INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

MECHANICAL ENGINEERING

ASSIGNMENT QUESTIONS

Course Name	:	**PRODUCTION PLANNING AND CONTROL**
Course Code	:	**A80366**
Regulation		**R15**
Class	:	IV B. Tech I Semester
Branch	:	Mechanical Engineering
Year	:	2018 – 2019
Course Coordinator	:	Mr.V Mahidhar Reddy, Assistant Professor
Course Faculty	:	Mr.V Mahidhar Reddy, Assistant Professor Mr.M V Aditya Nag, Assistant Professor

OBJECTIVES

The objective of this course is to understand the various components and functions of production product planning, process planning, production scheduling, Inventory Control. The course covers the fundamentals of Production Planning & the subsequent Production Control that follows an adaptation of product design and finalization of a production process. Production Planning & Control resolves a basic issue of low productivity, inventory management, and resource utilization and is needed for scheduling, dispatch, inspection, quality management, inventory management, supply management and equipment management. It guarantees target achievement by the production team, optimum resource utilization, quality management and cost savings.

ASSIGNMENT-I			
S. No.	**Question**	**Blooms Taxonomy Level**	**Course Outcomes**
1	Discuss the position of motion and time study in the organizational Structure of a manufacturing firm?	Remember	1
2	Explain in detail about principles of sound production control systems.	Remember	2
3	Describe sales force composite method in sales forecasting.	Understand	3
4	Describe moving average method in sales forecasting.	Remember	4
5	Mention the control procedure is to be exercised on A class, B class and C class items.	Understand	5
6	Explain exponential smoothing method of forecasting. Also Define forecasting and its uses.	Remember	4
7	Describe jury executive opinion method of sales forecasting.	Understand	3
8	Name and describe the various factors affecting sales forecasting.	Remember	4
9	ABC manufacturer's produces 1, 25,000 oil seals each year to satisfy the requirement of their client. They order the metal for the bushing in lot of 30,000 units. It cost them $40 to place the order. The unit cost of bushing is $0.12 and the estimated carrying cost is 25% unit cost. Find out the economic order quantity. What percentage of increases or decrease in order quantity is required so that the ordered quantity is Economic order quantity.	Understand	6
10	The XYZ Company produces wheat flour as one of their product. The wheat flour is produced in the pack of 1kg. The demand for wheat flour is 40,000 packs/year& the production rate is 50,000 packs/year. Wheat flour 1kg pack cost $0.50 each to make. The Procurement cost is $5. The carrying cost is high because the product gets spoiled in few week times span. It is nearly 50 percent of cost of one pack. Find out the operating doctrine.	Understand	5

ASSIGNMENT-II			
1	Distinguish between single level bill of materials and indented bill of materials, with an example for each type	Remember	7
2	Explain the importance of bills of material in production control. How does it help in assembly production?	Understand	8
3	Explain factors effecting routing procedure.	Understand	8
4	Explain the factors to be considered for bill or materials.	Understand	8
5	Discuss advantages and disadvantages of centralized and decentralized dispatching.	Remember	6
6	Discuss various orders triggered in a manufacturing firm by a centralized dispatching department.	Understand	9
7	With the help of an Organizational Charts, explain the Centralized and Decentralized System of Dispatching. Also List the merits and demerits of Centralized and decentralized system of dispatching.	Understand	10
8	Explain briefly about decentralized dispatching.	Understand	11
9	Explain briefly about the sequence of dispatching activities	Understand	11
10	Explain briefly about the duties of a dispatcher.	Understand	12

Prepared by:

M V Aditya Nag, Assistant Professor

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