

**JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA**  
**PGDM / PGDM (M) / PGDM (SM)**  
**TERM V (Batch 2016-18)**  
*Re* - **END TERM EXAMINATIONS**

Set II

Course Name	Materials and Inventory Management	Course Code	OP-502
Max. Time	2 Hour	Max. Marks	40

**INSTRUCTIONS: Answer All questions:**

**Marks as indicated**

1. List elements of Ordering Cost and Inventory Carrying Cost.

Show with a diagram, how the two costs vary with the Quantity on order.

Derive the formula for computation of EOQ.

(5 Marks)

2. Unicom Software sources 9000 blank CDs annually from a supplier in Mumbai.

Costs involved in procurement are as follows:

Ordering cost per order is Rs10; Price of the CD: Rs 20 per unit;

Inventory Holding cost is 10% of the Price of CD

Supplier offers Price Discounts for different lot-Sizes as follows:

a) 100-449: Discount 2%

b) 450-899: Discount 4%

c) 900 & above, Discount 5%

Determine EOQ and choose the best Discount Offer.

(5 Marks)

3. Use FIFO Method of Stock Valuation and determine Stock Balance and the Stock Value at the end of February. Priced Ledger indicating Receipts and Issues during the month are as below. Complete the Ledger entries for the month.

Date	Receipt Quant	Receipt Rate	Receipt Value	Issue Quant	Issue Rate	Issue Value	Stock Quant	Stock Rate	Stock Value
1/2	200	1.0							
5/2	300	1.5							
10/2				100					
15/2				100					
20/2				200					
25/2	200	2.0							
28/2				200					

(5 Marks)

4. Explain any THREE of the following practices used in Materials Management:

(3 X 5 =15 Marks)

- A. A B C and V E D Analysis in Selective Inventory Control
- B. Techniques for Lead Time Reduction
- C. Codification/ Standardization and Variety Reduction
- D. Q-system & P-system of stock replenishment

5. Case Analysis

10 Marks

**Case: Fairways Company: Diagnosing problems in Purchasing Function**

The Fairways Company is a manufacturer of highly technical equipment. The gross sales of the company consists primarily of units designed and customized to Client specifications. The purchasing department consists of the Purchase Manager, one Purchase Assistant, and two Clerks who handled typing and filing.

Although many of the items purchased were of highly technical nature, the Purchase Manager had no formal technical qualification and training. Over the years, he had picked up a fair knowledge of engineering terminology used in the field, but was not equipped to deal with the specialized design problems of the company.

The Purchase Assistant is competent to procure general supplies only. He is not capable to handle procurement of technical items unless detailed specifications were supplied by the user in design & production departments.

The clerks reported to the inventory controller, who reviewed the stock records, prepared requisition for items at their reorder points, and disposed off items which were having slow consumption or were deteriorating.

Of late, frequent problems had arisen when suppliers claimed interest charges on long overdue payments on material received by the Company. In some cases it was also discovered that Receipt Section had forgotten to make a receiving report. Since purchasing only passed bill for payment after receipt of the receiving report, payment was delayed. The image of the company had been substantially tarnished for not meeting commitments for payments on due date. The company could not avail discounts offered due to payments delays. In such cases, the inventory controller would blame the Inward Receipt section for not arranging inspection on time and the Receipt Clerk would blame the indenter for not coming for inspection.

Every officer in Design and Production Deptt. Was authorized to initiate purchase requisitions for procurement. Approval of Purchase Manager was required up to order value of Rs.15000. Orders over Rs 15,000 required President's approval on requisitions. Company was facing lot of complaints from

- a) User about non-availability of materials on time
- b) Suppliers about delay in Payment

Analyze reasons for the two complaints and recommend corrective measures to be taken by the company.