**Business Modelling 3 Models for Inventory Control**

1. What of the following is often used as another name for inventory?
   1. Shares
   2. Stock
   3. Purchases
   4. Sales
2. Which of the following is not a cost incurred by keeping inventory?
   1. Ordering costs
   2. Holding costs
   3. Shortage costs
   4. Operating costs
3. Which of the following is not an assumption of the basic EOQ model?
   1. Stock is ordered before stock levels reach zero
   2. Stock levels are gradually depleted at a constant rate
   3. Stock is ordered in a fixed-size batch
   4. Stock ordered arrives instantaneously
4. Which of the following is unlikely to be part of the holding cost?
   1. insurance
   2. financing costs
   3. storage facilities
   4. transport
5. How would you define the order cost?
   1. administration cost of placing an order
   2. transport costs of delivering an order
   3. overheads assigned to each order
   4. all the various costs of placing an order and receiving the materials
6. A company sells 1000 items of a product per week at a constant rate. It costs £5 to place an order and it costs £1 per item per week to store the product. How many items should be ordered in a batch?
   1. 100
   2. 200
   3. 150
   4. 50
7. A company sells 1000 items of a product per week at a constant rate. It costs £5 to place an order and it costs £1 per item per week to store the product. 100 items should be ordered in a batch. How often are orders placed?
   1. weekly
   2. every ten weeks
   3. every 0.1 weeks
   4. we cannot say without more information
8. How would you calculate a basic reorder level?
   1. demand during the lead time
   2. demand over a stock cycle
   3. the maximum stock level
   4. the average stock level
9. A company sells 1000 items of a product per week at a constant rate. It costs £5 to place an order and it costs £1 per item per week to store the product. When stock is not available customers are willing to wait but this costs the company 50p per item per week. What is the optimal order quantity?
   1. 100
   2. 173
   3. 58
   4. 141
10. Which of the following statements is not true?
    1. The variability coefficient is used to assess whether the assumption of constant demand is reasonable
    2. The variability coefficient is calculated by dividing the sample variance of recent demand figures by the sample mean of these figures squared
    3. The assumption of constant demand is deemed appropriate when the variability coefficient > 0.25
    4. The assumption of constant demand is deemed appropriate when the variability coefficient < 0.25
11. The following are weekly demands for a product: 998, 1005, 1032, 995, and 1008. What is the variability coefficient approximately?
    1. 0.2
    2. 0.02
    3. 0.002
    4. 0.0002

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| Question | Answer |
| 1 | B |
| 2 | D |
| 3 | A |
| 4 | D |
| 5 | D |
| 6 | A |
| 7 | B |
| 8 | A |
| 9 | B |
| 10 | C |
| 11 | D |