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

1.1 Demand Management is a part of Inventory Management

1.2 Newspaper is a perishable item.

1.3 Standardisation is a good tool to promote maximum number of parts to serve minimum number of purposes.

1.4 Two Bin System & Three Bin Systems are examples of Fixed Order System.

1.5 If cost of reconditioning an item is 70% of the cost of a new item and it will give life of 60% of the new item, then one should go for reconditioning.

1.6 FIFO Method is suitable for the trend of rising prices in the market.

1.7 Chemical change in material is termed as a normal loss.

1.8 AGVs are used ASRS Warehouses.

Q.2 Fill in the blanks:  [8 marks]

2.1 Safety Stock is a function of __________ and __________

2.2 __________ cannot be calculated accurately from production schedule and BOM.

2.3 __________ Analysis. This classification is based on the stock value of materials.

2.4 In __________ Classification, items are classified based on shelf life.
2.5 If 20 Orders are placed in a year and management accepts 1 stock out in a year the Acceptance Level of stock out is _____% 
2.6 _______________ maximizes purchasing powder by combining multiple Purchase requirements. 
2.7 ______ Inspection is done at supplier’s premises. 
2.8 When Safety Stock is more, Holding Cost is more and Stock Out cost is _______

Q.3. Match A and B

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
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<tbody>
<tr>
<td>3A.1) PAN</td>
<td>3B.1) Safety Stock</td>
</tr>
<tr>
<td>3A.2) PPC</td>
<td>3B.2) Exponential Smoothing</td>
</tr>
<tr>
<td>3A.3) Pull System</td>
<td>3B.3) Shortening Supply Chain</td>
</tr>
<tr>
<td>3A.4) Service Level</td>
<td>3B.4) Consumables</td>
</tr>
<tr>
<td>3A.5) Time Series Analysis</td>
<td>3B.5) ABC Classification</td>
</tr>
<tr>
<td>3A.6) VMI</td>
<td>3B.6) WIP</td>
</tr>
<tr>
<td>3A.7) Catalyst</td>
<td>3B.7) Codification</td>
</tr>
<tr>
<td>3A.8) Pareto Law</td>
<td>3B.8) Kanban</td>
</tr>
</tbody>
</table>

Q.4. Expand the following: [8 marks]


**PART - B**

Write any three (3) of the following questions – 16 marks each (48 Marks)

**Q.5** How you will turn Inventory Management into a Profit Centre?

**Q.6**

A) What are rough methods of determining Safety Stock ?

B) What are various costs you will consider to work out Life Cycle Cost of Xerox machine.

**Q.7**

A) How you will set procedure for effective procurement of spare parts?

B) How you will control factors affecting management of spare parts.

**Q.8**

a) Discuss in detail ‘P’ System and ‘Q’ System of Re Order Level System.

b) Describe various methods of disposal of surplus inventory.
Q.9  Answer any four of the following:

Write Short Notes on:

(A) Vendor Managed Inventory
(B) Material Handling Equipments
(C) Finished Good Inventory
(D) Accounting for loss/pilferage.
(E) PQR Classification

PART – C

Q. 10  compulsory  (20 marks)

ABC Ltd is a chemical manufacturing company. The company has an average inventory of Rs 100 lacs and placed 4000 orders per year. Following details are available.

1. Purchase Department Expenses                     Rs 20 lacs
2. Store Warehouse Personnel Salary                  Rs 2 lacs
3. Obsolescence, Spoilage                            Rs 0.60 lac
4. Floor space charge related to Stores, warehouse   Rs 1.40 lac
    activities.
5. Cost of Collecting materials                      Rs 0.40 lac
6. Cost of Receiving materials                       Rs 0.35 lac
7. Cost of Inspection                                Rs 0.50 lac
8. Cost of Materials Handling                        Rs 1.50 lac
9. Cost of Bill Payment                              Rs 0.75 lac
10. Interest                                          12%
11. Insurance                                         2%

Questions:

A) Calculate Cost of placing order.
B) Calculate Inventory Carrying Cost.
C) Work out Economic Order Quantity
D) Supplier offers 1% discount if Order quantity is 2000 units per order.
Find out:

i) Saving on account of price discount.

ii) Saving in Ordering Cost

iii) Loss due to carrying extra inventory

iv) Advise company whether discount should be accepted or not? Why?