

Time-1 hour**Material Costing****Full Mark-30**

1. Following details are related to a manufacturing concern:
 Reorder level: 1,60,000 units
 Economic order quantity: 90,000 units
 Maximum stock level: 1,90,000 units
 Minimum stock level: 1,00,000 units
 Average lead time: 6 days
 Difference between maximum lead time and minimum lead time: 4 days
 Calculate:
 Maximum consumption per day
 Minimum consumption per day [5]
2. MM Ltd uses 7500 valves per month which is purchase at a price of ₹1.50 per unit. The carrying cost is estimated to be 20% of average inventory investment on an annual basis. The cost to place an order and getting the inventory delivery is ₹15. It takes a period of 1.5 months to receive delivery from the date of placing an order and a safety stock of 3200 valves is desired. You are required to determine:
 a. The Economic Order Quantity and the frequency of order.
 b. The Re-order point
 c. The Economic Order Quantity if the valves cost ₹4.5% each instead of ₹1.50 each. (assume a year consists of 360 days) [5]
3. Prepare a statement showing the pricing of issues, on the basis of Weighted Average method from the following information pertaining to Material D
- | | | |
|------------|----|--|
| 2024 March | 1 | Purchased 100 units @ ₹ 10 each |
| | 2 | Purchased 200 units @ ₹ 10.20 each |
| | 5 | Issued 250 units to Job X vide M.R. No. 12 |
| | 7 | Purchased 200 units @ ₹ 10.50 each |
| | 10 | Purchased 300 units @ ₹ 10.80 each |
| | 13 | Issued 200 units to Job Y vide M.R. No. 15 |
| | 18 | Issued 200 units to Job Z vide M.R. No. 17 |
| | 20 | Purchased 100 units @ ₹ 11 each |
| | 25 | Issued 150 units to Job K vide M.R. No. 25 |
- [6]
4. Answer the following questions by choosing correct options [3X2=6]
 A. The annual demand of a certain product is 8000 units, ordering cost per order is ₹40, carrying cost is 10% of average inventory value and purchase cost is ₹10 per unit. The EOQ of the product is

- a) 1,200
- b) 1,000
- c) 900
- d) 800

B. A company uses material A for production of product Z. the supplier of material A quotes a delivery period of 2 to 3 weeks. If the company uses 500 to 800 units of material A per week according to activity level, the reorder level of material A will be.

- a) 1000 units
- b) 1500 units
- c) 2,400 units
- d) None of the above

C. If the minimum stock level and average stock level of a particular raw material are 4000 and 9000 units respectively, find out its reorder level.

- a) 9000 units
- b) 10,000 units
- c) 4,000 units
- d) 5,000 units

5. Write short Note [4x2=8]

- a) Difference between Bill of Material and Material Requisition Note
- b) What is ABC Analysis? What are its advantages and limitations?