

Discipline: <b>MECHANICALENGG</b>	Semester: <b>6<sup>TH</sup></b>	Name of the Teaching Faculty: PRAVAT KUMAR SWAIN
Subject: <b>INDUSTRIAL ENGG. &amp;MANAGET(TH-1)</b>	No. of days/per week classallotted: <b>04</b>	SemesterFromdate: <b>14.03.2023</b> To Date: <b>23.05.2022</b> No.ofWeeks: <b>15</b>
Week	Class Day	Theory/Practical Topics
<b>1<sup>ST</sup></b>	1 <sup>ST</sup>	<b>CHAPTER-1</b> Selection of site of industry
	2 <sup>ND</sup>	Introduction to Plant location Layout
	3 <sup>RD</sup>	Describe the objectives & the principles of a plant layout
	4 <sup>TH</sup>	Explain process & product layout ,product layout, combination layout, Techniques to improve layout
<b>2<sup>ND</sup></b>	1 <sup>ST</sup>	Principal of material handling equipment
	2 <sup>ND</sup>	Plant maintenance
	3 <sup>RD</sup>	Importance of plant maintenance
	4 <sup>TH</sup>	Breakdown maintenance
<b>3<sup>RD</sup></b>	1 <sup>ST</sup>	Preventive maintenance
	2 <sup>ND</sup>	Scheduled maintenance
	3 <sup>RD</sup>	<b>CHAPTER-2</b> <b>OPERATION RESERCH</b> Introduction to operation research and its application
	4 <sup>TH</sup>	Define linear programming problem
<b>4<sup>TH</sup></b>	1 <sup>ST</sup>	Solved numerical
	2 <sup>ND</sup>	Solved numerical
	3 <sup>RD</sup>	Solution of LPP by graphical method
	4 <sup>TH</sup>	Solved numerical
<b>5<sup>TH</sup></b>	1 <sup>ST</sup>	Solved numerical
	2 <sup>ND</sup>	Evaluation of project completion time by CPM and PERT
	3 <sup>RD</sup>	Evaluation of project completion time by CPM and PERT contd.
	4 <sup>TH</sup>	Explain features of PERT with respect to CPM
<b>6<sup>TH</sup></b>	1 <sup>ST</sup>	<b>CHAPTER-3</b> <b>INVENTORY CONTROL</b> Classification of inventory
	2 <sup>ND</sup>	Objective of inventory control
	3 <sup>RD</sup>	Describe the functions of inventory
	4 <sup>TH</sup>	Benefits of inventory control
<b>7<sup>TH</sup></b>	1 <sup>ST</sup>	Costs associated with inventory control
	2 <sup>ND</sup>	Terminology in inventory control
	3 <sup>RD</sup>	Explain and derive economic order quantity for basic model
	4 <sup>TH</sup>	Solve numerical
<b>8<sup>TH</sup></b>	1 <sup>ST</sup>	Solve numerical
	2 <sup>ND</sup>	Define and explain ABC analysis
	3 <sup>RD</sup>	<b>CHAPTER-4</b> <b>INSPECTION AND QUALITY CONTROL</b> Define inspection and quality control
	4 <sup>TH</sup>	Describe planning inspection
	1 <sup>ST</sup>	Describe types of inspection
	2 <sup>ND</sup>	Advantage and dis advantage of quality control.

<b>9<sup>TH</sup></b>	3 <sup>RD</sup>	Study of factors influencing the quality of manufacture
	4 <sup>TH</sup>	Explain the concepts of statistical quality control
<b>10<sup>TH</sup></b>	1 <sup>ST</sup>	Control charts(X,R,P,C)
	2 <sup>ND</sup>	Method of attributes
	3 <sup>RD</sup>	Concepts of ISO 9001-2008
	4 <sup>TH</sup>	Quality management system
<b>11<sup>TH</sup></b>	1 <sup>ST</sup>	Registration/certificate procedure
	2 <sup>ND</sup>	Benefits of ISO to the organization
	3 <sup>RD</sup>	JIT, SIX sigma
	4 <sup>TH</sup>	7s, lean manufacturing
<b>12<sup>TH</sup></b>	1 <sup>ST</sup>	Solve related problems
	2 <sup>ND</sup>	Probable question answer discussion
	3 <sup>RD</sup>	<b>CHAPTER-5</b> PRODUCTION PLANNING AND CONTROL Introduction
	4 <sup>TH</sup>	Major function s of production planning and control
<b>13<sup>TH</sup></b>	1 <sup>ST</sup>	Methods of forecasting
	2 <sup>ND</sup>	Routing
	3 <sup>RD</sup>	Scheduling
	4 <sup>TH</sup>	Dispatching
<b>14<sup>TH</sup></b>	1 <sup>ST</sup>	Controlling
	2 <sup>ND</sup>	Types of production
	3 <sup>RD</sup>	Mass production
	4 <sup>TH</sup>	Batch production
<b>15<sup>TH</sup></b>	1 <sup>ST</sup>	Job order production
	2 <sup>ND</sup>	Principles of product and process planning
	3 <sup>RD</sup>	Principles of product and process planning contd.
	4 <sup>TH</sup>	Probable question answer discussion

Learning Resources:

Sl. No.	Name of Authors	Title of the Book	Name of the Publisher
1	O.P.KHANNA	INDUSTRIAL ENGINEERING & MANAGEMENT	DHANPAT RAI & SONS
2	MARTAND TELSANG	INDUSTRIAL ENGG & PRODUCTION MANAGEMENT	S.CHAND
3	M.MAHAJAN	STATISTICAL QUALITY CONTROL	DHANPAT RAI &SON