

Discipline : <b>MECHANICAL ENGG</b>	Semester : <b>6<sup>TH</sup></b>	Name of the Teaching Faculty: <b>Er. Michael Suveer</b>
Subject: <b>INDUSTRIAL ENGG &amp; MANAGEMENT</b>	No. of days/per week class allotted: <b>04</b>	Semester From date : <b>10.03.2022</b> To Date: <b>10.06.2022</b>  No. of Weeks: <b>15</b>
Week	Class Day	Theory / Practical Topics
<b>1<sup>ST</sup></b>	<b>1<sup>ST</sup></b>	1. Selection of Site of Industry, Define plant layout
	<b>2<sup>ND</sup></b>	Describe the objective and principles of plant layout.
	<b>3<sup>RD</sup></b>	Explain Process Layout, Product Layout and Combination Layout.
	<b>4<sup>TH</sup></b>	Techniques to improve layout.
<b>2<sup>ND</sup></b>	<b>1<sup>ST</sup></b>	Principles of material handling equipment.
	<b>2<sup>ND</sup></b>	Plant maintenance.
	<b>3<sup>RD</sup></b>	Importance of plant maintenance.
	<b>4<sup>TH</sup></b>	Break down maintenance
<b>3<sup>RD</sup></b>	<b>1<sup>ST</sup></b>	Preventive maintenance
	<b>2<sup>ND</sup></b>	Scheduled maintenance
	<b>3<sup>RD</sup></b>	2. Introduction to operations research & its applications
	<b>4<sup>TH</sup></b>	Explain the procedure of solution of LPP by graphical method
<b>4<sup>TH</sup></b>	<b>1<sup>ST</sup></b>	Problem solving
	<b>2<sup>ND</sup></b>	Problem solving
	<b>3<sup>RD</sup></b>	Define PERT and CPM
	<b>4<sup>TH</sup></b>	Explain the terms associated with PERT and CPM
<b>5<sup>TH</sup></b>	<b>1<sup>ST</sup></b>	Evaluation of project completion time by PERT and CPM
	<b>2<sup>ND</sup></b>	Differentiate between PERT and CPM
	<b>3<sup>RD</sup></b>	Problem solving
	<b>4<sup>TH</sup></b>	Problem solving
<b>6<sup>TH</sup></b>	<b>1<sup>ST</sup></b>	3. Classification of inventory.
	<b>2<sup>ND</sup></b>	Objective of inventory control
	<b>3<sup>RD</sup></b>	Describe the functions of inventories
	<b>4<sup>TH</sup></b>	Benefits of inventory control
<b>7<sup>TH</sup></b>	<b>1<sup>ST</sup></b>	Costs associated with inventory
	<b>2<sup>ND</sup></b>	Terminology in inventory control
	<b>3<sup>RD</sup></b>	Explain and Derive economic order quantity for Basic model.
	<b>4<sup>TH</sup></b>	Solve numerical
<b>8<sup>TH</sup></b>	<b>1<sup>ST</sup></b>	Solve numerical
	<b>2<sup>ND</sup></b>	Define and Explain ABC analysis.
	<b>3<sup>RD</sup></b>	4. Define Inspection and Quality control
	<b>4<sup>TH</sup></b>	2Describe planning of inspection.
<b>9<sup>TH</sup></b>	<b>1<sup>ST</sup></b>	Describe types of inspection
	<b>2<sup>ND</sup></b>	Advantages and disadvantages of quality control.
	<b>3<sup>RD</sup></b>	Study of factors influencing the quality of manufacture.
	<b>4<sup>TH</sup></b>	Explain the Concept of statistical quality control
<b>10<sup>TH</sup></b>	<b>1<sup>ST</sup></b>	Control charts (X, R, P and C - charts).
	<b>2<sup>ND</sup></b>	Methods of attributes
	<b>3<sup>RD</sup></b>	Concept of ISO 9001-2008

	4 <sup>TH</sup>	Quality management system, Registration /certification procedure.
11 <sup>TH</sup>	1 <sup>ST</sup>	Benefits of ISO to the organization
	2 <sup>ND</sup>	JIT, Six sigma,7S, Lean manufacturing
	3 <sup>RD</sup>	. Solve related problems.
	4 <sup>TH</sup>	. Solve related problems.
12 <sup>TH</sup>	1 <sup>ST</sup>	. Solve related problems.
	2 <sup>ND</sup>	5. Introduction to production planning and control
	3 <sup>RD</sup>	Major functions of production planning and control
	4 <sup>TH</sup>	Methods of forecasting
13 <sup>TH</sup>	1 <sup>ST</sup>	Methods of forecasting
	2 <sup>ND</sup>	Routing
	3 <sup>RD</sup>	Scheduling
	4 <sup>TH</sup>	Dispatching
14 <sup>TH</sup>	1 <sup>ST</sup>	Controlling
	2 <sup>ND</sup>	Types of production
	3 <sup>RD</sup>	Mass production
	4 <sup>TH</sup>	Batch production
15 <sup>TH</sup>	1 <sup>ST</sup>	Job order production
	2 <sup>ND</sup>	Principles of product and process planning
	3 <sup>RD</sup>	Previous year question discussion, Assignment
01. r	4 <sup>TH</sup>	Important question discussion