rinivas institute of Technolog

## GBCS SCHEME

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16MBAFM406

## Fourth Semester MBA Degree Examination, June/July 2018 Corporate Valuation

Time: 3 hrs.

Max. Marks: 80

Note: 1. Answer any FOUR full questions from Q.No.1 to Q.No.7.

- 2. Question No. 8 is compulsory.
- 3. PV Table should be allowed.
- 1 a. What are the sources of uncertainty in valuation?

(02 Marks)

b. What are the important types of intangiable assets? How are they valued?

(06 Marks)

c. XYZ Ltd is an unlisted company engaged in the manufacture of industrial chemicals. XYZ has a debt-equity ratio of 0.8 and a tax rate of 30%. There are 3 listed firms AB, MN and ST engaged in similar steel business. Their equity betas, debt — equity ratios and tax rate are as follows:

Company	Equity beta	Debt-Equity ratio	Tax rate
(AB	1.20	1.2	30%
MN	1.10	1.1	30%
ST	1.05	1.2	30%

What is the equity beta for XYZ Ltd?

(08 Marks)

2 a. What are the best practices with respect to multiples?

(02 Marks)

- b. The current dividend on equity shares of Divya Ltd is Rs. 2 and Divya Ltd is expected to enjoy an above normal growth rate of 20% for a period of 6 years, thereafter growth rate will fall and stablise at 10%. The equity investor requires a return of 15%. What is the value of equity shares of Divya Ltd?

  (06 Marks)
- c. Discuss briefly the 5 broad approaches for valuing company.

(08 Marks)

3 a. What are the important difference between valuing a company and valuing a project?

(02 Marks)

- b. Angel ventures, a PE investor is considering investing Rs.3000 million in the equity of Delta systems, a start up IT company. Angel's required return from this investment is 35% and it is planned holding period is 5 years. Delta has projected an EBITDA of Rs. 4000 million for year 5. An EBITDA multiple of 6 for year 5 is considered reasonable. At the end of year 5, Delta systems is likely to have a debt of Rs.2500 million and a cash balance of Rs.800 million.
  - (i) What ownership share in Delta systems should Angel Venture ask for?
  - (ii) What is the post-money investment value of the firm's equity?
  - (iii) What is the pre-money investment value?

(06 Marks)

Analog Limited is considering a capital project for which the following information is available:

Investment outlay Rs 5000; Project life = 4 years; Salvage value = 0;

Annual Revenue Rs. 6000; Annual costs = 4000 (Excluding depreciation, interest and taxes); Depreciation = straight line (For tax purposes); Tax rate: 40%;

Debt equity ratio = 4:5; Cost of equity = 18%; Cost of debt = 9% (post-tax)

- (i) \ Calculate the EVA of the project over its life.
- (ii) Compute the NPV of the project.

(08 Marks)

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4 a. What are the key value drivers of free cash flow?

(02 Marks)

b. The following information is available for MN company:

ROE = 20%, Cost of equity = 15%,

Dividend payout ratio = 0.4, Book value per share = Rs. 50. Net profit margin = 10% Calculate the following for MN company:

- (i)  $\frac{P_0}{E_1}$
- (ii)  $\frac{P_0}{B_0}$
- (iii) R
- (iv) PEG
- (v) Value ratio. (06 Marks)
- c. What are the guidelines bear in mind while doing corporate valuation?

(08 Marks)

5 a. List the key steps involved in the Marakon approach.

(02 Marks)

- b. The current dividend on an equity shares of IMC computers Ltd. is Rs. 3. The present growth rate is 50%. However this will decline linearly over a period of 10 years and then stabilize at 12%. What is the intrinsic value per share of IMC computers Ltd. using H model, if investors require a return of 16%?

  (06 Marks)
- c. The profit and loss A/C and Balance sheet of Keerthi corporation for two years are given

P & L A/C	(Rs. in million)
P&LA/C	(Rs. in million

,	2016	2017
Net sales	5600	6440
Income from marketable securities	140	210
Non-operating income	70	140
Total income	5810	6790
Cost of goods sold	3220	3780
Selling and administrative expenses	700	370
Depreciation	350	420
Interest expenses	336	392
Total cost and expenses	4606	5362
Profit before tax	1204	1428
Tax provision	364	448
PAT	840	980
Dividend	420	560
Retained earnings	420	420

Balance Sheet				(Rs. in million)		
Liabilities	2016	2017	Assets	2016	2017	
Equity capital	2100	2100	Fixed assets	4200	4550	
Reserve and surplus	4680	2100	Investments	1260	1400	
	0.500	20.40	NT	0.40	1100	

Debt 2520 2940 Net current assets 840 1190 6300 7140 6300 7140

Assume a tax rate of 40%, calculate

- (i) What is the NOPLAT for year 2?
- (ii) What is the free cash flow to the firm (FCFF) for year 2?

(iii) Give the break-up of the financing flow for year 2.

(08 Marks)

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- 6 a. MN Ltd. earns a return on equity of 25%. Its dividend payout ratio is 0.40. Required rate of return is 18%. The book value per share is Rs.50. What is market price per share according to Marakon model? (02 Marks)
  - b. Describe the context in which corporate valuation is done.

(06 Marks)

c. You have developed the following projections for PQR Ltd.

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	1	2	3	(A)	5
Free cash flow to firm	200	250	300	340	380
Interest bearing debt	500	400	300	200	100
Interest expenses	60	48	36	24	12

Calculate the enterprise value of PQR Ltd using the following assumptions:

- i) Beyond year 5, the FCFF will grow at a constant rate of 10% p.a.
- ii) PQR's unlevered cost of equity 14%.
- iii) After year 5, PQR will maintain a debt-equity ratio of 4:7.
- iv) The borrowing rate of PQR will be 12%.
- v) The rate is 30%.
- vi) The risk free rate is 8%.
- vii) The market risk premium is 6%.

(08 Marks)

7 a. Under which situation DCF method is applicable?

(02 Marks)

b. Discuss the steps involved in Relative valuation.

(06 Marks)

- c. What are the areas of activity for making value happen according to the Mc Kinsey approach?
  (08 Marks)
- Case Study: (Compulsory)

Exotica corporation is expected to grow at a higher rate for 5 years, thereafter the growth rate will fall and stabilize at a lower level. The following information is available:

I Base year (year '0') information	Revenue = Rs.4000 million,
	EBIT (12.5% revenue) = Rs 500 million.
	Capital expenditure = Rs 300 million,
	Depreciation = Rs.200 million,
	Net working capital as a % of revenue = 30%,
	Tax rate = 40%,
	Paid up equity (10 par) = Rs. 300 million,
	Market value of debt = Rs. 1250 million
II Inputs for High Growth rate	Length of high growth phase = 5 year,
5	Growth rate in revenue, depreciation,
	EBLT and capital expenditure = 10%,
	Net working capital as a % of revenue = 30%,
	Tax rate = $40\%$ , Cost of debt = $15\%$ (pre-tax),
	Debt-equity ratio = 1:1, Risk free rate = 13%
	Market risk premium = 6%, Equity beta = 1.333
III Inputs for the stable growth	Expected growth rate in revenue and EBIT = 6%
period.	Net working capital as a % of revenue = 30%.
	Capital expenditures are offset by depreciation.
	Cost of debt – 15% (pre-tax)
Legin,	Tax rate $-40\%$ , Debt $-$ equity ratio $= 2:3$
1/23	Risk – free rate = 12%, Market risk premium = 7%
	Equity beta = 1.0

Calculate the value of the firm?

(16 Marks)