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: **[1x10=10]**

(i) If a patent is developed internally, its cost is capitalized.

(ii) For valuation of equity share under yield method, knowledge of capital employed is not required.

(iii) Costs of R&D performed under contracts are capitalized as inventory.

(iv) Intrinsic value of share is a subjective concept and cannot be measured. Intrinsic value is measured as Net Assets of a Company /No. of shares.)**.**

(v) Goodwill is essentially a container for a customer's complete experience with the offer and the company.

(vi) Hedging protects against the price risk but not against gains or losses.

(vii) When the right is not exercised, value of option is equal to market price of underlying asset.

(viii) Exchange ratio of equity shares of merging firms is determined by their market price alone.

(ix) Brand value need not be amortized.

(x) Employee benefits are treated as long-term liabilities.

(b) Fill in the blanks by using the words/phrases given in the brackets: **[1x5=5]**

(i) Premium paid by a target company to buy back its stock from a potential acquirer is called **------------------.** (Greenmail, Whitemail).

(ii) Assets held as stock in trade are not **-----------------**. (investments/disinvestments).

(iii) In DCF valuation, the value of an asset is present value of **------------------** cash flows on the asset. (actual, expected).

(iv) Net worth of a firm as per Balance Sheet is called its **------------------.** (book value, market value).

(v) If expected rate of return is more than required rate, stock should be **------------------.** (bought,sold).

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

(i) In the valuation of a business if price to sales ratio of XYZ Ltd. is 0.45 and revenue is ₹ 150 lakh, then the market value of equity of XYZ Ltd. will be-

(a) ₹ 30.50 lakh
(b) ₹ 67.50 lakh
(c) ₹ 428.50 lakh
(d) ₹ 500.25 lakh

(ii) Which one of the following statements is correct?

(a) Although some methods of estimating the cost of equity capital encounter severe difficulties, the CAPM is a simple and reliable model that provides great accuracy and consistency in estimating the cost of equity capital.
(b) The DCF model is preferred over other models to estimate the cost of equity because of the case with which a firm's growth rate is obtained.
(c) The bond-yield-plus-risk-premium approach to estimating the cost of equity is not always accurate but its advantages are that it is a standardized and objective model.
(d) Depreciation-generated funds are an additional source of capital and, in fact, represent the largest single source of funds for some firms.

(iii) If Tobin's Q is over 1, this deems

(a) Stock market to be under valued
(b) Stock market is valued at par
(c) Stock market is highly valued
(d) None of the above

(iv) Assume that you buy a bond today yielding 9.50% (YTM). The face value of the bond is ₹ 1000 and is presently being traded in the market at ₹ 1005. Then, it means that the coupon rate is

(a) More than 9.50%
(b) Less than 9.50%
(c) Exactly equal to 9.50%
(d) All the above are possible

(v) Company has declared a dividend of ₹ 4 per share for the recently ended financial year. It is estimated that its cost of equity is 12.50%. If it has a Dividend pay-out Ratio of 40% and Growth rate in Dividend is 7.50%, then, its Price/ Earnings Ratio will be (assume that price in the market are determined as per the Constant Dividend Growth Model)

(a) 8.00
(b) 8.33
(c) 8.60
(d) 14.33

2. (a) Consider three bonds A, B and C. Their characteristics are shown below:

	Bond A	Bond B	Bond C
Face value	₹ 500	₹ 500	₹ 500
Coupon rate	12%	12%	12%
Coupon payments	Semi-annually		
Term to maturity	3 years	5 years	7 years
Market value	₹ 500	₹ 500	₹ 500

If the interest rates increase by 1 percentage point, what are the market values of these bonds? What do you observe regarding the percentage price change in these three bonds as the term to maturity increases? **[6+3]**

(b) Sentek Ltd furnishes the following Cash Flows estimate -

Year 1	₹ 20.00 Lakhs
Years 2 to 4	Compounded Growth Rate 6.5%
Years 5 to 8	Compounded Growth Rate 9.5%

Apply 20% Discount Rate and determine the Value of Business. **[6]**

3. (a) How do you react to various uncertainties during the process of business valuation? **[5]**

(b) The following information has been extracted from the Annual Report 2013-14 of Hudco Limited: **[10]**

Balance Sheet of Hudco Limited as at 31st March 2014

Particulars	**(₹ in crores) 2014**
EQUITY AND LIABILITIES	
Shareholder's Funds	
Share Capital	8,245.46
Reserves and Surplus	65,045.71
	73,291.17
Non-Current Liabilities	
Long- Term Borrowings	47,975.23
Other long term liabilities	2, 332.76
	50,307.99
Current Liabilities	
Trade payables	4,468.07
Other current Liabilities	12,770.57
	17,238.64
Total	1,40,837.80

ASSETS	
Non-Current Assets	
Fixed Assets:	
Tangible assets	45,046.47
Intangible assets	211.89
Capital work-in-progress	41, 827.82
Intangible assets under Development	0.04
	87,086.22
Non-current investments	9,583.92
Long-term loans and advances	3,883.26
Other non-current assets	1,371.88
	14,839.06
Current Assets:	
Current investments	1,622.46
Inventories	3,702.85
Trade receivables	5,832.51
Cash and bank balance	16,146.11
Short- term loans advances	2,754.73
Other current assets	8,853.86
	38,912.52
Total	**1,40,837.80**

Statements of Profit and Loss of Hudco Limited for the year ending on 31st March 2014

Particulars	**(₹ in crores) 2012**
Revenue from operations (Gross)	62,480.88
Less: Excise Duty	428.65
Revenue from operations (Net)	62, 052.23
Other Income	2,778.42
Total Revenue	**64,830.65**
EXPENSES:	
Fuel	41, 635.46
Employee benefits expense	3, 090.48
Finance Costs	1, 711.64
Depreciation and amortization expense	2,791.70
Administration & other expenses	3,588.79
Total Expenses	52,818.07
Profit/ (Loss) Before Tax	12,012.58
Note: Profit on sale of Non-Current Assets (included in Other Income above) being exceptional items.	313.58

Tax expense is 30% of the profit.

The directors of Tentex Ltd. are considering a takeover of Hudco Ltd. As the consultant of Tentex Ltd., you are required to determine the value of a share of Hudco Limited on the basis of the

Profit-Earning Capacity (Capitalization) Method by considering the following additional information:

(i) The face value of the share is ₹ 10.
(ii) Profit on sale on Non-current Assets is an exceptional item of the profit and it is expected that in future no such profits are likely to occur.
(iii) In subsequent years, additional expenses on advertisements of ₹ 25 crores and on depreciation of ₹ 50 crores each year are expected to be incurred.
(iv) The Capitalization rate on the similar business is 9.50%.
(v) All other items of the above financial statements are expected to remain same in the future.

4. Write short notes on: **[3×5=15]**

(a) Objectives of corporate branding
(b) Credit Risk
(c) Assumptions of MM Hypothesis

5. **(a)** ABC Ltd. wants to acquire PQR Ltd. The cash flow of ABC Ltd. & the merged entity is given as follows:

Year (₹ in Lakhs)	**1**	**2**	**3**	**4**	**5**
ABC Ltd.	275	302.5	324.5	641	357.5
Merged entity	440	495	563.75	591.25	618.75

After 5 years, earnings would have witnessed 5% constant growth rate without merger and 6% with merger on account of economies of operation. The cost of capital is 15%. The exchange ratio agreed upon is 0.6. From the viewpoint of ABC Limited, find out the value of acquisition, make suitable assumptions. **[9]**

(b) XYZ Ltd Company currently sells for ₹ 32.50 per share. In an attempt to determine if XYZ Ltd is fairly priced, an analyst has assembled the following information.

- The before-tax required rates of return on XYZ Ltd debt, preferred stock, and common stock are 7.0 percent, 6.8 percent, and 11.0 percent, respectively.
- The company's target capital structure is 30 percent debt, 20 percent preferred stock, and 50 percent common stock.
- The market value of the company's debt is ₹145 million and its preferred stock is valued at ₹65 million.
- XYZ Ltd's FCFF for the year just ended is ₹28 million. FCFF is expected to grow at a constant rate of 4 percent for the foreseeable future.
- The tax rate is 35 percent.
- XYZ Ltd has 8 million outstanding common shares.

What is XYZ Ltd's estimated value per share? Is XYZ Ltd's stock under priced? **[5+1]**

6. **(a)** A pharmaceutical firm has the patent rights for the next 20 years to a product that requires an initial investment of ₹1.4 crore to develop. However, the present value of the cash inflows for the product is only ₹80 lakh. Due to technological advancement, there is a possibility that the project would become a valuable project in the future. The simulation of the project under a variety of technological and competitive scenarios yields a variance in the present value of inflows of 0.05. The rate of the 10-year Government security is 10%. Estimate the value of the product patent. **[9]**

(b) Which categories of Financial Instruments are covered under AS 30? **[6]**

7. **(a)** What is a takeover bid? What are different types of takeover bid? **[3+7]**

(b) Offer a brief profile of Mergers and Acquisition in the Indian context? **[5]**

8. The following Balance Sheet of Forex Ltd. is given:

Balance Sheet of Forex Ltd. as on 31st March, 2014

Equity and Liability	₹	Assets	₹
(1) Shareholders Fund:		**(1) Non-Current Assets:**	
(a) Share Capital		(a) Fixed Assets	
Equity Share Capital of ₹ 10 each	50,00,000	(i) Tangible Assets:	
(b) Reserve & Surplus		— Land and Building	32,00,000
P & L Appropriation Account	21,20,000	— Plant and Machinery	28,00,000
		(ii) Intangible Assets:	
(2) Current Liabilities:		— Goodwill	4,00,000
(a) Short Term Borrowings – Bank O/D	18,60,000		
(b) Trade Payables		**(2) Current Assets:**	
— Sundry Creditors	21,10,000	(a) Inventories	32,00,000
(c) Short Term Provision		(b) Trade Receivables	
— Provision for Taxation	5,10,000	— Sundry Debtors	20,00,000
Total	**1,16,00,000**	**Total**	**1,16,00,000**

In 1995 when the company commenced operation the paid up capital was same. The Loss/Profit for each of the last 5 years was - years 2009-2010 - Loss (₹ 5,50,000); 2010-2011 ₹ 9,82,000; 2011-2012 ₹ 11,70,000; 2012-2013 ₹ 14,50,000; 2013-2014 ₹ 17,00,000;

Although income-tax has so far been paid @ 40% and the above profits have been arrived at on the basis of such tax rate, it has been decided that with effect from the year 2013-2014 the Income-tax rate of 45% should be taken into consideration. 10% dividend in 2010-2011 and 2011-2012 and 15% dividend in 2012-2013 and 2013-2014 have been paid. Market price of shares of the company on 31st March, 2014 is ₹ 125. With effect from 1st April, 2014 Managing Director's remuneration has been approved by the Government to be ₹ 8,00,000 in place of ₹ 6,00,000. The company has been able to secure a contract for supply of materials at advantageous prices. The advantage has been valued at ₹ 4,00,000 per annum for the next five years.

Ascertain goodwill at 3 year's purchase of super profit (for calculation of future maintainable profit weighted average is to be taken). **[15]**