1. Calculate operating leverage, financial leverage and combined leverage under situation 1 and 2 in financial plans A & B from the following information relating to the operation and capital structure of a company.

Installed capacity – 2,000 units

Actual production and sales – 50% of the capacity

Selling price ₹20 per unit

Variable Cost ₹10 per unit

Fixed Cost:

Under Situation I ₹ 4,000

Under Situation II ₹ 5,000

|  |  |  |
| --- | --- | --- |
| **Capital Structure:** | **Financial Plan** | |
|  | **A (₹)** | **B (₹)** |
| Equity | 5,000 | 15,000 |
| Debt (Rate of Interest 10%) | 15,000 | 5,000 |
|  | 20,000 | 20,000 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Particulars** | **Financial Plan A** | | **Financial Plan B** | |
|  | **Situation 1** | **Situation 2** | **Situation 1** | **Situation 2** |
| units | 1000 | 1000 | 1000 | 1000 |
| Sales | 20000 | 20000 | 20000 | 20000 |
| Less: Variable Cost | 10000 | 10000 | 10000 | 10000 |
| Contribution | 10000 | 10000 | 10000 | 10000 |
| Fixed Cost | 4000 | 5000 | 4000 | 5000 |
| EBIT | 6000 | 5000 | 6000 | 5000 |
| Less: Interest | 1500 | 1500 | 500 | 500 |
| EBT | 4500 | 3500 | 5500 | 4500 |
|  |  |  |  |  |
| DOL = contribution/EBIT | 1.6666667 | 2 | 1.66666667 | 2 |
| DFL = EBIT / EBT | 1.3333333 | 1.4285714 | 1.09090909 | 1.1111111 |
| DCL | 2.2222222 | 2.8571429 | 1.81818182 | 2.2222222 |

2. The selected financial data for A, B and C companies for the year ended 31st March, 2014 were as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | A | B | C |
| Variable cost as a % of sales | 66.67 | 75 | 50 |
| Interest Expense | 200 | 300 | 1000 |
| Degree of Operating Leverage | 5 | 6 | 6 |
| Degree of Financial Leverage | 3 | 4 | 2 |
| Income Tax rate | 35% | 35% | 35% |

Prepare an income statement for each of the companies.

|  |  |  |  |
| --- | --- | --- | --- |
| **Income Statement:** |  |  |  |
| **Particulars** | **A** | **B** | **C** |
| Sales | 9000 | 36000 | 24000 |
| Less: Variable cost | 6000 | 27000 | 12000 |
| Contribution | 3000 | 9000 | 12000 |
| Less: Fixed cost | 2400 | 7500 | 10000 |
| EBiT | 600 | 1500 | 2000 |
| Less: Interest | 200 | 300 | 1000 |
| EBT | 400 | 1200 | 1000 |
| Less: Tax @ 35% | 140 | 420 | 350 |
| EAT | 260 | 780 | 650 |
|  |  |  |  |
| DFL | 3 | 4 | 2 |
| DFL = EBIT/EBT | x/x-200 | x/x-300 | x/x-1000 |
| DOL | 5 | 6 | 6 |
| DOL = Contribution / EBIT |  |  |  |
| Contribution = DOL \* EBIT | 5\*600 | 6\*1500 | 6\*2000 |
| Variable cost as a % of sales | 66.67 | 75 | 50 |

3. From the following prepare income statement of Company A and B.

|  |  |  |
| --- | --- | --- |
|  | A Co., | B Co., |
| Financial Leverage | 4:1 | 5:1 |
| Interest Expense | ₹ 6,00,000 | ₹ 7,00,000 |
| Operating Leverage | 3:1 | 4:1 |
| Variable cost as a % of sales | 66.67 | 50 |
| Income Tax rate | 30% | 40% |
| No. of Equity shares | 100000 | 70000 |

|  |  |  |
| --- | --- | --- |
| **Income Statement:** |  |  |
| **Particulars** | **A Co.,** | **B Co.,** |
| Sales | 7200000 | 7000000 |
| Less: Variable cost | 4800000 | 3500000 |
| Contribution | 2400000 | 3500000 |
| Less: Fixed cost | 1600000 | 2625000 |
| EBiT | 800000 | 875000 |
| Less: Interest | 600000 | 700000 |
| EBT | 200000 | 175000 |
| Less: Tax @ 35% |  |  |
| EAT |  |  |
|  |  |  |
| DFL | 4 | 5 |
| DFL = EBIT/EBT | x/x-600000 | x/x-700000 |
| DOL | 3 | 4 |
| DOL = Contribution / EBIT |  |  |
| Contribution = DOL \* EBIT | 3\*800000 | 4\*875000 |
| Variable cost as a % of sales | 66.67 | 50 |