

- (c) Edwards Deming theory  
(d) Edward Deming theory
- 133.** At break-even point preparatory cost is  
(a) 3 times the inventory carrying cost  
(b) 2 times the inventory carrying cost  
(c) Equal to the inventory carrying cost  
(d) Not related to each other
- 134.** In ABC analysis, what does C-class signify?  
(a) Low value and low risk  
(b) Low value and high risk  
(c) High value and low risk  
(d) High value and high risk
- 135.** ISO 14000 belongs to  
(a) Improving effectiveness  
(b) Risk management  
(c) Environmental responsibilities  
(d) Quality of innovation and learning
- 136.** ISO 14064 related to  
(a) Green house gases  
(b) Global warming  
(c) Air pollution  
(d) Water pollution
- 137.** Indirect cost of a plant is 2,00,000 per year. The direct cost is Rs. 40 per product. If the average revenue per product is Rs. 80, the break even point is  
(a) 10,000 (b) 15,000  
(c) 5,000 (d) 20,000
- 138.** Consider the following statements :
1. Purchase cost depends upon the quality of the item.
  2. Order cost include tendering cost, processing and transportation cost.
  3. Depreciation cost is included in holding cost.
- Which of the following is correct?
- (a) 1, 2 (b) 1, 3  
(c) 2, 3 (d) All are correct
- 139.** Consider the following statements :
1. In fixed order review system size of the lot is not fixed and time is fixed.
  2. In periodic review system size of the lot is fixed and time is not fixed.
- Which of the following is correct?
- (a) Only 1 is correct (b) Only 2 is correct  
(c) Both are correct (d) None are correct
- 140.** Consider the following statements :
1. Deterministic model include shortage and buffer stock
  2. In deterministic model demand and lead time are known as with certainty and are variable.
  3. The probabilistic model demand and lead time are not known.
- Which of the following are correct?
- (a) 1 only (b) 2 only  
(c) 3 only (d) All are correct
- 141.** Consider the following statements :
1. Demand for inventory is know with certainty.
  2. Lead time is assumed to be zero.
  3. Inventory is controlled from one point in the system.
  4. No quantity discounts are allowed.
- Which of the above statements are assumptions of Harris-Wilson model?
- (a) 1, 2, 3 are correct (b) 2, 3, 4 are correct  
(c) 1, 3, 4 are correct (d) All are correct
- 142.** For a product demand (quantity/year) is 100, cost per unit order is 200 and cost of holding one unit in inventory for 1 year is 4. Find economic order quantity.  
(a) 50 (b) 100  
(c) 150 (d) 200
- 143.** Large size of the inventory is an indication of
1. Improper scheduling
  2. Less efficient planning
  3. Lack of coordination between vendors

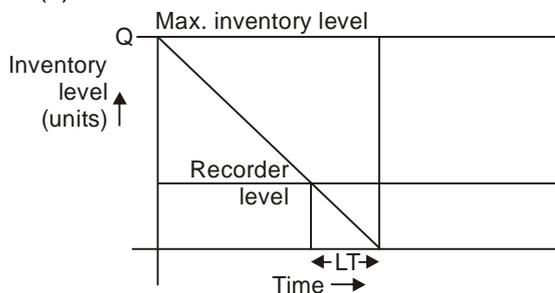
122. (d) Work in process is less in product layout as the flow of material is continuous along the line product cycle time is less as compared to process layout due to less chances of congestion and less waiting time on machine. Product cost unit is less in product layout as compared to process layout.

123. (a) Knowledge based system provides reasoning techniques decision support system uses statistical rule of interference.

Management system provides information recommendations data mining respond to queries with reports.

130. (d) Types of inventory are
1. Transit or pipeline inventory
  2. Buffer or safety stock
  3. Seasonal inventory
  4. Anticipation

131. (b)



134. (a) A – \* More careful and closer control is needed.

\* 10% of items accounts for 75% of total capital invested in inventory.

B – \* Nearly 15% of the items in an inventory accounts for 15% of the total investment.

\*These items have less importance than A.

C – \* Nearly 75% of inventory items accounts for 10% of the total invested capital.

137. (c) Break even point =  $\frac{2,00,000}{80 - 40} = 5,000$

139. (d) Fixed order review system  $\Rightarrow$  Size of lot is fixed and time is not fixed

Periodic review system  $\Rightarrow$  Size is not fixed and time is fixed.

140. (c)  $\rightarrow$  Deterministic model do not include shortage and buffer stock.

$\rightarrow$  In deterministic model demand and lead time are known as with certainty and are variable.

142. (b) 
$$(EOQ) = \sqrt{\frac{2DC_o}{C_h}}$$

$$= \sqrt{\frac{2 \times 100 \times 200}{4}}$$

EOQ = 100

150. (b) In value based approach quality is defined as conformance at acceptable cost

In manufacturing approach requirement of adherence to specification is needed.

152. (b) **Run chart** : Measurement against progression of time.

Control chart is represented by adding upper control limit and lower control limit to the run chart.

154. (a) Acceptance sampling gives no idea about process.

Attribute sampling; classification as good or bad.

Variable sampling; classification by actual measurement.

155. (c) The measurement of quality is the price of non-conformance.

156. (c) Type I error is associated with producer's risk  $\alpha$ .

Type II error is associated with consumer's risk  $\beta$ .