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

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. Classify following items of Inventory in A B C Categories: 5 Marks

Code	Value of Annual Consumption	Code	Value of Annual Consumption
A	1200	K	1393
B	2400	L	4625
C	17000	M	5450
D	1390	N	300
E	3450	O	610
F	5125	P	2590
G	11000	Q	3910
H	8650	R	2285
I	7300	S	1810
J	6375	T	687

2. Monthly sale of Olive Oil in 5 Kg Pack at Big Bazar is 400 Packs. Cost of each Pack is Rs 1000. Inventory Carrying cost is 2% of the Price. Ordering Cost per Order is Rs 100. Lead time of stock replenishment from Mumbai is 1 month. The store decides to place replenishment orders on stock review basis every 2 months. Since it is a slow-moving item Big Bazar decides to have only 1 week consumption as Safety Stock. Estimate Order Quantity on following 3 review cycles:
   A) Review I, if the stock in hand is 400
   B) Review II, when Stock in hand reduces to 200
   C) Review III, when the stock drops to 100

   5. Marks

3. A retail store has annual demand of wipes for 2400 packs. The store buys from the wholesaler at the rate of Rs10.00 each. Buying cost perorder is Rs100. Inventory holding cost per unit per year works out to 24% of the unit price.
   Wholesaler offers a discount of 10% for a minimum lot size of 500packs and discount of 20% if the lot size for purchase is above 1000.Advise the retailer to buy on EOQ or avail any of the two discounts offered.

   5 Marks

4. A Noida based Fabricator uses Hinges for making Steel Almirahs. Average consumption is 1000 units per week. However, the Standard Deviation in Demand Fluctuation is 300 units.
   The owner is currently buying hinges from Ghaziabad at the rate of Rs 100 each. The lead time is only 2 weeks and the standard deviation in lead time variation is 1 week. Ghaziabad vender is willing to accept order for lot size of 2000 Hinges. For the year 2018 he has received another offer from a vender from Mumbai willing to supply at the rate of Rs 90 each for a Lot size of 8000 Hinges The lead time for supply from Mumbai is 6 weeks and standard deviation in lead time is 4 weeks. Evaluate total cost involved in both options and suggest whether to buy from Ghaziabad or Mumbai.Assume Ordering cost to be Rs.100 per order and Inv. Holding cost @ 25% of the price of the Hinge.

   5. Marks

5. Explain with examples following practices in Materials Management:

   (3 X 4 = 12 Marks)

   A. Inward Receipt Process in Warehousing
   B. Value Analysis Technique for Cost Reduction
   C. 3-D Approach in Selective Inventory Management considering three variables namely i) Annual Consumption ii) Criticality of usage iii) Delivery Lead Time.

6. Case : Ganpathy Ram Refineries   8 Marks

As consultant you have identified following 12 major practices which are wrong

and are causing various inventory problems in Ganpathy Ram Refineries.

Prepare a Report for Top Management, explaining how the wrong practice

leads to rise in Inventory in the Refinery. Write 50-60WORDS for EACH practice.

1. Giving incomplete specification in Indents for procurement.
2. Classifying large number of non-moving spares as vital & critical insurance spares.
3. Very long internal lead time for placing orders.
4. Improper preservation of spare parts.
5. Procuring unwanted slow-moving spares with imported machines & equipment.
6. No policy for surplus declaration and disposal.
7. Old plants and equipment that have out lived their economic life are still in operation.
8. Inadequate space in covered warehouses forcing materials storage in open yards.