**MARGINAL COSTING**

1. From the following information calculate:

(a) Break Even Point

(b)Sales required earning a profit of Rs 150000

© Profit if 80000 units are sold at Rs 9 per unit

Units sold 50000

Fixed Cost 80000

Selling price per unit Rs 10

Variable cost per unit Rs 6

Ans: BEP - 20000 units, Sales – 57500 units, Profit – Rs 1, 60,000

2. Selling price per unit Rs 50

Variable cost per unit Rs 30

Fixed Cost Rs 60000

Calculate (a) Contribution (b) P/V ratio(c) Break Even Point (d) Sales to earn profit of Rs 40,000(e) New Break Even Point when selling price is reduced to Rs 45 per unit.

Ans – Contribution Rs 20,P/V ratio – 40 %,BEP – 3000 units ,Sales – Rs 2,50,000,New BEP – 4000 units.

3. You are given the following data

Year sales profit

Rs Rs

2003 1, 20,000 9,000

2004 1, 40,000 13,000

Assuming that the cost structure and selling price remain unchanged in two years, find out:

(a)P/V Ratio

(b)Break Even Point

© Profit when sales are Rs 1, 00,000

(d)Sales required to earn profit of Rs 20,000 and

(e)Margin of Safety in 2004

Ans P/V Ratio – 20%, BEP – Rs 75,000,Profit when sales are Rs 1,00,000 – Rs 5,000,Sales – Rs 1,75,000,MOS – Rs 65,000

4. In Dec 2004 the position of A ltd was as follows

Sales Rs 1, 80,000

Variable Cost Rs 1, 35,000

Contribution Rs 45,000

Fixed Cost Rs 20,000

Profit Rs 25,000

Calculate (a) P/V Ratio (b) Break Even Point (c) Net Profit when sales are Rs 2, 00,000(d) Sales required to earn a profit of Rs 45,000

Ans – P/V Ratio – 25%, BEP – Rs 80, 000, Net Profit Rs 30, 000, Sales Rs 2, 60,000

5. A Company which manufacture Small Motors has the following data

Material Rs 60

Labor Rs 80

Variable Cost 50 % of labour.Fixed overheads amounts to Rs 2.80 lakh per year

Selling price of the motor is Rs 250

(a)Determine the number of motors that have to be manufactured and sold in a year to break even

(b)How many motors have to be made and sold to make a profit of Rs 70,000 per year?

©If the sale price is reduced by Rs 20 how many motors have to be sold to break even.

Ans: BEP – 4000 units, No of motors to be sold – 5000 units, BEP – 5600 units

6. The following are the estimates for the year 2004-05 relating to a Manufacturing concern

Sales unit - 25000

Fixed Cost – 1, 20,000

Sales Value – 4, 00,000

Variable cost –Rs 8 per unit

You are required to

(a)Find out P/V Ratio, Break Even Point and Margin of Safety

(b)Calculate the Revised P/V Ratio .Break Even Point and Margin of Safety in each of the following cases

(i)Increase of 10 % in Variable Cost

(ii)Decrease of 10 % in selling price

(iii)Increase of sales volume by 5000 units

(iv)Increase in Fixed cost by Rs 15,000

Ans –P/V Ratio – 50 %, BEP – 15000 units, MOS – Rs 1, 60,000

7. The following figures are available from the record of a company as at 31 st March:

2000 2001

Rs Lakhs Rs Lakhs

Sales 150 200

Profit 30 50

Required (a) The P/V ratio and total fixed expenses for both periods

(b)The breakeven level of sales

©Sales required to earn profit of Rs 90 lakhs

(d)Profit or loss that would arise if the sales are Rs 280 lakhs

(e) Margin of safety for both periods

8. From the following particulars calculate:

(a)P/V Ratio

(b)BEP in units

©BEP in value

(d)Margin of Safety

(e)Sales for a desired profit of Rs 20,000

Selling price per unit Rs 20, variable cost per unit Rs16 and Fixed cost Rs 60,000

9. The sales and profits during the two periods were as follows:

Year Sales (Rs) Profit (Rs)

1995 20, 00,000 2, 00,000

1996 30, 00,000 4, 00,000

Calculate (a)P/V Ration(b)BEP(c)fixed cost for both the periods (d)sales required to earn a profit of Rs 5 lakhs (e) profit and when the sales are Rs 16,00,000(f) the new BEP if fixed cost increased by Rs 50,000

10. You are given the following data:

YEAR SALES (Rs) Profit (Rs)

1996 1, 20,000 9000

1997 1, 40,000 13000

Assuming that cost structure and selling price remain unchanged in two years Find out (a)P/V Ratio(b)BEP(c)profit when sales are Rs 1,00,000 and (d)sales required to earn a profit of Rs 20,000

11. The following fig are available for the record of Venus Enterprises as at 31 st March

1999 2000

Rs lakhs Rs Lakhs

Sales 150 200

Profit 30 50

Calculate

(a)The P/V Ratio and total fixed expenses

(b)The breakeven point of sales

©Sales to earn a profit of Rs 90 lakhs

(d) Profit or loss that would arise if the sales were Rs 20 lakhs

12. From the following you are required to

(i)Find the P/V Ratio, BEP AND Margin of Safety

(ii)Calculate the revised P/V Ratio, BEP and Margin Of Safety

(a)Decrease of 10 % in selling price

(b)Increase of 10 % in variable cost

© Increase of Rs 6,000 in fixed cost

Given:

Sales (units) 15,000

Selling price Rs 10 per unit

Fixed expenses Rs 34,000

Variable costs Rs 6 per unit

Ans: P/V Ratio – 40 %, BEP – 8,500 units, MOS – Rs 65,000