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ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
I MBA II Semester Regular Examinations, October / November-2020
OPERATIONS MANAGEMENT

Time: 3 Hrs   **Max. Marks: 60**

Answer any Five questions
All questions carry EQUAL marks
Question No. 8 is Compulsory

1.	a)	Define the term 'production function'. Discuss its importance in modern business.	6 Marks
	b)	Difference between intermittent and continuous manufacturing system.	6 Marks
2.		Distinguish between product layout and process layout and explain their advantages and disadvantages.	12 Marks
3.		What is Material Resource Planning (MRP)? How the MRP is useful for the cost of production?	12 Marks
4.		What do you understand by sequencing? How it is useful in production management?	12 Marks
5.		What is productivity? What is its importance? How would you measure productivity? Explain in brief.	12 Marks
6.		Outline the general procedure for a time study to determine the standard time.	12 Marks
7.		What is the necessity of statistical quality control when a product has ultimately to pass through inspection? Where it would check for quality?	12 Marks
8.		CASE STUDY:	12 Marks

The annual demand for a product is 6,400 units. The unit cost is Rs.6 and inventory carrying cost per unit per annum is 25% of the average inventory cost. If the cost of procurement is Rs. 75, determine:
i) Economic Order Quantity (EOQ)
ii) Number of orders per annum
iii) Time between two consecutive orders.

Code: 17MBA2004   **SET-I**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI
(AUTONOMOUS)
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PRODUCTION & OPERATIONS MANAGEMENT

Time: 3 Hrs   Max. Marks: 60

Answer any Five questions
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Question No. 8 is Compulsory

1. Explain the Nature and Scope of Production and Operations Management.

2. Six jobs are to be processed through Machine I and then on Machine II. The order of completion of jobs has no significance. The

Jobs / Machine	1	2	3	4	5	6
Machine I:	4	8	3	6	7	5
Machine II:	6	3	7	2	8	4

following table gives machine time for the six jobs on two machine. Find the sequence of the job that minimize the total elapsed time to complete the jobs. Also find Ideal time for machines.

3. What are the different types of Manufacturing Systems?

4. What is Inventory? Explain the different Inventory Control Techniques?

5. Explain briefly the following :
   a) Productivity b) Work-study c) Method study d) Work Sampling.

6. Compare and Contrast various types of Layouts? Discuss about each one in detail.

7. What is TQM? Discuss in detail the role of TQM in manufacturing company?

8. **CASE STUDY:**
   10 samples of different sizes were taken and the number of defectives in each sample are noted below:

Sample No:	1	2	3	4	5	6	7	8	9	10
Sample size:	100	300	200	150	200	250	300	150	100	250
No. of defects:	06	12	05	05	20	05	10	06	04	25

Draw a Control Chart for fraction defective by taking 3 Sigma control.