



GOVERNMENT POLYTECHNIC, KORAPUT
DEPARTMENT OF MECHANICAL ENGINEERING

Discipline: MECHANICAL ENGG	Semester: 6 TH	Name of the Teaching Faculty: M. KRISHNA PAO
Subject: INDUSTRIAL ENGG. & MANAGEMENT	No. of days/per week class allotted: 4	Semester From date: 20/11/21 . To Date: 03/01/22 . No. of Weeks:
COURSE OUTCOMES	CO1: UNDERSTAND THE BASIC CONCEPT ABOUT PLANT SETUP & MACHINES. CO2: OPTIMIZING RESOURCE UTILIZATIONS & IMPROVING PRODUCTIVITY. CO3: UNDERSTAND STOCK MANAGEMENT & MAINTENANCE OF PLANT. CO4: USE CHARTS TO RECORD THE QUALITY OF PRODUCTS. CO5: HOW TO ELIMINATE UNPRODUCTIVE ACTIVITIES & UNDERSTANDING DESIGN OF PRODUCTS & PROCESSES.	
Week	Class Day	Theory/Practical Topics
1 ST	1 ST	SELECTION OF INDUSTRY SITE, PLANT LAYOUT-OBJ. & PRINCIPLES
	2 ND	EXPLAIN PROCESS, PRODUCT & COMBINATION LAYOUT
	3 RD	TECHNIQUES TO IMPROVE LAYOUT
	4 TH	PRINCIPLES OF MATERIAL HANDLING EQUIPMENT
2 ND	1 ST	PLANT MAINTENANCE
	2 ND	PLANT MAINTENANCE (CONTD...)
	3 RD	IMPORTANCE OF PLANT MAINTENANCE
	4 TH	BREAKDOWN MAINTENANCE
3 RD	1 ST	PREVENTIVE MAINTENANCE & SCHEDULED MAINTENANCE
	2 ND	QUIZ & ASSIGNMENT - 1
	3 RD	INTRODUCTION TO OPERATIONS RESEARCH & ITS APPLICATIONS
	4 TH	DEFINE LINEAR PROGRAMMING PROBELM
4 TH	1 ST	SOLUTION OF LPP BY GRAPHICAL METHOD
	2 ND	SOLUTION OF LPP BY GRAPHICAL METHOD (CONTD...)
	3 RD	EVALUATION OF PROJECT COMPLETION TIME BY CPM & PERT
	4 TH	EVALUATION OF PROJECT COMPLETION TIME BY CPM & PERT (CONTD...)
5 TH	1 ST	EXPLAIN DISTINCT FEATURES OF PERT W.R.T CPM
	2 ND	EXPLAIN DISTINCT FEATURES OF PERT W.R.T CPM
	3 RD	REVISION
	4 TH	QUIZ & ASSIGNMENT - II
6 TH	1 ST	CLASSIFICATION OF INVENTORY
	2 ND	OBJECTIVE OF INVENTORY CONTROL
	3 RD	DESCRIBE THE FUNCTIONS OF INVENTORIES
	4 TH	BENEFITS OF INVENTORY CONTROL
7 TH	1 ST	COSTS ASSOCIATED WITH INVENTORY
	2 ND	TERMINOLOGY IN INVENTORY CONTROL
	3 RD	EXPLAIN & DERIVE ECONOMIC ORDER QUANTITY (EOQ)
	4 TH	EXPLAIN & DERIVE EOQ FOR BASIC MODEL (CONTD...)
8 TH	1 ST	DEFINE & EXPLAIN ABC ANALYSIS
	2 ND	QUIZ & ASSIGNMENT - III
	3 RD	DEFINE INSPECTION & QUALITY CONTROL
	4 TH	DESCRIBE PLANNING OF INSPECTION

9 TH	1 ST	DESCRIBE TYPES OF INSPECTION
	2 ND	ADVANTAGES & DISADVANTAGES OF QUALITY CONTROL
	3 RD	STUDY OF FACTORS INFLUENCNG QUALITY OF MANUFACTURE
	4 TH	EXPLAIN STATISTICAL QUALITY CONTROL, CONTROL CHARTS
10 TH	1 ST	CONTROL CHARTS (X, R, P & C CHARTS) (CONTD...)
	2 ND	METHOD OF ATTRIBUTES
	3 RD	CONCEPT OF ISO 9001 - 2008
	4 TH	QUALITY MANAGEMENT SYSTEM
11 TH	1 ST	REGISTRATION/CERTIFICATION PROCEDURE
	2 ND	BENEFITS OF ISO TO THE ORGANISATION
	3 RD	JIT, 6 SIGMA, 7S, LEAN MANUFACTURING
	4 TH	NUMERICALS
12 TH	1 ST	QUIZ & ASSIGNMENT - IV
	2 ND	INTRODUCTION OF PRODUCTION PLANNING & CONTROL
	3 RD	MAJOR FUNCTIONS OF PRODUCTION PLANNING & CONTROL
	4 TH	METHODS OF FORECASTING
13 TH	1 ST	ROUTING
	2 ND	SCHEDULING
	3 RD	DISPATCHING
	4 TH	CONTROLLING
14 TH	1 ST	TYPES OF PRODUCTION
	2 ND	MASS PRODUCTION
	3 RD	BATCH PRODUCTION
	4 TH	JOB ORDER PRODUCTION
15 TH	1 ST	PRINCIPLES OF PRODUCT & PROCESS PLANNING
	2 ND	QUIZ & ASSIGNMENT - V
	3 RD	REVISION
	4 TH	REVISION

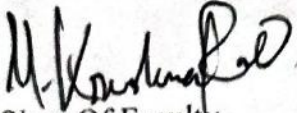
LEARNING RESOURCES:


INDUSTRIAL ENGINEERING & MANAGEMENT, O.P KHANNA, DHANPAT RAI & SONS.

INDUSTRIAL ENGINEERING & PRODUCTION MANAGEMENT, MART & TELSANG, S.CHAND

STATISTICAL QUALITY CONTROL, M. MAHAJAN, DHANPAT RAI & SONS

WEBSITE RESOURCES:


Sign. Of Faculty
concerned


Sign. Of HOD /C


Principal