

E217 – Inventory Management

Quiz for Problem 02: Discount more, buy more?

State if the below statement is **True or False**.

1. The basic EOQ Model assumes that the unit cost of the item remains unchanged regardless of the ordered quantity. Hence, we must be able to modify the EOQ Model to cope with the situations of quantity discounts.
Answer: True
2. In basic EOQ model, ordering & holding costs are assumed to be fixed. But in reality, these costs vary according to the stock and ordering situations.
Answer: True
3. One of the advantages of the basic EOQ Model is that it is suitable for dependent demand items. It is also easy to use and provides a quick estimate of order size.
Answer: False. It should be suitable for independent demand items.
4. One of the disadvantages of the basic EOQ Model, suppliers or manufacturers may supply goods in batches.
Answer: True.
5. The reason that the EOQ Model is robust is that the EOQ does not vary much even when there is substantial variation in demand or ordering cost.
Answer: True.
6. The reason that we must consider quantity discounts, is because suppliers often offer discount for large orders to entice buyers to purchase in bulk, and buyers must weigh the potential benefits of reduced unit price and fewer orders from larger order quantities against the increased holding cost caused by higher average inventories.
Answer: True
7. The EOQ should be regarded as an approximate quantity rather than an exact quantity. Thus, rounding the calculated value is acceptable.
Answer: True
8. The EOQ model determines the best time to make an order.
Answer: False
9. The EOQ model determines the best order quantity per order.
Answer: True

10. The optimal order quantity will go _____ if the demand goes up.
a) Up
b) Down
11. The optimal order quantity will go _____ if the unit holding cost per year goes up.
a) Up
b) Down
12. The total annual purchase cost (cost of goods) does not change with different order quantities, if there is no volume discount.
Answer: True
13. If volume discount is offered by the supplier, only the ordering cost and the increased holding cost need to be consider in the basic EOQ Model.
Answer: False
14. If $EOQ = 600$ units, ordering cost is \$20 per order, and demand usage in units is 2,000, what is the holding cost per unit?
a) \$0.22
b) \$0.11
c) \$3.47
d) \$0.47