

TOPICS : Leverages and Capital Structure

NOTES: (1) WORKING NOTES SHOULD FORM PART OF ANSWERS.

(2) NEW QUESTION SHOULD BE ON NEW PAGE

QUESTION NO.1

(5*2 = 10 MARKS)

A. Z Ltd is considering the installation of a new project costing Rs. 80,00,000. Expected Annual Sales Revenue from the project is Rs. 90,00,000 and its Variable Costs are 60% of Sales. Expected Annual Fixed Cost other than Interest is Rs. 10,00,000. Corporate Tax Rate is 30%. The Company wants to arrange the funds through issuing 4,00,000 Equity Shares of Rs. 10 each and 12% Debentures of Rs. 40,00,000. **You are required to:**

1. Calculate the Operating, Financial and Combined Leverages and Earnings Per Share (EPS).
2. Determine the likely level of EBIT, if EPS is - (a)Rs. 4, (b)Rs. 2, and (c)Rs. 0.

B. Consider the following information for Omega Ltd.:

	Rs. in lakhs
EBIT (Earnings before Interest and Tax)	15,750
Earnings before Tax (EBT):	7,000
Fixed Operating costs:	1,575

Required:

Calculate percentage change in earnings per share, if sales increase by 5%.

QUESTION NO.2

(10 MARKS)

A Company needs Rs. 31,25,000 for the construction of new plant. The following three plans are feasible:

Plan-I The Company may issue 3,12,500 equity shares at Rs. 10 per share.

Plan-II The Company may issue 1,56,250 ordinary equity shares at Rs. 10 per share and 15,625 debentures of Rs. 100 denomination bearing a 8% rate of interest.

Plan-III The Company may issue 1,56,250 equity shares at Rs. 10 per share and 15,625 preference shares at Rs. 100 per share bearing a 8% rate of dividend.

- (i) if the Company's earnings before interest and taxes are Rs. 62,500, Rs. 1,25,000, Rs. 2,50,000, Rs. 3,75,000 and Rs. 6,25,000, what are the earnings per share under each of three financial plans? Assume a Corporate Income tax rate of 40%.
- (ii) Which alternative would you recommend and why?
- (iii) Determine the EBIT-EPS indifference points by formulae between Financing Plan I and Plan II and Plan I and Plan III.

QUESTION NO.3**(5*2 = 10 MARKS)**

- A. From the following details of X Ltd., **prepare the Income Statement** for the year ended 31st December, 2014:

Financial Leverage	2
Interest	Rs. 2,000
Operating Leverage	3
Variable cost as a percentage of sales	75%
Income tax rate	30%

- B. The capital structure of ABC Ltd. as at 31.3.15 consisted of ordinary share capital of Rs.5,00,000 (face value Rs. 100 each) and 10% debentures of Rs. 5,00,000 (Rs. 100 each). In the year ended with March 15, sales decreased from 60,000 units to 50,000 units. During this year and in the previous year, the selling price was Rs. 12 per unit; variable cost stood at Rs. 8 per unit and fixed expenses were at Rs. 1,00,000 p.a. The income tax rate was 30%.

You are required to calculate the following:

- (i) The percentage of decrease in earnings per share.
- (ii) The degree of operating leverage at 60,000 units and 50,000 units.
- (iii) The degree of financial leverage at 60,000 units and 50,000 units.

QUESTION NO.4**(10 MARKS)**

A Company earns a profit of Rs. 3,00,000 per annum after meeting its Interest liability of Rs. 1,20,000 on 12% debentures. The Tax rate is 50%. The number of Equity Shares of Rs. 10 each are 80,000 and the retained earnings amount to Rs. 12,00,000. The company proposes to take up an expansion scheme for which a sum of Rs. 4,00,000 is required. It is anticipated that after expansion, the company will be able to achieve the same return on investment as at present. The funds required for expansion can be raised either through debt at the rate of 12% or by issuing Equity Shares at par.

Required:

- (i) Compute the Earnings per Share (EPS), if:
 - The additional funds were raised as debt
 - The additional funds were raised by issue of equity shares.
- (ii) Advise the company as to which source of finance is preferable.