d. cyclical demand items
(Easy)

34. As the level of inventory increases to provide better customer service, inventory costs
a. decrease
b. stay the same
c. increase
d. cannot be estimated
(Easy)

35. Which of the following is not a cost associated with carrying inventory?
a. price discounts
b. carrying costs
c. ordering costs
d. shortage costs
(Easy)

36. Receiving, inspection, handling, and shipping costs are examples of
a. shortage costs
b. carrying costs
c. holding costs
d. ordering costs
(Easy)

37. In general, as the order size increases,
a. ordering costs decrease and carrying costs increase
b. ordering costs increase and carrying costs decrease
c. both ordering and carrying costs increase
d. both ordering and carrying costs decrease
(Medium)

38. As the amount of on hand inventory increases,
a. shortage costs increase and carrying costs increase
b. shortage costs decrease and carrying costs increase
c. both shortage costs and carrying costs increase
d. both shortage costs and carrying costs decrease
(Medium)

39. In a continuous inventory system an order is placed
a. for a variable amount whenever the inventory on hand decreases to less than the lead time demand
b. for a variable amount after the passage of a fixed amount of time
c. for the same fixed amount whenever the inventory on hand decreases to a certain level
d. for the same constant amount after the passage of a fixed amount of time

especially in a retail operation. Because demand is not known with certainty additional inventory, called safety stock, is kept on hand to meet variations in product demand. Because of the bullwhip effect additional inventory is held throughout the supply chain. Additional stocks of inventories are sometimes built up to meet demand that is seasonal. At the other end of the supply chain from finished goods inventory, a company might keep large stocks of parts and materials to meet variations in supplier deliveries. Sometimes a company will purchase large amounts of inventory to take advantage of price discounts, as a hedge against anticipated future price increases, or to secure a lower price because of large volume purchases. Finally, many companies find it necessary to maintain buffer inventories at different stages of their production processes to provide independence and to avoid work stoppages and delays.

3. What is the difference between independent and dependent demand items?

In general, the demand for items in inventory is either dependent or independent. Dependent demand items are typically component parts or materials used in the process of producing a final product. Independent demand items are final or finished products that are not a function of, or dependent on, internal production activity. Independent demand is usually determined by external market conditions and beyond the direct control of the organization. Different inventory management control systems are used for managing independent and dependent demand items.

4. What is the relationship between ordering costs and carrying costs in inventory management?

Ordering costs react inversely to carrying costs. As the size of the order increases, fewer orders are required, reducing ordering costs. However, ordering larger amounts results in higher inventory levels and higher carrying costs. In general, as the order size increases, ordering costs decrease and carrying costs increase.

5. Briefly compare and contrast a continuous inventory system to a periodic inventory system listing an advantage and disadvantage of each.

There are two basic types of inventory systems: a continuous (or fixed-order-quantity) system and a periodic (or fixed-time-period) system. In a continuous system, an order is placed for the same constant amount whenever the inventory on hand decreases to a certain level, whereas in a periodic system, an order is placed for a variable amount after the passage of a specific period of time. A positive feature of a continuous system is that the inventory is continuously monitored, so management always knows the inventory status. This is advantageous for critical items such as replacement parts or supplies. However, maintaining a continual record of the inventory on hand can also be costly. In the periodic inventory system the inventory level is not monitored at all during the time interval between orders, so it has the advantage of little or nor required record keeping. The disadvantage is less direct control which typically results in