INVENTORY MANAGEMENT

Q.1 State whether the following statements are True or False. [8 marks]

1.1. In XYZ inventory analysis 'X' items represent low stock value whereas 'Z' is high valued items.

1.2. In Kodak codification system 7 digits are used for coding.

1.3. EOQ is essentially an accounting formula that determines the point at which the combination of order costs and inventory carrying costs are the least.

1.4. Maintaining Safety stock / Buffer stock is dependent on Lead time and Consumption pattern.

1.5. Inventory carrying cost is the cost of materials excluding materials handling cost.

1.6. Economic Order Quantity means purchase of materials at lowest price.

1.7. Demand Aggregation facilitates the enterprise to optimize the buying strength.

1.8. FIFO is based on the principle that the first inventory goods received will be the first inventory goods sold.
Q.2. Fill in the blanks. [8 marks]

2.1. __________ and __________ are two broad techniques of forecasting.

2.2. Fewer and larger orders will reduce __________ cost

2.3. In ABC analyses classification of “A” class items accounts for approx. __________ of the value of consumption.

2.4. Materials ordered and paid but not received is called __________ Inventory

2.5. Safety stock arises due to variations in __________ and __________

2.6. Any difference in quantity resulting from the delivery note or the invoice shall be notified to the Seller in writing, albeit __________ after receipt of the commodities

2.7. Twenty-foot-equivalent-unit term used in transportation of __________ in shipping.

2.8. Transport Emergency Cards must be visible in the vehicle at all times during the transportation of __________

Q.3. Expand the following [8 marks]

3.1. M A W B, 3.2. MSDS, 3.3. BIS, 3.4. GOLF

3.5. MRO, 3.6. NIFO, 3.7. MBOM, 3.8. RFID

Q.4. Match A and B [8 marks]

<table>
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<th>A</th>
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<tr>
<td>4A.1) Shelf Life Expired</td>
<td>4B.1) Forecasting method</td>
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<td>4A.2) Insurance Spares</td>
<td>4B.2) Unit Load</td>
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<td>4A.3) Pareto Principle</td>
<td>4B.3) Dabbawalas</td>
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<td>4A.4) Material Handling System</td>
<td>4B.4) Spare Parts Inventory</td>
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<td>4A.5) Pallet</td>
<td>4B.5) Balance between demand and supply</td>
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<td>4A.6) Delphi</td>
<td>4B.6) Vital few, Trivial many</td>
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<td>4A.7) World’s best food delivery system</td>
<td>4B.7) Fork Lift</td>
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<td>4A.8) Optimizing inventory</td>
<td>4B.8) Obsolescence</td>
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PART - B

Answer any three (3) of the following questions – 16 marks each [48 Marks]

Q.5 Which are the different methods of Inventory Analysis, Explain each one in detail and its Benefits?

Q.6 What do you mean Inventory Forecasting? Name & explain each Inventory Forecasting models and How to Choose the Right Inventory Forecasting Models?

Q.7 Classify Spare Parts Inventory? Explain the factors which influence Spare Parts Inventory Control?

Q.8 A) Explain Vendor Managed Inventory? What are the Benefits and Risks of VMI? (8 marks)
   B) What is Surplus Inventory? How to Identify, Avoid and Liquidate it, (8 marks)

Q.9 Write Short Notes on (any four) : (4 x4 = 16 marks)
   9. A) Periodic Review System
   9. B) Material Handling System
   9. C) Benefits of implementing RFID
   9. D) Advantage of Containerisation
   9. E) Hedging
   9. F) Inventory accounting System

PART – C
(Compulsory)

Q. 10 Read the case and answer the questions [20 marks]

Dr. Narayanan MD of Omkar Power Works Pvt. Ltd., OPW Pvt Ltd. manufactures Uninterrupted Power Supply (UPS) and is located in Chandigarh - India. Dr. Narayanan was of the opinion that the present Ordering Cost & Inventory carrying Cost are high as compared to the out up of the company and requires review the Ordering & Inventory carrying costs. Dr. Narayanan MD invited his Manager-Inventory Mr. Murty to study the possibility of reducing the Ordering & Inventory carrying costs. Manager agreed and called his team for a discussion. His assistant manager Mrs. Gitanjali gave a detailed data of UPS manufactured for the last 12 months.

Company OPW Pvt. Ltd produces 450 nos. of UPS per month. It buys the power sockets for UPS from a supplier located near Chandigarh at a cost of Rs.20 per socket, each UPS requires 2 nos. of sockets. The company’s inventory carrying cost is estimated to be 15% of cost and the ordering is Rs.50 per order.

Mr. Murty asked his Asst. Mngr, Mrs. Gitanjali to calculate the following so that he can take action if required and give factual picture to his boss on Ordering & Inventory carrying cost. Based on above data calculate the following-

A. Calculate the EOQ 4- Marks
B. What is the number of orders per year? 3- Marks
C. Compute the average annual ordering cost 3- Marks
D. Compute the average inventory 3- Marks
E. What is the average annual carrying cost? 3- Marks
F. Compute the total cost 3- Marks
G. With present trend, what is your opinion - Is the Ordering & Inventory carrying Costs of OPW Pvt. Ltd, are High / Very Low/Ok.

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