2023

COMMERCE

Paper : CC-301

(Strategic Financial Management and Business Valuation)

Full Marks : 40

The figures in the margin indicate full marks.

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

Module - I

(Strategic Financial Management)

Answer ***any two*** questions.

1. Calculate Net Present Value and Internal Rate of Return of the two mutually exclusive projects from the information given below and suggest which one should be selected, based on your computation.

	Project-I	**Project-II**
Investment (₹)	1,00,000	1,00,000
Cash Inflow	₹	₹
Year 1	1,50,000	40,000
Year 2	—	40,000
Year 3	—	1,40,000
Overall Cost of Capital = 12%		

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2. (a) What is Working Capital Leverage? What does it signify?

(b) Discuss briefly Conservative and Aggressive approaches of Working Capital Management.

(c) From the following information, determine the Optimum Level of cash balance that the firm should maintain.

A firm plans to hold ₹ 20 lakh in cash, on an average, to meet the transaction needs during its planning period of next six months. The firm has this amount in marketable securities at 10% p.a. The fixed cost of conversion of marketable securities is ₹ 500 per transaction. 2+4+4

3. (a) Discuss the signalling impact of dividend policy, in view of irrelevance dividend theory.

(b) Write down differences between recourse and non-recourse financing.

(c) XYZ Ltd. has 25,000 outstanding shares. The current market price per share is ₹ 100 each. Last year EPS was ₹ 10. The company is contemplating the declaration of dividend of ₹ 5 per share at the end of current financial year. The company expect to have a net profit of ₹ 2.5 lakhs and a proposal of making a new investment of ₹ 5 lakhs.

Show that under the MM assumptions payment of dividend does not affect the value of firm. Show all calculations including share price for new issue, number of new shares to be issued and value of the company under both the situation. 2+2+6

4. (a) Highlight the significance of marginal cost of capital in comparison to weighted average cost of capital in evaluating investment project proposals.

(b) If the equity capitalisation rate of a levered firm is K_e, and the overall capitalisation rate of the firm is K_o, and K_d being the cost of debt capital, then show that at various Debt-Equity (D/E) levels of the firm,

$$K_e = K_o + (K_o - K_d)(D/E).$$

(c) A company needs ₹ 12 lakhs for the new factory, which is expected to earn EBIT of ₹ 2 lakhs p.a. It is considering the possibility of issuing equity shares plus raising a debt of ₹ 2 lakhs, ₹ 6 lakhs and ₹ 12 lakhs. The current market price of the shares is ₹ 40 and will drop to ₹ 25 if the borrowing exceeds ₹ 7.5 lakhs. The costs of borrowings are 10.5% upto ₹ 2.5 lakhs, 14% from 2.5 lakhs to 6.25 lakhs and 16% above ₹ 6.25 lakhs. Assuming the tax rate to be 30%, discuss which option is better and risks involved in terms of DOL. Also calculate ROE.

(2+2)+(3+2+1)

Module - II

(Business Valuation)

Answer ***any two*** questions.

5. (a) Estimate Free Cash flow to Equity shareholders for the relevant financial years based on the following information: (All financial figures are in Indian Rupees Crores) Figures in parentheses are to be read as negative.

FY	Net Income	Depreciation	Capex	Δ Non-Cash NWC
2024	1.36	0.11	0.24	0.08
2025	1.95	0.12	0.26	(0.11)
2026	2.12	0.13	0.26	0.15
2027	2.35	0.15	0.28	(0.02)
2028	2.88	0.18	0.30	0.13

Additional Information :

(i) During this explicit forecast period of 5 years, the firm shall be redeeming a part of its existing 12 percent non-cumulative debt amounting to ₹ 1.25 crores.

(ii) For such redemption, it is contemplating to refinance through a fresh issue of 9 percent Debentures worth ₹ 2.50 crores.

(iii) The firm is subjected to corporate taxes under the relevant provisions @ 25 percent.

(iv) Any changes in interest obligations due to debt restructuring is considered while estimating Net Income of the forecasted period.

(v) Accounting policies of the firm are consistent with respect to depreciation, amortization, reinvestment, and payouts and the management do not wish to initiate a significant change during the forecasted period.

(b) Comment on the following statements in the context of valuation of a firm.

(i) Free Cash flow to equity of a levered firm is always lesser than the free cash flow of the firm.

(ii) Dividend discount model of valuation of firm is viewed as outmoded as it considers Dividend as the only cash flow received by equity owners.

(iii) Other things remaining equal, an increase in financial leverage will increase the beta of the equity in a firm.

(iv) If the growth rate is expected to drop significantly after the initial growth phase of the firm, the payout ratio should be higher in the stable phase than in the growth phase.

(v) The stock price will exceed the book value of equity, if the return on equity exceeds the cost of equity. 5+5

6. (a) Give your opinion regarding the following statements :

(i) Since valuation models are quantitative, valuation is objective.

(ii) The more quantitative a model, the better the valuation.

(iii) The product of valuation (i.e., the value) is what matters; the process of valuation is not important.

(iv) A valuation analyst firm is researching the relative valuation of a company in the aerospace industry. The relevant information about the company is provided below : (All figures are in ₹)

Price per share	150
Market value of Debt	50 million
Cash and cash equivalents	5 million
Net Operating Income	49 million
Depreciation and amortization	8 million
Shares outstanding	5 million
Book value of Debt	52 million
Net income	49.5 million
Interest expenses	3 million
Taxes	2 million

Based on the above information, calculate the mose appropriate valuation multiple for this company and comment. 6+4

7. (a) The high growth period of an unlevered firm is expected for a tenure of 9 years which it is experiencing since FY 2021-22. During these period the net income growth is expected to be maintained at 12.5 percent whereas the return on equity shall be around 25 percent. The firm reported its annual turnover of ₹ 26,500 crores with a net income of ₹ 5,125 crores based on the last audited financial statement of FY 2022-23. Once the high-growth period gets over, it will pass through a transition period for another 3 years where the return on equity shall be around 12 percent and thereafter it is expected stabilise at 6 percent on its earnings till perpetuity. The

firm is subjected to income taxes at 30 percent. Expected return from a well-diversified market benchmark index portfolio is around 12.5 percent and whereas return from instruments having zero default risk and zero reinvestment risk is 4.5 percent. The current beta of this firm is 1.45 which shall increase to 2.2 during the stable growth period. There shall be no change in the equity reinvestment rate of the firm. Based on this information provided, can you compute the terminal value of equity of this firm.

(b) Compute the value of the firm to equity based on the following information:

High Growth rate = 11%; Stable Growth rate = 6%

Plowback rate during explicit period = 60%; Plowback rate during stable period = 30%

Tenure of high growth (expected) = 5 year

Risk free rate obtained from Treasury bond = 4.5%

Market Risk Premium (based on well diversified market portfolio) = 10%

Cost of Debt Premium = 5%

Beta of the firm = 1.33 (during high growth period) and 1.66 (during stable growth period)

Debt to equity ratio = 2/5 (during high growth period) and 3/5 (during stable growth period)

EBIT (current financial year) = ₹ 3500 crores

Corporate tax rate = 30% 5+5

8. (a) You have been asked to estimate the PE ratio for a firm having the following characteristics:
Length of super normal growth = 6 years
Growth rate in Sales revenue during first 6 years is 15% whereas during stable period is 10%.
Beta =1.5, Treasury Bond rate = 6%, Risk Premium = 6%,
Payout ratio in first 6 years = 25%; Payout ratio after 6 years = 50%.
Earnings growth rate during first 6 years = 10%; and 5% during stable period.

(b) You are currently scanning a list of stocks in the pharma sector for valuation purposes. The PE ratios, expected growth rates in earnings, risk levels and payout ratios are listed below:

Firm	Current PE	Growth	Beta	Payout
RP	40	30%	High	10%
BS	10	10%	Low	50%
TC	40	10%	High	10%
SD	40	10%	Low	10%
SS	10	30%	Low	50%
AP	10	30%	High	50%

Can you identify the most probable undervalued firm and the overvalued firm from the above mentioned list of stocks? Give strong support in favour of your answer.

(c) Vande Bharat Public Corporation reported an earnings per share of ₹ 27.50 in FY 22-23, and paid dividends per share of ₹ 16.50. The earnings had grown 8 percent a year over the prior five years and were expected to grow 5 percent a year in the long-term starting from FY 23-24. The stock had a beta of 1.35 and was trading 12 times of its earnings. The treasury bond rate is 5%. The market risk premium is 6 percent. Estimate the PE ratio of Vande Bharat and comment whether the firm is over-valued or undervalued. Also determine an approximate value of Vande Bharat if its Net Income post tax is estimated to touch ₹ 750 million in FY 23-24. 3+4+3