

## Chapter: Marginal Costing

(1) From the following particulars, you are required to calculate.

(i) Fixed Cost (ii) Profit Volume Ratio (iii) Break Even Sales (vi) Sales to earn Profit of ₹ 6,00,000 (v) Margin of safety of the year 2009.

Particulars	2009 ₹	2010 ₹
Total Cost	12,96,000	18,72,000
Sales	14,40,000	21,60,000

(2) From the following information calculate.

(I) Amount of Sales (II) Break Even Sales. (III) Margin of Safety:

Fixed Cost - Rs. 80,000

Profit- Rs. 30,000

Profit Volume Ratio- 25%

(3) You are given the following information:

Selling Price - Per Unit – ₹40

Variable Cost - Per Unit - ₹30

Fixed Cost - ₹1,80,000

Calculate:

- (1) Profit Volume Ratio
- (2) The Break-Even Sales (in Rs. & Units)
- (3) Profit at sales ₹ 9,60,000
- (iv) New Break-Even Sales in rupees if sale price is reduced by 10%

(4) If Margin of safety is Rs. 4,00,000 which is 25% of total sales, the company earned profit of ₹80,000.

Calculate: (i) Total Sales (ii) Break Even Sales, (iii) Fixed Cost.

(5) From the following information:

Variable cost per Unit ₹19.20 (60% of Selling price per unit) and Fixed cost 1,56,032.

Calculate

- (i) Profit Volume Ratio.
- (ii) Break Even Sales in units.
- (iii) Margin of Safety in units when sales is 16,000 units.
- (iv) Sales to earn profit of 84,096.

(6) Margin of safety is ₹4,20,000 which is 30% of total Sales and Profit Volume Ratio is 25%.

**From the above Calculate:**

**(i) Total Sales. (ii) Profit on present sales. (iii) Fixed Cost. (iv) Sales to earn profit ₹1,40,000.**

**(7) The following figures relate to Amit Ltd.**

<b>Selling Price per unit</b>	₹ 40
<b>Direct Materials per unit</b>	₹ 12
<b>Direct Labour per unit</b>	₹ 9
<b>Other Variable overheads per unit</b>	₹ 7
<b>Fixed Factory overheads</b>	₹ 3,20,000
<b>Fixed Office overheads</b>	₹ 4,30,000

**Calculate:**

- (i) P/V Ratio
- (ii) Break Even sales in Units and
- (iii) Sales to earn Profit of ₹4,50,000
- (iv) New Break Even Point in and unit if total fixed overheads are increased by 15%

**(8) Profit-volume Ratio -25%.**

Margin of safety - ₹ 24,20,000 (30% of total sales)

**From the above calculate: (I) Total Sales (II) Fixed Cost (III) Sales to earn profit of ₹ 1,40,000 (IV) Profit on present sale.**

**(9) A Company annually manufactures and sells 20,000 units of Product the selling price the selling price of which is ₹ 50 and Profit earned is 10 per unit.**

The analysis of cost of 20,000 units is

Materials Cost ₹ 23,00,000

Labour Cost ₹ 1,00,000

Overhead (50% variable) ₹ 4,00,000

**You are required to compute:**

- (i) Contribution per unit.**
- (ii) P/v ratio.**
- (iii) Break Even Sales in**
- (iv) Break Even sales in Units**
- (v) Sales required to earn a profit of ₹ 4,00,000.**
- (vi) Profit when sales is 18,000 units**
- (vii) Margin of safety when actual sales is ₹ 7,00,000**

**(10) From the following information, calculate.**

- (I) P/V Ratio**
- (II) Fixed Cost**
- (III) Break Even Sales**
- (IV) Profit at sales of ₹ 24,00,000**

Particular	31-03-2018 ₹	31-03-2015 ₹
Sales	18,00,000	21,00,000
Profit	1,20,000	1,80,000

**April – 2016**

**(11) The following information is available from records of a Company as at 31st March 2019 and 2020.**

Particular	2019 ₹ in lakhs	2020 ₹ in lakhs
Sales	1500	2000
Profit	300	500

**Calculate:**

- (i) P/V Ratio**
- (ii) Fixed Cost.**
- (iii) Break Even Sales in**
- (iv) Sales required to earn Profit of ₹ 71,000 Lakhs.**
- (v) Profit for sales of ₹ 2,000 Lakhs**
- (vi) Margin of Safety when sales is ₹ 21,000 Lakhs.**

**(12) Margin of safety is 8,00,000 which is 40% of total sales and Profit Volume Ratio is 30%**

**From the above. Calculate:**

- (i) Total Sales.**
- (ii) Profit on present sales.**
- (iii) Sales to earn profit of Rs. 3,00,000.**
- (iv) Fixed Cost.**

**(13) From the following information, calculate:**

- (i) Profit Volume Ratio.
- (ii) Sales and marginal cost of sales.
- (iii) New B.E.P. in units & in Rs. If selling price is reduced by 10%.
- (iv) Profit at sales ₹ 60,000.

Fixed Cost ₹ 8,000

Break even sales ₹ 40,000

Profit Rs. ₹ 2,000

Selling price ₹ 40 per unit

**(14) Selling price of a product was ₹ 200 per unit.**

Its cost structure was as follows:

Variable Cost per Unit:

Material ₹ 76.

Labour Direct Expenses ₹ 16.

Fixed Overhead for the year:

Factory Overhead ₹ 5,60,000

Office Overhead ₹ 4,40,000

Selling Overhead ₹ 80,000

Number of units sold 40,000 units.

**Calculate:**

- (a) P/v Ratio.
- (b) Break-even Point in Units.
- (c) Margin of Safety.
- (d) Break-Even sales amount, if fixed Overhead is increased by 20%.
- (e) Revised PNV Ratio when selling price is increased by 20%.