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) Horizontal mergers are also known as conglomerate mergers.
   - (ii) A market is efficient when trading oriented strategies can beat the market.
   - (iii) Industrial groups are inherently less conservative than investors in allocating resources.
   - (iv) A levered portfolio provides increasing returns with increased risk.
   - (v) In constant growth model, the value of equity share is sensitive to growth rates.

   (b) Fill in the blanks by using the words/phrases given in the brackets: [1x10=10]
   - (i) Key to income-based approach of valuation is ------------- (capitalization rate/ internal rate of return)
   - (ii) β factor does not measure ---------------- risk (systematic/unsystematic).
   - (iii) Super profit is the excess of future maintainable profits over ----------------- expected profits (normally/abnormally).
   - (iv) The value of the patent does not show up if it is …………… generated. (internally/externally).
   - (v) The risk that the cash flows will not be delivered is called --------------- (liquidity risk/default risk).
   - (vi) Organizational capital is a ------------ component of intellectual capital (primary/secondary).
   - (vii) A real estate investment trust is -------------- investment company that invests only in real estate (closed-end/opened-end).
   - (viii) ----------- takes place when a healthy company merges into a financially weak company (merger/reserve merger).
   - (ix) The price paid by the option buyer to the option seller to acquire the right to buy or sale is ------------------ (Strike Price/ Option Premium).
   - (x) ----------- implies risk arising from debtors default on financial claim (default risk/credit risk).

   (c) In each of the questions given below one out of the four options is correct. Indicate the correct answer: [2×5=10]
   - (i) RIL (FV ₹10) quotes ₹520 on NSE, and 3 months future price quoting at NSE is ₹542,and one month borrowing rate is given as 15%.The price of 3-month RIL futures is
     - a) 539.50
     - b) 598
     - c) 578.50
     - d) 545
   - (ii) S & Co. earns ₹12 per share, capitalization rate of 10% and has a return on investment at the rate of 20%. According to Walter's model price per share at 30% dividend payout ratio will be

a) ₹212
b) ₹204
c) ₹220
d) ₹224

(iii) A bank borrowed call money for 3 days in the overnight call money market and paid ₹152345 for these 3 days on a borrowing of ₹40 crores. The implied call money rate will be
a) 4.61%
b) 4.63%
c) 4.65%
d) 4.67%

(iv) 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%

(v) A wishes to sell his business and his business has been good. Revenues are growing each year. He desires to pick a best offer and have patience till he gets best price. In this situation on which basis he should value his business
a) Book Value
b) NPV of future earnings
c) Auction value
d) Fair Market Value

2. (a) S Ltd. furnishes the following information relating to the previous three years, and requests you to compute the value of the brand of the company [₹ in lakhs]

Particulars	2010	2011	2012
Profits Before Interest and Tax	75.00	100.00	150.00
Loss on Sale of Assets	3.00	10.00	18.00
Non Operating Income	12.00	12.00	8.00

Inflation was 10% for 2011 and 12% for 2012. If the capitalisation factor considering internal and external value drivers to the brand is 15, determine the brand value. Assume an all inclusive future tax rate of 40%.

(b) STU Ltd. has a capital of ₹ 10,00,000 in equity shares of ₹ 100 each. The shares are currently quoted at par. The company proposes to declare a dividend of ₹10 per share at the end of the current financial year. The capitalization rate for the risk class of which the company belongs is 12%. What will be the market price of the share at the end of the year, if
(i) a dividend is not declared?
(ii) a dividend is declared?
(iii) assuming that the company pays the dividend and has net profits of ₹5,00,000 and makes new investments of ₹10,00,000 during the period, how many new shares must be issued? Use the MM model. [7+(2+2+4)]

3. (a) AB Company is considering the acquisition of T Company in a stock-for-stock transaction in which T Company would receive ₹ 85 for each share of its common stock. AB company does not expect any change in its price/earnings ratio multiple after the merger and chooses to value the T Company conservatively by assuming no earning growth due to synergy.
Calculate

a. The purchase price premium
b. The exchange ratio
c. The number of new shares issued by AB Company
d. Post- merger EPS of the combined firms
e. Pre-merger EPS of the AB Company
f. Pre-merger P/E ratio
g. Post merger share price
h. Post merger equity ownership distribution

The following additional information is available

	AB	T
Earnings	₹2,50,000	₹72,500
Number of Shares	1,10,000	20,000
Market price per share	₹52	₹64

Also comment on the results. [1+1+1+1+1+1+1+1+2]

(b) From the following details, compute according to Lev and Schwartz (1971) model, the value of the skilled employees.

	Skilled
Annual average earning of an employee till the retirement age	₹50,000
Age of retirement	65 years
Discount rate	15%
No. of employees in the group	20
Average age	62 years

[5]

4. (a) State the reasons why companies are going for restructuring? [6]
(b) Briefly describe the progress made by India so far in the field of human resource accounting. [5]
(c) What are the limitations of DCF Valuation? [4]

5. (a) From the following particulars of three companies, ascertain the value of goodwill. Terms and conditions are as follows:
(i) Assets are to be revalued.
(ii) Goodwill is to be valued at four years' purchase of average super profits for three years. Such average is to be calculated after adjustment of depreciation at 10% on the amount of increase/decrease on revaluation of fixed assets. Income tax is to be ignored.
(iii) Normal profit on capital employed is to be taken at 10%, capital employed being considered on the basis of net revalued amounts of tangible assets.

The summarized Balance Sheets and relevant information are given below: (₹ in lakhs)

Liabilities	A Ltd.	B Ltd.	C Ltd.	Assets	A Ltd.	B Ltd.	C Ltd.
Equity shares of ₹10 each	12.00	14.00	6.00	Goodwill	-	1.00	-
Reserves	2.00	1.00	2.00	Net tangible block	16.00	12.00	10.00
10% Debentures	4.00	-	2.00	Current assets	6.00	5.00	2.00
Trade & expense creditors	4.00	3.00	2.00				
Total	22.00	18.00	12.00	Total	22.00	18.00	12.00

	A Ltd. (₹)	B Ltd. (₹)	C Ltd. (₹)
Revaluation of tangible block	20,00,000	10,00,000	12,00,000
Revaluation of current assets	7,00,000	2,80,000	1,60,000
Average annual profit for three years before	3,60,000	2,88,000	1,56,000

charging debenture interest			

[7]

(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? [8]

6. (a) D.K. International Ltd. is developing a new production process. During the financial year ending 31st March, 2013, the total expenditure incurred was ₹50 lakhs. This process met the criteria for recognition as an intangible asset on 1st December, 2012. Expenditure incurred till this date was ₹22 lakhs. Further expenditure incurred on the process for the financial year ending 31st March, 2014 was ₹80 lakhs. As at 31st March, 2014, the recoverable amount of know-how embodied in the process is estimated to be ₹72 lakhs. This includes estimates of future cash outflows as well as inflows.

You are required to calculate:

(i) Amount to be charged to Profit and Loss A/c for the year ending 31st March,2013 and carrying value of intangible as on that date.

(ii) Amount to be charged to Profit and Loss A/c and carrying value of intangible as on 31st March, 2014.

Ignore Depreciation [3+3]

(b) 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.

a. 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.

b. 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? [5+4]

7. (a) The following table contains expected returns estimated from historical data, required returns from the CAPM, the covariance of the security with the true market portfolio, and the security's beta.

Stock	Expected Return %	Required return from CAPM %	Covariance with Market	Beta	Overvalued or Undervalued
Stock A	19.0	17.000	0.40	1.000	?
Stock B	16.0	12.875	0.25	?	?
Stock C	25.5	?	?	2.000	?
Risk-Free T-Bill	6.0	6.000	0	0	

Using the CAPM formulas, assuming the CAPM is true and assuming the market variance is 0.40, fill in all the blanks. Assuming the CAPM is true, which investment(s) would you choose to invest in? Why? [8]

(b) Write a short note on Accounting for investment by a holding company in subsidiaries. [7]

8. (a) 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.

[2+2+1+3+2]

(b) How do you value acquired brand? [5]