Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS/MMA/SEM-3/MMAFNE-306/2010-11

2010-11

CAPITAL STRUCTURE

Time Allotted : 3 Hours Full Marks : 70

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following : 10 × 1 = 10

i) According to the Net Income Approach, as leverage ratio increases, the average cost of fund

a) increases b) decreases

c) remains constant d) none of these.

ii) According to MM's second proposition

a) $r_E = r_A + (r_A - r_D)(D/E)$ b) $r_E = r_A - (r_A + r_D)(D/E)$

c) $r_E = r_A \times (r_A - r_D)(D/E)$ d) $r_E = r_A / (r_A + r_D)(D/E)$.

iii) Asymmetric Information Theory was proposed by

a) Franco Modigliani b) Merton Miller

c) Both (a) and (b) d) Myers.

iv) Which of the following is not a ratio for analyzing capital structure ?

a) Debt service Coverage Ratio

b) Interest Coverage Ratio

c) Fixed Assets Coverage Ratio

d) Debtors Turnover Ratio.

v) The loss in efficiency on account of restrictions on operational freedom due to financial distress plus the cost of monitoring the firm represent

a) Agency Cost b) Finance Cost

c) Operational Cost d) Opportunity Cost.

vi) The effect of existence of fixed costs in the capital structure of the firm is termed as

a) Financial Leverage b) Operating Leverage

c) Combined Leverage d) Total Leverage.

vii) The value of the firm is defined as

a) $V = E + D$ b) $V = E - D$

c) $V = E.D$ d) $V = E/D$.

viii) Operating leverage refers to

a) Financing a portion of the firm's assets with securities bearing a fixed rate of return

b) The additional chance of insolvency borne by the common shareholder

c) The incurrence of fixed operating costs in the firm's income stream

d) High degree of variable cost of production.

ix) A firm has a DOL of 3·5 at Q units. What does this tell us about the firm ?

a) If sales rise by 3·5% at the firm, then EBIT will rise by 1%

b) If EBIT rises by 3·5% at the firm, then EPS will rise by 1%

c) If EBIT rises by 1% at the firm, then EPS will rise by 3·5%

d) If sales rise by 1% at the firm, then EBIT will rise by 3·5%.

x) Calculate the break-even (quantity) point given the following information : The firm has Rs. 10,00,000 in fixed cost. The firm produces only one product and anticipates selling each unit for Rs. 25 with variable costs of Rs. 5 per unit.

a) 2,00,000 b) 50,000

c) 40,000 d) 1,00,000.

xi) Which of the following formulae represents the correct calculation of the degree of financial leverage ?

a) [NI + T + I]/[NI – I – PD/(1 – T)]

b) EBIT/[EBIT – I – PD/(1 – T)]

c) EBIT/[NI – I – PD/(1 – T)]

d) All of these.

xii) The discount rate used to determine the present value of a stream of expected future cash flows is referred to as the

a) Net operating income

b) Capitalization rate

c) Capital structure

d) Yield on the company's market value of common equity.

xiii) What is the market value of common equity under the NOI approach ? The firm has an expected net operating income of Rs. 5,000 with Rs. 4,000 of debt (market value). Assume that the overall capitalization rate is 20%.

a) Rs. 5,000 b) Rs. 20,000

c) Rs. 21,000 d) Rs. 25,000.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. The following information is available for XYZ Co. :

EBIT	Rs. 11,20,000
PBT	Rs. 3, 20,000
Fixed Cost	Rs. 7,00,000

Calculate the combined leverage and show the % change in EPS if the sales are expected to increase by 5%.

3. What is meant by leverage ? What are the types of leverage ?

4. Why is increasing financial leverage indicative of financial risk ?

5. What is capital structure ? Distinguish between financial structure and capital structure.

6. *X* and *Y* are two companies identical in every respect except that *Y* uses debt in its capital structure whereas *X* does not use debt. The corporate tax rate is 50%. The EBIT is Rs. 4,00,000. The equity capitalization rate of the unlevered company is 15% while that of the levered company is 20%. Determine the value of the firm using the Net income approach.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. a) What is EBIT-EPS analysis ?

   b) When does financial leverage become unfavourable ?

   c) Why must a finance manager keep in mind the degree of financial leverage in evaluating various financial plans ? 4 + 5 + 6

8. a) Calculate the operating leverage, financial leverage and combined leverage from the following data under Situation I and II Financial Plan *A* and *B* :

Installed Capital	4000 units
Actual Production and Sales	75% of the capacity
Selling Price	Rs. 30 per unit
Variable cost	Rs. 15 per unit
Fixed Cost :	
– Situation I	Rs. 15,000
– Situation II	Rs. 20,000

Capital Structure :

Financial Plan

	A	*B*
	(Rs.)	(Rs.)
Equity	10,000	15,000
20% Debt	10,000	5,000
Total	20,000	20,000

   b) State MM Proposition II and show graphically the general implications of MM Proposition II. 7 + 8

9. Gama Ltd. has an EBIT of Rs. 4,00,000. The firm currently has outstanding debts of Rs. 15,00,000 at an average cost of debt of 10%. Its cost of equity is estimated to be 16%.

   i) Determine the current value of the firm

   ii) Determine the firm's overall capitalization rate

   iii) The firm is considering to issue capital of Rs. 5,00,000 in order to redeem Rs. 5,00,000 debt. The cost of debt is expected to be unaffected. However, the firm's cost of equity is to be reduced to 14% as a result of decrease in leverage. Would you recommend the proposed action ?

10. Explain the Traditional Approach of capital structure of a firm.

11. a) Discuss the pecking order of financing.

    b) The following information is available for Avinash Metals :

    - Net Operating Income Rs. 40 million
    - Interest on debt Rs. 10 million
    - Cost of Equity 18 per cent
    - Cost of Debt 12 per cent

    i) What is the average cost of capital of Avinash ?

    ii) What happens to the average cost of capital of Avinash, if he employs Rs. 100 million of debt to finance a project which earns an operating income of Rs. 20 million ? Assume that the Net Operating Income (NOI) method applies and there are no taxes. 7 + 8

12. a) What simplifying assumptions are commonly made to study the relationship between capital structure and firm value ?

b) What are the main propositions of Traditional approach ?

c) Discuss the implications of corporate and personal taxes on capital structure. 4 + 5 + 6