VPM's DR VN BRIMS, Thane

Programme: MMS (2015-17) (Finance) Third Semester Examination October 2016

Subject	Corporate Valuation		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages		Date	22.10.2016

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.

Q. 1 (a) John Ltd. and Miller Ltd. are planning to merge. The total value of the companies are dependent on the fluctuating business conditions. The following information is given for the total value (debt + equity) structure of each of the two companies.

Rs. Lakhs

Business Condition	Probability	John Ltd.	Miller Ltd.
High Growth	0.20	820	1050
Medium Growth	0.60	550	825
Slow Growth	0.20	410	590

The current debt of John Ltd. is Rs. 65 Lakhs and of Miller Ltd. is Rs. 460 Lakhs. Calculate the expected value of debt and equity separately for the merged entity. (10 Marks)

(b) You are appointed to value Platinum Ltd., a jewelry industry company. The management asks you to value the company based on the comparable company approach.

(Rs. Crores)

Particulars	Gold Ltd.	Silver Ltd.	Diamond Ltd.	Platinum Ltd.
Market Value	200	150	180	?
Replacement	275	200	220	250
Value				
Book Value	100	150	150	200
PAT	20	18	16	18
Sales Revenue	300	240	250	275

(10 Marks)

Attempt Any FOUR from the Remaining SIX Questions

Q2) Any two from (a) or (b) or (c) ——— (5x2) = 10 Marks

a) Sun Ltd. projects the following figures for the financial year 2016-2017:

Net Income after tax= Rs.130 crores.Depreciation= Rs.50 crores.Capital expenditure planned= Rs.80 crores.Additional working capital needed= Rs.25 crores.Principal repayment of debt= Rs.10 crores.

As the firm has a very low debt equity ratio , it plans to increase its leverage by financing debt repayment and 30% of the planned capital expenditure and additional working capital needs by raising fresh debt.

Project the free cash flow to equity for 2016-2017.

- **b)** What do you understand by Economic Value Added (EVA)? How can management enhance EVA for a company?
- c) XYZ Ltd. paid a dividend of Rs. 2 for the current year. The dividend is expected to grow at 40% for the next 5 years and at 15% per annum thereafter. The return on 182 days T-bills is 11% per annum and the market return is expected to be around 18%with a variance of 24%. The co-variance of XYZ's return with that of the market is 30%. You are required to calculate the required rate of return and intrinsic value of the stock.

Q3) Any two from (a) or (b) or (c) ———
$$(5x2) = 10$$
 Marks

- a) Explain the disadvantages of Relative Valuation method of Corporate Valuation.
- **b)** The following financial data pertaining to Infotech Ltd., an IT company are made available to you:

		Rs. Crores	
FY ended	2016	2015	2014
EBIT	696.03	325.65	155.86
Non-branded	53.43	35.23	3.46
Income			
Inflation	1.000	1.087	1.181
Compounded			
factor@8%			

Remuneration of capital: 5 % of average capital employed

Average Capital employed: Rs. 1,112 crores

Corporate Tax Rate: 35% Capitalization Factor: 16%

You are required to calculate the Brand value for Infotech Ltd.

c) From the following details, compute according to Lev and Schwartz (1971) model, the total value of human resources for employee groups- Skilled and unskilled:

Particulars	Skilled	Un-skilled
(i) Annual average earning of an employee till age	Rs. 1,00,000	Rs. 60,000
of retirement		
(ii) Age of retirement	65 years	62 years
(iii) Discount rate	20%	20%
(iv) No. of employees in the group	25	20
(v) Average age	62 years	60 years

It is assumed that employees will leave the organization only on retirement.

Q4) Any two from (a) or (b) or (c) ——— (5x2) = 10 Marks

a) Following is the information given for ABC Ltd:

Current Dividend: Rs. 2.50 per share

Discount rate: 10.5% Growth rate: 2%

- (i) Calculate the present value of stock of ABC Ltd.
- (ii) Is its stock overvalued, if stock price is Rs. 35, ROE= 9% and EPS= Rs. 2.25? Show detailed calculation.

b) M Ltd. agrees to acquire N Ltd. based on the capitalization of last three years profits of N Ltd. at an earning yield of 25%

Profits of N Ltd. for the years	Rs. In lakhs
2014	75
2015	89
2016	82

Calculate the value of business based on earning yield basis.

c) Calculate the value of share of Avenger Ltd. from the following information:

Equity capital of company	RS 1,200 crores
Profit of the company	RS 300 crores
Par value of share	RS 40 each
Debt ratio of company	25
Long run growth rate of the company	8%
Beta 0.1; risk free interest rate	8.7%
Market returns	10.3%
Change in working capital per share	RS 4
Depreciation per share	RS 40
Capital expenditure per share	RS 48

Q5) Any two from (a) or (b) or (c) ———
$$(5x2) = 10$$
 Marks

- a) The CEO of a company thinks that shareholders always look for EPS. Hence, he considers maximization of EPS as his company's objective. His company's current Net Profits after tax are Rs. 80 lakhs and P/E multiple is 10.5. He wants to buy another firm which has current income of Rs. 15.75 lakhs & PE multiple of 10. What is maximum exchange ratio which the CEO should offer so that he could keep EPS at the current level, price of both the acquirer and the target company are Rs. 42 and Rs.105 respectively If the CEO borrows funds at 15% and buys out target company by he offer to maintain his EPS? Assume tax rate of 30%.
- b) A company has a book value per share of Rs. 137.80. Its return on equity is 15% and follows a policy of retaining 60 percent of its annual earnings. If the opportunity cost of capital is 18%, what is the price of its share? (Adopt the Dividend Discount Model).
- c) Bright Computers limited is planning to issue a debenture series with a face value of RS 1,000 each for a term of 10 years with the following coupon rates:

Years	Rates
1-4	8%
5-8	9%
9-10	13%

The current market rate on similar debenture is 15% p.a. the company proposes to price the issue in such a way that a yield of 16% compounded rate of return is received by the investors. The redeemable price of the debenture will be at 10% premium on maturity. What should be the issue price of debenture?

Pv @16% for 1 to 10 years are: .862, .743, .641, .552, .476, .410, .354, .305, .263, .227 respectively.

Q6) Any two from (a) or (b) or (c) ———
$$(5x2) = 10$$
 Marks

- a) Tender Limited has earned a net profit of Rs.15 lakhs after tax at 30 %. Interest cost charged by financial institutions was Rs.10 lakhs. The invested capital is Rs.95 lakhs of which 55% is debt. The company maintains a weightage average cost of capital of 13%. Required:
 - i. Compute the Operating income.
 - ii. Compute the Economic Value Added (EVA).
 - iii. Tender Ltd. has 6 lakhs equity shares outstanding. How much dividend can the company pay before the value of the entity starts declining?
- **b)** The following information relates to the business of a firm:
 - Average capital employed in the business Rs. 7,20,000
 - Net trading profits of the firm for the past three years after taxation were Rs. 1,07,600, Rs. 90,700 and Rs. 1,12,500
 - Reasonable return expected in the same type of business is 10%
 - Fair remuneration to the partners for their services is Rs. 12,000 per anum.

You are required to calculate the value of goodwill on the basis of five year's purchase of annual average super profits.

- **c)** Based on the above data, calculate the value of goodwill on the basis of:
 - (i) Capitalization of the annual average super profits at the reasonable return of 10% and
 - (ii) Annuity of super profits, taking the present value of annuity of one rupee for five years at 10% interest is Rs. 3.78.

Q7) Any two from (a) or (b) or (c) ———— (5x2) = 10 Marks

a) Based on the credit rating of the bonds, A has decided to apply the following discount rates for valuing bonds:

Credit rating	Discount rate
AAA	364-day T-bill rate + 3% spread
AA	AAA + 2% spread
A	AAA + 3% spread

He is considering to invest in AA rated RS 1,000 face value bond currently selling at RS 1,025.86. The bond has five years to maturity and the coupon rate on the bond is 15% p.a. payable annually.

The next interest payment is due one year from today and the bond is redeemable at par. (Assume the 364-day T-bill rate to be 9%).

You are required to calculate the intrinsic value of the bond for A. should he invest in the bond?

- b) Based on the above data, calculate the current yield (CY) and the Yield to Maturity (YTM) of the bond.
- c) Explain with examples the concepts of Value Creation, Value Maximization & Value Retention & their relationship with shareholder value.
