Discipline: **MECHANICALENGG**	Semester: **6TH**	Name of the Teaching Faculty: PRAVAT KUMAR SWAIN
Subject:**INDUSTRIAL ENGG. &MANAGET(TH-1)**	No. ofdays/perweek classallotted:**04**	SemesterFromdate:1**0.03.2022** ToDate: **10.06.2022** No.ofWeeks:**15**
Week	ClassDay	Theory/PracticalTopics
1ST	1ST	Selection of site of industry
	2ND	Introduction toPlant location&Layout
	3RD	Describetheobjectives & theprinciples ofaplantlayout
	4TH	Explainprocess&productlayout ,productlayout, combinationlayout, Techniques to improve layout
2ND	1ST	Principal of material handling equipment
	2ND	Plant maintenance
	3RD	Importance of plant maintenance
	4TH	Breakdown maintenance
3RD	1ST	Preventive maintenance
	2ND	Scheduled maintenance
	3RD	OPERATION RESERCH Introduction to operation research and its application
	4TH	Define linear programming problem
4TH	1ST	Solved numerical
	2ND	Solved numerical
	3RD	Solution of LPP by graphical method
	4TH	Solved numerical
5TH	1ST	Solved numerical
	2ND	Evaluation of project completion time by CPM and PERT
	3RD	Evaluation of project completion time by CPM and PERT contd.
	4TH	Explain features of PERT with respect to CPM
6TH	1ST	INVENTORY CONTROL Classification of inventory
	2ND	Objective of inventory control
	3RD	Describe the functions of inventory
	4TH	Benefits of inventory control
7TH	1ST	Costs associated with inventory control
	2ND	Terminology in inventory control
	3RD	Explain and derive economic order quantity for basic model
	4TH	Solve numerical
8TH	1ST	Solve numerical
	2ND	Define and explain ABC analysis
	3RD	INSPECTION AND QUALITY CONTROL Define inspection and quality control
	4TH	Describe planning inspection
9TH	1ST	Describe types of inspection
	2ND	Advantage and dis advantage of quality control.
	3RD	Study of factors influnncing the quality of manufacture
	4TH	Explain the concepts of statistical quality control

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