	Breakdownmaintenance
3rd	1st	Preventivemaintenance
	2nd	Scheduledmaintenance
	3rd	<u>OPERATIONRESEARCH</u> :IntroductiontoOperationsResearchand its applications
	4th	DefineLinearProgrammingProblem
4th	1st	SolutionofL.P.P.bygraphicalmethod.
	2nd	SolutionofL.P.P.bygraphicalmethod.
	3rd	EvaluationofProjectcompletiontimebyCriticalPathMethod and PERT (Simple problems)-
	4th	EvaluationofProjectcompletiontimebyCriticalPathMethod andPERT(Simpleproblems)-

5 <sup>th</sup>	1st	Explain distinct features of PERT with respect to CPM.
	2nd	Explain distinct features of PERT with respect to CPM.
	3rd	revision
	4th	revision
6th	1st	<u>INVENTORY CONTROL</u> : 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. (Solve numerical)
	4th	Explain and Derive economic order quantity for Basic model. (Solve numerical)
8th	1st	Define and Explain ABC Analysis
	2nd	revision
	3rd	<u>INSPECTION AND QUALITY CONTROL</u> : Define Inspection and Quality control.
	4th	Describe planning of inspection
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	Methodsofattributes.4.8.4.9.14.9.2.4.9.34.9.4
	2nd	ConceptofISO9001-2008
	3rd	Qualitymanagementsystem,Registration/certificationprocedure.
	4th	BenefitsofISOtotheorganization
11th	1st	JIT,Sixsigma,7S,Leanmanufacturing
	2nd	Solverelatedproblems
	3rd	Solverelatedproblems
	4th	Solverelatedproblems
12th	1st	Solverelatedproblems
	2nd	<u>PRODUCTIONPLANNINGANDCONTROL</u> :Introduction
	3rd	Majorfunctionsofproductionplanningandcontrol
	4th	Methodsofforecasting
13th	1st	Routing
	2nd	Scheduling
	3rd	Dispatching
	4th	Controlling
14th	1st	Typesofproduction
	2nd	Massproduction
	3rd	Batchproduction
	4th	Joborderproduction
15th	1st	Principlesofproductplanning
	2nd	Principlesofprocessplanning
	3rd	revision
	4th	revision