A project costing Rs. 15 lakhs yields annually a profit of Rs. 2 lakhs after depreciation @12.5% (straight line method) but before tax 50%.

In this case cash inflow = Profit after tax + Depreciation = Rs. 2,00,000 - Tax Rs. 1,00,000 + 1,87,500.

☑ **Soln. :**

$$\text{Payback period} = \frac{\text{cost of the project}}{\text{annual cash inflow}}$$

$$= 15,00,000 / 2,87,500 = \textbf{5.2 years.}$$

Ex. 2.3.20

Nirmiti associates has following details

Fixed cost = Rs. 50 Lakh

Variable cost per unit = Rs. 200

Selling price per unit = Rs. 400

Find 1. Break equal quantity

2. Break even sales

3. Contribution of actual production quantity is 80,000

4. Represent graphically BEU and sales costs.

Soln. :

Fixed cost = Rs. 50 Lakhs

Variable cost per unit = Rs. 200

Selling price per unit = Rs. 400

(i) Break even quantity $= \dfrac{\text{Fixed cost}}{\text{Selling price per unit} - \text{Variable cost per unit}}$

$= \dfrac{50,00,000}{400 - 200}$

$= 25,000$ units

(ii) Break even sales $= 25000 \times 400$

$= 10,00,0000$

(iii) Actual production quantity = 80,000

$\therefore$ Contribution per unit $= 400 - 200 = 200$

$\therefore$ Contribution $= 200 \times 80,000$

$= \mathbf{16,00,0000}$

Ex. 2.3.21

Surya associates have following details

(i) Fixed cost = Rs. 30 Lakhs

(ii) Variable cost per unit = Rs. 150

(iii) Selling price per unit = Rs. 300

Find (i) Break even quantity

(ii) Break even sale

(iii) Actual production quantity is 80,000 find out contribution.

☑ **Soln. :**

Fixed cost = Rs. 30 Lakhs

Variable cost = Rs. 150

Selling price per unit = Rs. 300

(i) Break even quantity $= \dfrac{\text{Fixed cost}}{\text{Price per unit} - \text{Variable cost per unit}}$

$$= \frac{30,00,000}{300 - 150}$$

$= 20,000$ units

(ii)Break even sale $= 20000 \times 300 = 60,00,000$

(iii)Actual quantity $= 80,000$

Contribution per unit $= 300 - 150 = 150$

$\therefore$ Contribution $= 150 \times 80,000$

$= \mathbf{12,00,0000}$