Paper-18: BUSINESS VALUATION MANAGEMENT

Time Allowed: 3 Hours **Full Marks: 100**

The figures in the margin on the right side indicate full marks.

Answer Question No. 1 which is compulsory carrying 25 marks and any five from the rest.

Working Notes should form part of the answer.

"Whenever necessary, suitable assumptions should be made and indicated in answer by the candidates."

1. (a) State whether the following statements are true or false: [1x5=5]

(i) Zero coupon bonds have no coupon rate, hence no yield.

(ii) Deferred Tax Liabilities are the liabilities towards payment of tax at some future point of time and hence, while calculating the Net Worth of a company, it should be deducted.

(iii) Value gap is the difference between the synergy value and purchase price.

(iv) Industrial groups are inherently less conservative than investors in allocating resources.

(v) In a debt for equity swap, a firm replacing equity with debt decreases its leverage ratio.

(b) Fill in the blanks by using the words/phrases given in the brackets: [1x10=10]

(i) Price/Earning (PE) Ratio of a company is……….related to Dividend Payout Ratio, (positively/negatively/not).

(ii) The stronger a brand of a company is,………… its risk, (lower is/higher is/nothing can be said regarding).

(iii) Intangible assets are treated as……….assets, (fixed/fictitious).

(iv) ………risk remains fixed irrespective of number of securities in portfolio (systematic/ unsystematic).

(v) Seller of a futures contract incurs a loss when the future price………. (increases/decreases).

(vi) The…………. (Tangible/ Intangible) Assets monitor is a management tool for organizations that wish to track and value their………assets, (tangible/ intangible).

(vii) Dividend yield is the dividend per share as a % of the……value of the share, (book/market).

(viii) The dividend discount model is a specific case of……….valuation.(bond/equity).

(ix) Super profit is the excess of future maintainable profit over…..expected profits, (normally/abnormally).

(x) DCF analysis requires the revenue and expenses of……….past/future).

(c) In each of the questions given below one out of the four options is correct. Indicate the correct answer: [2×5=10]

(i) Which is not a, human – capital related intangible asset?
(a) Trained workforce
(b) Employment agreements
(c) Union contracts
(d) Design patent

(ii) A share, Y, currently sells for ₹50. It is expected that in one year it will either rise to ₹55 or decline to ₹45. The value of a European call, if the strike price of the underlying share is ₹48 and the risk free interest rate is 9% p.a. is
(a) ₹9.33
(b) ₹11.33
(c) ₹18.33
(d) ₹20.50

(iii) The beta (β) of portfolio is equal to
(a) The beta of the market portfolio
(b) The arithmetic average of the individual security betas
(c) The weighted average of the individual security betas
(d) None of these

(iv) A company is having Book Value per share of ₹15 while the market value per share is ₹20. If a company has 20 crores number of shares and Book Debt of ₹100 crores, then its Enterprise Value will be
(a) ₹300 Crores
(b) ₹400 Crores
(c) ₹500 Crores
(d) None of the above

(v) If the company has a P/E Ratio of 12 and a ROE of 13%, then its Market to Book Value Ratio will be
(a) 1.09
(b) 1.56
(c) 9.34
(d) Nothing can be concluded as information available is insufficient

2 (a) Rajjan Ltd. provide you the following information:

Net Assets at their current values:		₹ 100 lacs
Average Annual Earnings available for Equity Share holders		₹ 15 lacs
8,00,000 Equity Shares of ₹ 5 each fully paid	₹ 40 lacs	
1,00,000 Equity Shares of ₹ 10 each fully paid-up	₹ 10 lacs	₹ 50 lacs
Normal Rate of Expectation		12%

Calculate the Fair Value of an Equity Share assuming that controlling interest is to be transferred. **[10]**

2 (b). 'Balance Scorecard translates a business's vision and strategy enabling better monitoring and management'. Do you agree with the statement? **[5]**

3 (a). DABU Ltd. is planning to acquire BALSA Ltd. another company in the same industry. The financial details of the two companies are as follows:

Details	DABU	BALSA
Profit after tax	₹ 3,000 lakhs	₹ 600 lakhs
Market Price	₹550	₹100
P/E ratio	25	16

DABU wants to merge BALSA with itself after acquiring k. The earnings of the merged entity are expected to be higher than the sum of earnings of the two companies by ₹15 lakhs and its P/E ratio is expected to be 22.

The Management of DABU is offering one share of DABU for every ten shares of BALSA, while the management of BALSA is expecting at least two. Can a deal be struck between the two companies? **[10]**

3. (b) Identify and explain four techniques of relative valuation. **[5]**

4. Sundar Manufacturing Company Limited's Operating Profits and Operating Capital Employed during last 5 years are – (₹ in Lakhs)

Particulars	Operating Profit	Opening Capital	Closing Capital
2010-2011	410	4,000	6,000
2011-2012	690	6,000	7,000
2012-2013	800	7,000	9,000
2013-2014	1500	9,000	10,000
2014-2015	1800	10,000	12,000

The Company is expected to commission a new project in April 2015 at a cost of ₹ 9,000 Lakhs, which would generate operational flow amounting to ₹1,200 Lakhs p.a. for atleast 4 years. Moreover the Company expects a 2% annual growth of existing profits over the next 4 years. Industry Average Rate of Return is 6% p.a.

Determine the Company's Goodwill taking 4 years purchase of Discounted Super Profit. The Company is in 25% tax bracket. Consider 5% Capital Growth and 10% WDV depreciation from April 2015 onwards. 60% of Capital Employed comprise of depreciable Fixed Assets. Use 10% Discount Factor.

Also assume that the Company has the following Capital Structure as on 31.03.2015 - (a) Equity Share Capital (₹ 10 each) = ₹ 5,000 Lakhs, (b) Reserves and Surplus = ₹ 4,000 Lakhs, (c) 14% Debentures = ₹ 3,000 Lakhs.

The funds for the new project (₹ 9,000 Lakhs) are to be raised by issue of shares and availing loans. The Company wants to maintain the existing Debt-Equity Ratio. It can arrange for 16% Term Loan.

How much maximum premium should the Company fix for its new Equity Issue? Assume that the Company desires to link Premium to the Intrinsic Value of Shares after taking into account the Value of Goodwill. **[15]**

5 (a). From the following data compute the Economic value Added: **[7]**

Share Capital	1,600 Crores	Beta Factor	1.05
Long Term Debt	320 Crores	Market Rate of Return	14%
Interest	32 Crores	Risk Free Rate	10%
Reserve and Surplus	3,200 Crores		
PBIT	1,432 Crores		
Tax Rate	30%		

5 (b). From the following information, calculate the value of a share if you want to

1. Buy a small lot of shares;
2. Buy a controlling interest in the company.

Year	Profit (₹)	Capital Employed (₹)	Dividend (%)
2011	55,00,000	3,43,75,000	12
2012	1,60,00,000	8,00,00,000	15
2013	2,20,00,000	10,00,00,000	18
2014	2,50,00,000	10,00,00,000	20

The market expectation is 12%. **[4+4]**

6 (a). Suraj Ltd. is a closely held company engaged M2M business offering logistic services mainly to small and medium sized companies through internet, who cannot afford sophisticated logistics practices. Company is planning to go for public issued in the coming year and is interest to know what the company's share will worth. The company engaged a consultant based in Mumbai. The consultant evaluated company's future prospects and made following estimates of future free case flows:

	Years (Amount in ₹)			
	1	**2**	**3**	**4**
Sales	1,00,000.00	1,15,000.00	1,32,250.00	1,32,250.00
Operating Income (EBIT)	16,000.00	18,400.00	21,160.00	21,160.00
Less: Cash tax payments	(4,800.00)	(5,520.00)	(6,348.00)	6,348.00
Net Operating Profit after	11,200.00	12,880.00	14,812.00	14,812.00
Less: Investments:				
Investments in Net Working Capital	(1,695.65)	(1,950.00)	(2,242.50)	---
Capital Expenditures (CAPEX)	(2,347.83)	(2,700.00)	(3,105.00)	---
Total Investments	(4,043.48)	(4,650.00)	(5,347.50)	---
Free Cash Flow	7,156.52	8,230.00	9,464.50	14,812.00

Further, the company's investment banker had done a study of the company's cost of capital and estimated WACC to be 12%. You are required to determine.

I. Value Suraj Ltd. based on these estimates.

II. Market Value Added (MVA) by company supposing that invested capital in the year 0 was ₹ 31,304.05 lacs.

III. Value of per share, if company has 2,000 Equity Shares outstanding and debt amounting to ₹ 4,000 lacs. **[3+1+3]**

6 (b). CAS Ltd. gives the following information about past profits:

Year	2010	2011	2011	2013	2014
Profits ('000 ₹)	43,40	45,00	47,40	49,00	42,20

On scrutiny it is found (i) that upto 2012, The Company Ltd. followed FIFO method of finished stock valuation thereafter adopted LIFO method, (ii) that upto 2013 it followed Straight Line Method of Depreciation and thereafter adopted Written Down Value Method. Given below the details of Stock Valuation Straight Line and Written Down Value Depreciation:

(Figures in ₹ '000)

Year	**Opening Stock**		**Closing Stock**		**Depreciation**	
	FIFO	**LIFO**	**FIFO**	**LIFO**	**SLM**	**WDV**
2010	80,00	79,60	92,00	82,40	24,20	34,00
2011			98,40	95,80	28,30	36,20
2012			77,80	78,20	30,00	38,50
2013			84,00	77,00	33,40	39,20
2014			90,00	86,20	36,00	38,80

Determine Future Maintainable Profits (based on average of past 4 years) that can be used for Valuation of Goodwill. **[8]**

7. (a) Milton Consulting Ltd. is a firm that specializes in offering management consulting services to software companies.

Milton Ltd. reported operating income (EBIT) of ₹306 lakh and net income of ₹135 lakh in the most recent year. However, the firms expenses include the cost of recruiting new consultants and the cost of training which amounts to ₹60 lakh. A consultant who joins Milton Consulting Ltd. stays with the firm, on an average, for 4 years. Recruitment and training expenses are amortizable over 4 years immediately following the year in which they are incurred. Over the past 4 years the expenses are:

Year	Training, Recruitment Expenses (₹in lakh)
Current	60
Year 1	48
Year 2	45
Year 3	36
Year 4	30

Assuming a linear amortization schedule (over 4 years)

Estimate:

(1) The value of human capital asset and the amount of training and recruitment expenses amortization for this year.

(2) The adjustment to operating income. **[4+2]**

7 (b). Describe the progress made by India so far in the field of human resource accounting. **[4]**

7 (c). How do you minimize Valuation bias? **[5]**

8. The following projections for T Ltd., have been developed based on internal estimates and market information:

					₹ In million
Year	**1**	**2**	**3**	**4**	**5**
Free cash flow to the firm	200	250	300	340	380
Interest bearing debt	500	400	300	200	100
Interest expenses	60	48	36	24	12

You are required to calculate the enterprise value of T Ltd., using the following assumptions:

(a) Beyond year 5, the free cash flow to the firm will grow at a constant rate of 10 percent per annum

(b) T Ltd.'s unlevered cost of equity is 14%

(c) After year 5, T Ltd. will maintain a debt equity ratio of 4:7

(d) The borrowing rate for T Ltd. will be 12 percent

(e) The tax rate for T Ltd. is 30%

(f) The risk free rate of return is 8%

(g) The market risk premium is 6% **[15]**