Q1. Following details are available

	Sales in Rs	Profit in Rs
Period I	2,00,000	20,000
Period II	3,00,000	40,000

Find out break-even sales; and P/V ratio.

Q2. The following figures relate to a small manufacturing company

Sales in Rs	6,00,000
Variable Cost in Rs	4,50,000
Fixed Cost (Rs)	45,000

Calculate (i) B.E.P (ii) P/V ratio.

Q3. A factory, producing only one item, which it sells for Rs 12.50 per unit, has a fixed cost equal to Rs. 60,000 and variable cost Rs. 7.50 per unit.
Find out: (i) the number of units to be produced to break even.
(ii) No. of units to be produced to earn a profit of Rs. 12,000.
(iii) The profit, if 25,000 units are produced and sold.

Q4. Following details are available: Actual sales = Rs. 30,000, Break-even sales =Rs. 15,000, Fixed Cost = Rs 6,000. Find out the profit at actual sales.

Q5. The following figures relate to a small manufacturing concern: sales = Rs. 50, 00,000, P/V Ration = 50% Margin of safety = 40%. Find out the B.E.P and profit.

Q6. The fixed costs for the year 1984-85 are Rs.1, 00,000. The estimated sales are Rs. 3, 00,000. The variable cost per unit for the single product made is Rs. 5.00. If each unit sells at Rs. 30 and the number of units involved coincides with the expected volume of output, construct the break-even chart:
  i.   Determine B.E.P
  ii.   Determine the profit at a turn-over of Rs. 1, 80,000.
  iii. Find the margin of safety.
  iv.   Measure the angle of incidence.

Q7. The fixed costs for the years 1987-90 are Rs. 8, 00,000, variable cost per unit is Rs. 30. The estimated sales for the period are valued at Rs. 24, 00,000. Each unit sells at Rs. 180. Determine:
  i.   B.E.P
  ii.   Rs. 18, 00,000 will be the likely sales turn-over for the next budget period, calculate the estimated contribution and profit.
  iii. If a profit target of Rs. 9, 50,000 has been budget, compute the turn-over required.

 Q8. A manufacturer sells the product at Rs. 6 each and variable costs are Rs. 4 each and the fixed costs are Rs. 30.000: (a) Calculate B.E.P. (b) What would be the profit, if the firm sells 20,000 units?
(c) What would be the break even point if the firm spends Rs. 4,000 on R & D. (d) how many units should the manufacturer sell to make a profit of Rs. 20,000?

Q9. The fixed costs for the year 1985-86 are Rs. 10, 00,000, variable cost per unit is Rs. 50. The estimated sales revenues are Rs. 25, 00,000. Each unit sells at Rs. 225 each: (a) Find B.E.P. (b) If Rs. 20, 00,000 will be the likely sales turnover for the next budget period, calculate the contribution and profit. (c) If a profit target of Rs. 8, 00,000 has been budgeted, compute the turn-over required.

Q10.Following information is given to you about a company for two periods.

	Sales in Rs	Profit in Rs
Period I	1,20,000	9,000
Period II	1,40,000	13,000

Calculate:
(a) P/V ratio.
(b) Break even point.
(c) Profit when sales are Rs. 1, 00,000.
(d) Sales required earning profit of Rs. 20,000.
(e) Margin of safety for period II.

Q11. The fixed costs for the year 1990-91 are Rs. 80,000; the estimated sales for the period are valued at Rs. 2, 00,000. The variable cost per unit is Rs. 4. If each unit sells at Rs. 20 and the number of units involved coincides with the expected volume of output, construct the break even chart and determine:
(i) B.E.P.
(ii) Profit earned at turnover of Rs. 1, 60,000.
(iii) Margin of safety.
(iv) Measure the angle of incidence.

Q12. The fixed costs for the financial year 1985-86 are Rs. 40,000. The sales for this period are Rs. 1, 00,000. The variable cost per unit is Rs. 2. Selling price of each product is Rs. 10 and the number of units involved coincides with the expected volume of output. Construct the Break-Even Chart and determine:
(a) B.E.P.
(b) Minimum production to earn profit.
(c) Margin of safety.
(d) Profit earned at turnover of Rs. 80,000.
(e) Angle of incidence?

Q13. A company is planning to launch a new product. For any volume of production below 400 units the fixed cost is Rs. 6,000 and the variable cost is Rs. 20 per unit. If the volume is to be more than 400, larger equipment will be needed and the fixed cost will be Rs. 10,000. However, the variable cost will reduce to Rs. 10 per unit. At any volume the selling price is Rs. 30 per unit:
(a) What is B.E.P.?
(b) What is the profit or loss if the volume is fixed at 500 units?
(c) What are the assumptions made in your analysis.

Q14. A certain product is manufactured in batches of 100. The direct material cost is Rs. 500, direct labour cost is Rs. 750 and the factory overheads are 50% of the prime cost. If the selling expenses are 30% of the factory cost, what would be the selling price of each product so that the profit is 10 % of the total cost?

Q15. The catalogue price of drilling machine is Rs. 6,000 and the discount allowed to distribute is 20%. The administrative and selling expenses are 50% of the factory cost and the material cost, labour cost and factory overheads are in the ratio of 1:3:2. If the cost of labour on the manufacture of the machine is Rs. 1200, determine the profit on each machine.

Q16. A factory owner employed 100 workers during the month of April 1985.
The following are the details of expenditure:
     a.   Cost of material – Rs.40, 000.
     b.   Rate of wages for each worker = Rs. 2 per hour of normal duty and Rs. 4 per hour of overtime duty.
     c.   Man hours per day of normal duty =Rs 8 hours
     d.   Number of holidays per month (without wages) = Rs. 5 days.
     e.   Total overhead expenses = Rs. 10, 00. The workers were paid overtime for 300 hours.

Determine: 1. Total cost/month
            2. Man hour rate on costs.

Q17. An article is being sold in the market for Rs.300.00. Find the manufacturing cost assuming 25% profit of the selling price and selling expenses to be 40% of production cost. If the cost of material used for the article is Rs. 75.00 and the overhead of charges are 40% of labour cost. Find the time taken for its manufacture if the labour rate is Rs. 800 per hour.

Q18. The output of an electric bulb factory is 4000 bulbs per month. Its variable cost is Rs. 3 each and the fixed overheads are Rs. 6,000 per month. The selling price is Rs. 5 per bulb. Work out the minimum monthly production which may not cause any loss to the owner.