

Question 1.**Calculation of Operating Leverage**

Particulars	Per Unit	5,000 Units	6,000 Units
	Rs.	Rs.	Rs.
Sales	10.50	52,500	63,000
(-) Variable Cost	6.75	33,750	40,500
Contribution	3.75	18,750	22,500
(-) Fixed Cost		10,000	10,000
Operating Profit or E.B.I.T.		8,750	12,500
Operating Leverage = $\frac{C}{EBIT}$		$\frac{18,750}{8,750}$	$\frac{22,500}{12,500}$
		= 2.14	= 1.8

Question 2.

Sales Revenue (8,000 × 50)	Rs. 4,00,000
(-) Variable Cost (8,000 × 35)	Rs. 2,80,000
Contribution	Rs. 1,20,000
(-) Fixed Cost	Nil
Operating Profit (EBIT)	Rs. 1,20,000

$$OL = C/EBIT = 1,20,000/1,20,000 = 1$$

Question 3.

	A Ltd.	B Ltd.
	Rs.	Rs.
Sales	15,00,000	18,00,000
(-) Variable Costs	7,50,000	4,50,000
Contribution	7,50,000	13,50,000
(-) Fixed Costs	4,50,000	9,00,000
Operating Profit (EBIT)	3,00,000	4,50,000
DOL = C/EBIT	$\frac{7,50,000}{3,00,000}$	$\frac{13,50,000}{4,50,000}$
	= 2.5	= 3.0

B Ltd. has greater business risk as its DOL is higher.

Question 4.**Calculation of Operating Leverage**

Particulars	Per Unit	2,500 Units	3,000 Units
	Rs.	Rs.	Rs.
Sales	14.00	35,000	42,000

(-) Variable Cost	9.00	22,500	27,000
Contribution	5.00	12,500	15,000
(-) Fixed Cost		10,000	10,000
Operating Profit or E.B.I.T.		2,500	5,000
Operating leverage = $\frac{C}{EBIT}$		$\frac{12,500}{2,500}$	$\frac{15,000}{5,000}$
		= 5	= 3

Question 5.

Calculation of Operating Leverage

Particulars	I Situation	II Situation	III Situation
	Rs.	Rs.	Rs.
Sales (4,000 units × Rs. 10)	40,000	40,000	40,000
(-) Variable Cost (4,000 × 6)	24,000	24,000	24,000
Contribution	16,000	16,000	16,000
(-) Fixed Cost	4,000	10,000	12,000
Operating Profit or E.B.I.T.	12,000	6,000	4,000
OL = $\frac{C}{EBIT}$	$\frac{16,000}{12,000}$	$\frac{16,000}{6,000}$	$\frac{16,000}{4,000}$
	= 1.33	= 2.67	= 4.00

Question 6.

Computation of Operating Leverage

Particulars	Existing Situation	Assumed Situation (a)	Assumed Situation (b)
Sales in Units	10,000	5,000	15,000
Sales @ Rs. 20 per unit	2,00,000	1,00,000	3,00,000
(-) Variable Cost @ Rs. 10 per unit	1,00,000	50,000	1,50,000
Contribution	1,00,000	50,000	1,50,000
(-) Fixed Operating Costs	20,000	20,000	20,000
Operating Profit (EBIT)	80,000	30,000	1,30,000
% Change in EBIT		(-) 62.5%	(+) 62.5%
% Change in Sales		(-) 50%	(+) 50%
DOL :			
= $\frac{\% \text{ Change in EBIT}}{\% \text{ Change in Sales}}$		- 1.25	+ 1.25

Question 7.

Given : Operating Leverage = 2.5, Increase in Sales = 40%

We know that Degree of Operating Leverage :

$$= \frac{\text{Percentage Change in EBIT}}{\text{Percentage Change in Sales}}$$

by putting the given values, we get :

$$2.5 = \frac{\text{Percentage Change in EBIT}}{40\%}$$

$$\therefore \text{Percentage Change in E.B.I.T.} = 2.5 \times 40\% = 100\%$$

(b) Given : Operating Leverage = 1.25; The firm wants to double its EBIT, i.e., a 100% rise.

We know that Degree of Operating Leverage :

$$= \frac{\text{Percentage Change in EBIT}}{\text{Percentage Change in Sales}}$$

by putting the given values in above formula, we get :

$$1.25 = \frac{100\%}{\% \text{ Change in Sales}}$$

$$\therefore \text{Percentage in Sales} = \frac{100}{1.25} = 80\%$$