Q.1. Fill in the blanks. (Do not reproduce the statement) [5 marks]

i) Inventory _________ is the loss in inventory physical value and the reported accounting stock value.

ii) The difference between the actual demand and the forecast demand is known as forecast _________.

iii) Minimum quantity of stock to avoid loss of sale due to non-availability is called _________ stock.

iv) To bring more control over the pull system of production _________ is used.

v) Verification of stock carried out continuously throughout the year is called _________ verification.

Q.2. State True or False (Do not reproduce the statement) [5 marks]

a) In vendor managed inventory the supplier of goods replenishes the inventory held by the buyer.

b) A smoothing constant determines the relevance of previous data to the forecast.

c) MPS stands for Master Planning System.

d) The forecasted probability of preventing a stock out is service level.

e) The actual price at which the transaction was performed is known as standard cost.

Q.3. Expand the following: [5 marks]

a) COGS   b) GAAP   c) DPMO   d) LIFO   e) MAD

Q.4. Match the following: [5 marks]

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Column A</th>
<th>Description</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Backordering</td>
<td>A</td>
<td>Inventory valuation</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>FSN analysis</td>
<td>B</td>
<td>Use of panel of experts</td>
<td></td>
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<tr>
<td>3.</td>
<td>Delphi method</td>
<td>C</td>
<td>Purchases and ships once order is received</td>
<td></td>
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<td>4.</td>
<td>Make to stock</td>
<td>D</td>
<td>Frequency of issue</td>
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</tr>
<tr>
<td>5.</td>
<td>Specific cost method</td>
<td>E</td>
<td>Derived from sales forecast</td>
<td></td>
</tr>
</tbody>
</table>
PART - B

Write any three (3) of the following questions – 20 marks each (60 marks))

Q.5  a) What is inventory? What are the reasons for keeping it? [10 marks]
     b) Explain ABC and VED inventory analysis methods. [10 marks]

Q.6 a) Describe quantitative methods of forecasting. [10 marks]
     b) Explain in detail the process of MRP. [10 marks]

Q.7 a) Describe the seven major SPC tools [10 marks]
     b) What are the measures for controlling finished goods inventories? [10 marks]

Q.8 a) What is retail shrinkage? What are its primary causes? [10 marks]
     b) Differentiate between stock verification and stock evaluation. [10 marks]

Q.9 Write short notes on any four: [4 x 5 = 20 marks]
    a) WIP inventory
    b) Quality at source
    c) Methods of calculating forecast error
    d) Vendor managed inventory
    e) Advantages of ERP

PART – C (20 marks)
(Compulsory)

Q.10 An item purchased from a vendor costs Rs 20/- each and the annual demand for the item is 1000 units. It costs Rs 5/- every time an order is placed and the carrying cost is 20% of the unit cost. Delivery lead-time is 5 days and average daily demand is 3 units.

Questions:
    a) Derive the EOQ formula
    b) Calculate EOQ
    c) Calculate ordering cost
    d) Calculate holding cost.
    e) Calculate ROP