From the following information calculate stock turnover ratio :

Gross Sales	₹ 5,00,000
Sales Return	₹ 25,000
Opening Stock	₹ 70,000
Closing Stock at Cost	₹ 85,000
Purchase	₹ 3,00,000
Direct Expenses	₹ 1,00,000

The following information relates to year 2013-2014.

Details	**Material-I**	**Material-II**
Opening Stock	5,00,000	20,00,000
Closing Stock	3,00,000	16,00,000
Net Purchases	42,00,000	50,00,000

Calculate the material turnover ratios regarding each of these materials and express in number of days the average inventory held. ***(T.Y.B.Com., Oct. 2014, adapted)***

The following details are given of a certain material of the month of March 2018 :

March 1	Opening stock - 200 tons at ₹ 460 per ton
March 4	Issue to Job No. 1 - 140 tons
March 6	Purchase - 350 tons at ₹ 450 per ton
March 8	Condemned due to deterioration in quality and transferred to scrap - 30 tons.
March 9	Issue to Job No. 2 - 80 tons
March 14	Issue to Job No. 3 - 210 tons
March 17	Purchase - 200 tons at ₹ 480
March 20	Issue to Job No. 4 - 120 tons
March 25	Purchase - 180 tons at ₹ 470
March 28	Issue to Job No. 5 - 280 tons
March 31	Excess found in stock - 43 tons, reason traced to the use of wrong measure during the month

Show the stores ledger entries assuming FIFO as the pricing system.

From the following particulars, prepare Stores Ledger for the month of January 2018 showing material issue prices on the Weighted Average Price Method.

Date	*Particulars*	*Units*	*Rate per unit (₹)*
1-1-2018	Receipts of Material	500	2.00
1-1-2018	Issue of Material	400	
10-1-2018	Receipt of Material	400	3.00
15-1-2018	Issue of Material	300	
18-1-2018	Receipts of Material	400	4.00
22-1-2018	Issue of Material	200	
29-1-2018	Receipts of Material	280	5.00
30-1-2018	Return of 10 units (issued on 15-1-2018)		
31-1-2018	Issue of Material	375	

5 units loss was revealed on 27-1-2018 during stock verification.

The stores ledger of a manufacturing company reveals the following entries of a particular material:

Date		Receipts			Issues
		Qty.	Rate	Amount	Qty.
January 2018 :					
2	... ...	4,000	1.80	7,200	
5	... ...	2,000	1.75	3,500	
18	... ...				10,000
February 2018 :					
3	... ...				5,000
14	... ...	3,000	1.85	5,550	
18	... ...	3,000	1.90	5,700	
20	... ...				10,000

Opening stock as on 1-1-18 was 20,000 units valued at ₹ 40,000. Closing stock as per physical verification on 28-2-18 was 6,950 units.

Complete the account of the material and work out of the value of the closing stock as on 28-2-18 on the basis of Weighted Average method of valuation.

Two components, A and B, are used as follows :

Normal usage	50 units per week each
Minimum usage	25 units per week each
Maximum usage	75 units per week each
Re-order quantity	A : 300 units
	B : 500 units
Re-order period	A : 4 to 6 weeks
	B : 2 to 4 weeks

Calculate for each component :

(a) Re-order level

(b) Minimum level

(c) Maximum level and

(d) Average stock level

(CA-Inter, May 95; FYBAF Nov. 2017, Mar. 2017, adapted)

The following information is available in respect of material:

Re-order quantity = 1,500 units

Re-order period = 4 - 6 weeks

Maximum consumption = 400 units per week

Normal consumption = 300 units per week

Minimum consumption = 250 units per week
Emergency Re-order Period = 2 weeks
Calculate :
(a) Re-order level,
(b) Minimum level,
(c) Maximum level,
(d) Average stock level, and
(e) Danger level

X Ltd. manufactures a special product 'ZED' and provides the following information :
Demand of ZED is 1,000 units per month.
Semi-annual carrying cost - 6%
Raw-material required per unit of finished product - 2 kg
Ordering cost per order - ₹ 90
Purchase price of input unit - ₹ 25 per kg
Required : Calculate (a) Economic order quantity and (b) Total Annual Carrying and Ordering Cos
at that quantity.

ZED Company supplies plastic crockery to fast food restaurants in metropolitan city. One of its products is a special bowl, disposable after initial use, for serving soups to its customers. Bowls are sold in pack of 10 pieces at a price of ₹ 50 per pack. The demand for plastic bowl has been forecasted at a fairly steady rate of 40,000 packs every year. The company purchases the bowl direct from manufacturer at ₹ 40 per pack. The ordering and related cost is ₹ 8 per order. The storage cost is 10% per annum of average inventory investment.

The Purchase Manager of an organisation has collected the following data for one of the A class items.

Interest of the locked up capital	20%
Order processing cost (₹) for each order	₹ 100
Inspection cost per lot	₹ 50
Follow up cost for each order	₹ 80
Pilferage while holding inventory	5%
Other holding cost	15%
Other procurement cost for each order	₹ 170
Annual demand	1,000 units
Cost per item	₹ 10

What should be the EOQ ? ***(T.Y.B.Com., Nov. 2017, 2018, Mar. 2018, ICWA - Final, adapted)***

From the following information, calculate Economic order quantity.

Semi-Annual Consumption 6,000 units

Purchase price of input unit ₹ 25

Ordering cost per order ₹ 45

Quarterly carrying cost 3%

From the following information, calculate Economic Order Quantity by using Formula and Tabulation Method.

Annual Requirement (Units)	6,400
Ordering Cost (Per order ₹)	100
Carrying Cost per unit (₹)	8
Per Unit Price (₹)	80

The firm can procure inventories in various lots such as (i) 6,400 units (ii) 3,200 units (iii) 1,600 units (iv) 800 units (v) 400 units (vi) 200 units and (vii) 100 units. ***(T.Y.B.Com. Oct. 2014, adapted)***

A firm's inventory planning period is one year. Its inventory requirement for this period is 1,600 units. Assume that its order costs are ₹ 50 per order. The carrying costs are expected to be ₹ 1 per unit per year for an item.

The firm can procure inventories in various lots as follows : (i) 1,600 units, (ii) 800 units, (iii) 400 units, (iv) 200 units and (v) 100 units. Which of these order quantities is the economic order quantity? Use (i) Table Method (ii) Equation Method.

A company manufactures a product from raw material which is purchased at ₹ 80 per kg. The company incurs a cost of placing an order of ₹ 250 plus freight of ₹ 1,150 per order. The incremental carrying cost of inventory of raw material is ₹ 2 per kg per annum. In addition, the cost of working capital finance on investment in inventory of raw material is ₹ 5 per kg per anuum. The annual production of product is 50,000 units and 5 units are obtained from one kg of raw material.

(T.Y.B.Com., Nov. 2016, adapted)

From the following information, calculate Economic Order Quantity and Number of orders to be placed in the year according to Formula Method and Tabular Method.