

INDUSTRIAL ENGINEERING&MANAGEMENT

LESSON PLAN AS PER SCTEVT WEF dt.16/01/2024 OF 6TH SEMESTER TO DT. 26/04/24

MECHANICAL ENGINEERING DEPARTMENT OF GOVT POLYTECHNIC ANGUL

Discipline :Mechanical engineering	Semester : 6th	Name of the Teachnig Faculty : MRS. LOPAMUDRA SWAIN (LECTURE)
Subject:Industrial Engineering&Mana gement (TH-1)	No.of days/Per weeks Class Alloted Weeks :4.	Semester From Date: 16TH JAN 2024 To Date: 26TH APR 2023
Weeks	Class day	Theory
3RD(JAN-2024)	1st	2.1 Introduction to Operations Research and its applications.
	2nd	2.2 Define Linear Programming Problem.
	3rd	2.3Solution of L.P.P. by graphical method.
	4th	2.4 Evaluation of Project completion time by Critical Path Method and PERT
4TH(JAN-2024)	1st	2.5Explain distinct features of PERT with respect to CPM.
	2nd	1.1 Selection of Site of Industry.
	3rd	1.2 Define plant layout.
	4th	1.3 Describe the objective and principles of plant layout.
1ST(FEB-2024)	1st	1.4 Explain Process Layout, Product Layout and Combination Layout.
	2nd	1.5 Techniques to improve layout.
	3rd	1.6 Principles of material handling equipment.
	4th	1.7 Plant maintenance.
2ND(FEB-2024)	1st	HOLIDAY
	2nd	HOLIDAY
	3rd	1.7.1 Importance of plant maintenance , 1.7.2 Break down maintenance.
	4th	1.7.3 Preventive maintenance, 1.7.4 Scheduled maintenance
3RD(FEB-2024)	1st	3.1 Classification of inventory.
	2nd	3.2 Objective of inventory control
	3rd	3.3 Describe the functions of inventories.
	4th	3.4 Benefits of inventory control.
4TH(FEB-2024)	1st	3.5 Costs associated with inventory.
	2nd	3.6 Terminology in inventory control
	3rd	3.7 Explain and Derive economic order quantity for Basic model. (Solve numerical)

	4th	3.8 Define and Explain ABC analysis.
1ST(MAR-2024)	1st	4.1 Define Inspection and Quality control.
	2nd	4.2 Describe planning of inspection
	3rd	4.3 Describe types of inspection.
	4th	4.4 Advantages and disadvantages of quality control.
2ND(MAR-2024)	1st	HOLIDAY
	2nd	HOLIDAY
	3rd	4.5 Study of factors influencing the quality of manufacture.
	4th	4.6 Explain the Concept of statistical quality control, Control charts.
3RD(MAR-2024)	1st	4.7 Methods of attributes
	2nd	4.8 Concept of ISO 9001-2008.
	3rd	4.9.1 Quality management system, Registration /certification procedure
	4th	4.9.2 Benefits of ISO to the organization.
4TH(MAR-2024)	1st	4.9.3 JIT, Six sigma, 7S, Lean manufacturing
	2nd	4.9.4 Solve related problems.
	3rd	5.0 PRODUCTION PLANNING AND CONTROL , 5.1 Introduction
	4th	5.2 Major functions of production planning and control
1ST(APR-2024)	1st	INTERNAL ASSESSMENT
	2nd	INTERNAL ASSESSMENT
	3rd	5.3 Methods of forecasting
	4th	5.3.1 Routing
2ND(APR-2024)	1st	5.3.2 Scheduling
	2nd	5.3.3 Dispatching
	3rd	5.3.4 Controlling
	4th	5.4 Types of production
3RD(APR-2024)	1st	5.4.1 Mass production
	2nd	5.4.2 Batch production
	3rd	5.4.3 Job order production
	4th	5.5 Revision of Principles of product and process planning
4TH(APR-2024)	1st	5.5 Revision of Principles of product and process planning
	2nd	5.4.3 Revision of Job order production
	3rd	5.4.1 Revision of Mass production
	4th	5.4 Revision of Types of production

Lucian
16/01/2024