Paper-18: BUSINESS VALUATION MANAGEMENT

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

Working Notes should form part of the answer.
"Whenever necessary, suitable assumptions should be made and indicated in answer by the candidates."

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.

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

(i) Market price of firms with high revenue ratios and low profit margins are considered by investors as overvalued.
(ii) Firms with higher operating margins, lower reinvestment rates and lower costs of capital will trade at lower value – to - sales multiplies.
(iii) Variable dividend feature makes the computation of share value difficult.
(iv) Market value per share is expected to be lower than the book value per share in case of profitable and growing firms.
(v) Horizontal mergers are also known as conglomerate mergers.

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

(i) The most appropriate method of determining the cost of equity for calculating the Weighted Average Cost of Capital is ……………….(The Dividend Discount Model/ The Capital Asset Pricing Model).
(ii) In valuing a firm, the …………tax rate should be applied to earning of every period (marginal/effective/average).
(iii) Dividend yield ratio is equal to dividend per share divided by…….. and the quotient multiplied by 100. (EPS/market price per equity share).
(iv) The value of the patent does not show up if it is …………… generated. (internally/externally).
(v) A ………….. is essentially a container for a customer's complete experience with the offer and the company (goodwill/ brand).
(vi) Post-merger control and the …………….. are two of the most important issues in agreeing on the terms of a merger (negotiated price/calculated price).
(vii) β factor does not measure ---------------- risk (systematic/unsystematic).
(viii) The risk that the cash flows will not be delivered is called --------------- (liquidity risk/default risk).
(ix) A real estate investment trust is -------------- investment company that invests only in real estate (closed-end/opened-end).
(x) Key to income-based approach of valuation is ------------- (capitalization rate/ internal rate of return)

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

(i) Identify which of the following is not a financial liability
(a) X Ltd. has 1 lakh ₹ 10 ordinary shares issued
(b) X Ltd. has 1 Lakh 8% ₹ 10 redeemable preference shares issued
(c) X Ltd. has ₹ 2,00,000 of 6% bonds issued
(d) Both (a) and (b)

(ii) A firm's current assets and current liabilities are 1600 and 1000 respectively. How much can it borrow on a short-term basis without reducing the current ratio below 1.25?
(a) ₹ 1,000
(b) ₹ 1,200
(c) ₹ 1,400
(d) ₹ 1,600

(iii) Rudy's, Inc. and Blackstone, Inc. are all-equity firms. Rudy's has 1,500 shares outstanding at a market price of ₹22 a share. Blackstone has 2,500 shares outstanding at a price of ₹38 a share.
Blackstone is acquiring Rudy's for ₹36,000 in cash. What is the merger premium per share?
(a) ₹2.00
(b) ₹4.25
(c) ₹6.50
(d) ₹8.00

(iv) Dayes Corporation has ₹300 million of common equity on its balance sheet and 6 million shares of common stock outstanding. The company's Market Value Added (MVA) is ₹162 million. What is the company's stock price?
(a) ₹ 23
(b) ₹ 32
(c) ₹ 50
(d) ₹ 77

(v) A convertible bond with a face value of ₹1,000 issued at ₹1,300 with a coupon rate of 12%.The conversion rate is 20 shares per bond. The current market price of the bond is ₹1,500 and that of stock is ₹60.The conversion value premium is
(a) 15%
(b) 18%
(c) 20%
(d) 25%

Q. 2. (a)Describe Price-Book Value Ratio. What are the two measurement issues that you have to confront in computing this multiple? How return on equity and cost of equity can influence this ratio?

(b) Your client is holding the following securities:

Particulars of securities Equity share	Cost (₹)	Dividends (₹)	Market Price (₹)	Beta

Co. Alpha	10,000	1000	10200	0.8
Co. Beta	12,000	1000	12500	0.7
Co. Gama	18,000	1000	24000	0.5
Govt. Bonds	36,000	5400	34300	1.0

Assuming a risk free rate of 14%, calculate

(i) Expected rate of return in each, using the Capital Asset Pricing Model (CAPM)

(ii) Average return of the portfolio. [9+(4+2)=15]

Q. 3. (a) Technostyle with its need to grow and maintain its leadership position in the leather industry is planning to acquire ABC. The recent financial details of the two companies are as follows:

Particulars	Technostyle	ABC
PAT	₹2200 lakhs	₹40 lakhs
MPS(FV₹10)	₹200	₹24
P/E Ratio	18.18	12
Projected Growth Rates(p.a.)	9%	5%

There are two views expressed by two leading consultants on the benefits due to Synergy, one arguing that there can be no benefit from synergy while the other projects a 3% increase in earnings after the acquisition.

(i) If ABC's shareholders want an exchange ratio of 0.4 (i.e. 4 shares for every 1 share of ABC), would that be acceptable to the shareholders of Technostyle, if

1. **There is no synergy due to merger.**
2. **There is an increase in earnings of the merged entity by 3% due to synergy.**

(ii) If Technostyle accepts an exchange ratio of 0.4 and synergy benefits are not realized, Will there be any dilution in EPS of Technostyle? If so, when will the dilution be wiped off?

(b) Consider a bond portfolio comprising of a zero coupon bond, 8% coupon bond and a 10% coupon bond (all with 10years to maturity). All have a face value of ₹1000. The current prices of these bonds are ₹463.19, ₹1000 and ₹1134.20 respectively. If the yield over the next 1 year period is likely to stay at 8%, what is the current value of the portfolio and what will be the portfolio value at the end of next year? What is the individual return earned on each bond? [(5+4)+6=15]

Q. 4. (a) Negotiation is going on for transfer of A. Ltd. on the basis of Balance Sheet and the additional information as given below:

Balance Sheet of A. Ltd.

As on 31st March, 2014

Liabilities	Amount (₹)	Assets	Amount (₹)

Share Capital (₹10 fully paid up)	10,00,000	Goodwill	1,00,000
Reserves & Surplus	4,00.000	Land & Building	3,00,000
Sundry Creditors	3,00,000	Plant & Machinery	8,00,000
		Investment	1,00,000
		Stock	2,00,000
		Debtors	1,50,000
		Cash & Bank	50,000
Total	17,00,000	Total	17,00,000

Profit before tax for 2013-14 amounted to ₹6,00,000 including ₹ 10,000 as interest on investment. However, an additional amount of ₹ 50,000 per annum shall be required to be spent for smooth running of the business. Market value of the land & building and plant & machinery are estimated at ₹ 9,00,000 and ₹ 10,00,000 respectively. In order to match the above figures further depreciation to the extent of ₹ 40,000 should be taken into consideration. Income tax rate may be taken at 30%. Return on capital @ 20% before tax may be considered as normal for this business for the present stage.

For the purpose of determining the rate of return profit for this year after the aforesaid adjustments may be taken as expected average profit. Similarly, average trading capital employed is also to be considered on the basis of position in this year.

It has been agreed that a three years purchase of super profit shall be taken as the value of goodwill for the purpose of the deal. You are requested to calculate the value of goodwill for the company.

(b) The Following are the operating results of a firm:

Sales (Units)	25,000
Interest per annum	₹ 30,000
Selling price per unit	₹ 24
Tax rate	35% including education cess
Variable cost per unit	₹ 16
Fixed cost per annum	₹ 80,000

Compute operating leverage and financial leverage.

[10+5=15]

Q. 5. (a) Bikram Ltd has hired a Marketing Consultancy Firm for doing market research and provides data relating to Tyre industry for the next 10 years. The following were the observations and projections made by the consultancy firm —

I. The Tyre Industry in the target area i.e., whole of India, is expected to grow at 5% p.a. for the next 3 years, and thereafter at 7% p.a. over the subsequent seven years.

II. The market size in terms of unencumbered basic sales of tyres was estimated at ₹8,000 lakhs in the last year, dominated by medium and large players. This includes roughly 9.0% of fake brands and locally manufactured tyres. Market share of this segment is expected to increase by 0.5%.

III. Cheap Chinese imports accounts for 40% of the business (but 60% of the volume. This is expected to increase by 0.25% over the next decade.)

IV. The other large players account for roughly 35% of the business value, which is expected to go down by 0.5% over the next ten years, due to expansion of Bikram Ltd's product portfolio.

V. The Company is in the process of business re-engineering, which will start yielding results in 2 years time, and increase its profitability by 3% from its existing 12%.

If the appropriate discount rate is 16% what is the Brand Value of Bikram Ltd., under Market oriented Approach.

(b) From the following information taken from the books of Progressive Ltd. relating to staff and community benefits, prepare a statement showing value of benefits to staff and community at large, as required under Corporate Social Reporting.

	₹
Environment Improvements	20,10,000
Medical Facilities to staff and family	45,00,000
Training Programmes conducted in-house	10,25,000
Generation of Job Opportunities in the locality	60,75,000
Municipal Taxes paid	10,70,000
Increase in cost of living in the vicinity due to a thermal power station	16,55,000
Concessional transport, water supply to staff	11,25,000
Extra work put in by company staff and officers for drought relief	18,50,000
Leave encashment and leave travel benefits	52,00,000
Educational facilities for children of staff members	21,60,000
Subsidised canteen facilities on premises	14,40,000
Generation of business in the district	25,00,000

[8+7=15]

Q. 6. (a) S Ltd. gives the following information:

Current Profit	₹210 lakhs
Compound growth rate of profit	7.5%
Current cash flows from operations	₹270 lakhs
Compound growth rate of cash flows	6.5% p.a.
Current price earning ratio	12
Discount factor	15%

Find out the value of S Ltd. taking 10 years projected profit or cash flows based on

(i) Discounted earning method,

(ii) Discounted cash flows method.

(b) "Jaggi & Lau suggested that a proper valuation of human resource is not possible unless the contribution of individuals as a group is taken into consideration." Comment.

[(5+5)+5=15]

Q. 7. (a) Discuss how would you value a real estate. List the different levels of market efficiency.

(b) The following information is given for 2 companies that are identical except for their capital structure:

	RICE	WHEAT
Total Invested Capital	1,00,000	1,00,000
Debt/Asset Ratio	0.8	0.5
Shares Outstanding	6,100	8,300
Pre Tax Cost of Debt	16%	13%
Cost of Equity	26%	22%
Operating Income(EBIT)	25,000	25,000
Net Income	8,970	12,350

The tax rate is uniform 35% in all cases.

a) **Compute the weighted average cost of capital for each company.**
b) **Compute the Economic Value Added (EVA) for each company.**
c) **Based on the EVA, which company would be considered for best investments?**
d) **If the industry PE ratio is 11, estimate the price for the share of each company.**
e) **Calculate the estimated market capitalization for each of the companies.**

[5+(2+2+1+3+2)=15]

Q. 8.(a) A Ltd. has a capitalization rate of 10%. It currently has 100000 shares of ₹100 each. The firm is deciding to pay ₹6 as dividend at the end of the current fiscal year, which has just begun. Answer the following questions based on MM irrelevancy model and assume no taxes:

(i) **What will be the price of the share at the end of the year if a dividend is declared?**
(ii) **What will be the price of the share at the end of the year if a dividend is not declared?**
(iii) **Assuming that the firm pays dividend, has a net income of ₹10 lakhs and makes new investments of ₹20 lakhs during the period, how many new shares must be issued?**

(b) State the reasons for mergers and acquisitions. **[(2+1+7)+5=15]**