

Printed Page:-

Subject Code:- AMIBA0406

Roll. No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute Affiliated to AKTU, Lucknow)

MBA (Integrated)

SEM: IV - THEORY EXAMINATION (20 - 20)

Subject: Production and Operations Management

Time: 2.5 Hours

Max. Marks: 60

General Instructions:

IMP: Verify that you have received the question paper with the correct course, code, branch etc.

1. This Question paper comprises of three Sections -A, B, & C. It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.
2. Maximum marks for each question are indicated on right -hand side of each question.
3. Illustrate your answers with neat sketches wherever necessary.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.
6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

SECTION-A

15

1. Attempt all parts:-

- 1-a. A flexible manufacturing system is designed to: (CO1, K1) 1
- (a) Produce a single type of product efficiently
 - (b) Adapt to changes in product demand and design
 - (c) Minimize employee training
 - (d) Maximize raw material usage
- 1-b. _____ factor has the most significant impact on productivity.(CO2,K2) 1
- (a) Technology
 - (b) Workforce motivation
 - (c) Management strategies
 - (d) Environmental conditions
- 1-c. Lead time in inventory management refers to: (CO3,K1) 1
- (a) The time taken to produce finished goods
 - (b) The time taken for an order to be delivered after it is placed
 - (c) The time taken to count inventory
 - (d) The time taken for products to be sold
- 1-d. Stage of the product life cycle involves gathering customer feedback: (CO4, K2) 1
- (a) Introduction
 - (b) Growth
 - (c) Maturity

(d)	Decline	
1-e.	The bullwhip effect refers to: (CO5,K1)	1
(a)	A sudden increase in demand causing shortages in the supply chain	
(b)	A decrease in demand causing excess inventory buildup	
(c)	Efficient supply chain management practices	
(d)	Minimal fluctuations in inventory levels	
2.	Attempt all parts:-	
2.a.	Name two production scheduling techniques. (CO1,K1)	2
2.b.	Define value analysis.(CO2,K1)	2
2.c.	Explain inventory and its importance in business. CO3, K1)	2
2.d.	Give an example of a product suited for continuous manufacturing.(CO4,K2)	2
2.e.	Define supply chain integration.(CO5,K1)	2
SECTION-B		15
3.	Answer any <u>three</u> of the following:-	
3-a.	Discuss the advantages and disadvantages of different production scheduling techniques. (CO1,K1)	5
3-b.	Explain the concept of time-motion study. (CO2.K2)	5
3.c.	Discuss the challenges associated with implementing a just-in-time (JIT) inventory system. (CO3,K2)	5
3.d.	"In what ways does continuous manufacturing affect the environment differently than batch (intermittent) production?"(CO4,K3)	5
3.e.	Discuss the concept of Kaizen in continuous improvement.(CO5,K2)	5
SECTION-C		30
4.	Answer any <u>one</u> of the following:-	
4-a.	"Suggest an effective production scheduling strategy to overcome bottlenecks and delays in a manufacturing process. Justify your choice.".(CO1,K5)	6
4-b.	Compare and contrast the different types of plant layouts. Describe the advantages and disadvantages of each? (CO1,K2)	6
5.	Answer any <u>one</u> of the following:-	
5-a.	Explain the concept of work measurement and its significance in productivity improvement.(CO2,K2)	6
5-b.	Discuss the challenges faced by organizations in implementing productivity improvement initiatives.(CO2,K2)	6
6.	Answer any <u>one</u> of the following:-	
6-a.	Imagine you are a consultant for a small business. Describe the steps you would take to implement a just-in-time (JIT) inventory system.(CO3, K1)	6
6-b.	Discuss the concept of inventory turnover ratio and its interpretation in evaluating inventory management performance.(CO3,K2)	6

7. Answer any one of the following:-

- 7-a. Discuss the factors influencing the selection of suitable manufacturing processes for a given product. (CO4,K2) 6
- 7-b. A car manufacturing plant produces vehicles on an assembly line where the cars move continuously through various stages of assembly. Explain the continuous manufacturing system in this context and its advantages.(CO4,K3) 6

8. Answer any one of the following:-

- 8-a. Explain the concept of total cost of ownership (TCO) in supply chain decision making.(CO5,K1) 6
- 8-b. "Evaluate strategies a retail company can use to manage unexpected changes in product demand."(CO5,K6) 6

REG:JAN_JUN-2025