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=10]**

(i) The book value of an asset is the historical cost less depreciation.

(ii) Valuing a firm using discounted cash flow method is conceptually different from valuing a capital project using percent value method.

(iii) It is important to cross-check the financial statement information by studying financial statement information with respect to the changes in financial ratio during the period of forecast.

(iv) The provinces of accounting standards do not impact mergers of companies.

(v) Divestitures represent the sale of a part of the total undertaking.

(b) Fill in the blanks by using the words/phrases given in the brackets: **[1x10=5]**

(i) In **-----------------**, a firm separates out assets or a division, creates shares with claims on these assets, and sells them to the public (spin-off, spilt-up, equity carve out).

(ii) **-----------------** companies have volatile earnings and high-growth potential choose low-debt ratios (telephones/software).

(iii) **-----------------** measures the variation of distribution for the expected returns (standard division/ regression).

(iv) Shares of listed companies which are traded on the stock exchange are **-----------------** (quoted/ unquoted).

(v) A negative economic value added indicates that the firm is **-----------------** value (creating/destroying).

(vi) An investment is risk free when actual returns are always **-----------------** the expected returns (less than/equal to/more than).

(vii) In valuing a firm, the **-----------------** tax rate should be applied to earnings of every period (marginal/effective/average).

(viii) If a company's share is priced at ₹ 20 and EPS is ₹ 5, then P/E ratio will be**-----------------** (0.25/ 4/400).

(ix) Dividend yield ratio is equal to dividend per share divided by **-----------------** and the quotient multiplied by 100. (EPS/market price per equity share).

(x) If EPS of a company is ₹ 15 and the P/E ratio of other similar company is ₹ 10, then market value of the share of this company will be ₹ **-----------------** (150/1.5/.67).

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

(i) Haskell Motors' common equity on the balance sheet totals ₹700 million, and the company has 35 million shares of common stock outstanding. Haskell has significant growth opportunities. Its assets book value is ₹800 million, but its market value is estimated to be ₹910 million. Over time, Haskell has issued outstanding debt that has a book value of ₹100 million and a market value of ₹75 million. Which of the following statements is most correct?
(a) Haskell's book value per share is ₹20.
(b) Haskell's market value per share is probably less than ₹20.
(c) Haskell's market value per share is probably greater than ₹20.
(d) Statements a and c are correct.

(ii) 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

(iii) Hayes 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

(iv) Turner, Inc. has ₹4.2 million in net working capital. The firm has fixed assets with a book value of ₹48.6 million and a market value of ₹53.4 million. Martin & Sons is buying Turner, Inc. for ₹60 million in cash. The acquisition will be recorded using the purchase accounting method.
What is the amount of goodwill that Martin & Sons will record on its balance sheet as a result of this acquisition?
(a) ₹0
(b) ₹2.4 million
(c) ₹6.6 million
(d) ₹7.2 million

(v) Casey Motors recently reported the following information:

- Net Income = ₹600,000.
- Tax rate = 40%.
- Interest expense = ₹200,000.
- Total investor-supplied operating capital employed = ₹9 million.
- After-tax cost of capital = 10%.

What is the company's EVA?

(a) -₹300,000
(b) -₹180,000
(c) ₹200,000
(d) ₹400,000

2. (a) K Ltd. processes raw material M to make product A. Contribution per unit of A is ₹ 32. Each unit of A requires two units of M. The company can process maximum 20,000 units of M to produce 10,000 units of A. Demand for product is unlimited at present selling price but annual production is restricted to 6,000 units due to restricted supply of raw materials. B Ltd is the only supplier of the raw material.

K Ltd. wishes to acquire controlling interest in B Ltd. to ensure supply of raw material M. B Ltd. makes two products M and N using same production facilities. Machine hour required for each unit of M and N are 4 and 5 respectively. Total machine hour available in a year is 75,000. Contribution per unit of M is ₹ 8 and that per unit of N is ₹ 15. Demand for N is restricted to 5,400 units.

Share capital of B Ltd. consists of 50,000 ordinary shares of ₹ 10 each. Tax rate is 40%and cost of capital is 10%.

Determine (i) maximum price K Ltd. can offer for 51% interest in B Ltd; (ii) Likely change in value of B Ltd. if the acquisition is successful. **[8+2]**

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

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

3. (b) The Optical Machineries Ltd. requests you to ascertain the amount at which the inventory should be included in the financial statement for the year 2013-14. The value of inventory as shown in the books is ₹6,25,000.

To determine the net realizable value of the inventory (on a test check basis), you had selected several items whose book value was ₹1,75,000. You ascertain that except for items (1) to (3) mentioned below, the cost was in excess of the realizable value by ₹14,766.

The following items require special treatment.

(1) One machine (cost ₹65,000) can now fetch ₹57,500. It was priced at ₹35,000 and was written down to the same figure at the end of 2013-14.

(2) A pump (cost ₹25,000) was expected to realize ₹17,500. A special commission of 15% would have to be paid to the broker.

(3) 6 units of Product No. 15710 were in stock valued each at ₹2,760; the selling price was ₹2,250 per unit; selling expenses are 10% of the selling price.

Taking into consideration only the above mentioned items requiring special treatment, compute the value of their inventory as at 31st March 2014 you would consider reasonable. **[10]**

4. (a) A company invested in 5-year bond issues of another company in 2012 carrying a coupon rate of 10% per annum. The interest is payable at half-yearly rates and the principal repayable after 5 years in 2016 end. The current market yield has fallen to any willing buyer. Compute the value of the bond at the end of 2013. Assume par value of each bond ₹2000. **[5]**

4. (b) Jain Co. Ltd. purchased a machine costing ₹2,50,000 for its manufacturing operations and paid shipping cost of ₹40,000. Jain Ltd. spent an additional amount of ₹20,000 for testing and preparing the machine for use. What amount should Jain Ltd. record as the cost of the machine? **[3]**

4. (c) From the following details, compute according to Lev and Schwartz model, the total value of unman resources of the employee groups skilled and unskilled. **[7]**

	Skilled	**Unskilled**
Annual average earning of an employee till the retirement age	₹80,000	₹60,000
Age of retirement	65 Years	62 Years
Discount rate	15%	15%
No. of employees in the group	30	35
Average age	62 years	60 years

5. (a) Mukesh Ltd. furnishes the following particulars about their investment in shares of Sasco Ltd. for the year 2013-14.

Balance of shares held on 1st April, 2013 ₹1,31,000 [5000 shares @ ₹10 each]

Purchased 1000 shares on 1st July 2013 ₹30,000

Sold 250 shares on 1st August 2013 ₹8,750 @ ₹35 per share cum dividend

Sasco Ltd. declared final dividend for 2012-13 on 1st September 2013. 20%

Received 1 : 5 bonus shares on 1st February 2014.

Brokerage for each transaction is 2%. Find out cost of shares held by Mukesh Ltd. as on 31st March, 2014. **[8]**

5. (b) The following financial share date pertaining to ALPHA LTD on IT company is made valuable to you:

Year ended March 31st	2014	2013	2012
EBIT (₹)	696.03	325.65	155.86
Non-branded Income (₹)	53.43	35.23	3.46
Inflation compound factor @ 8%	1.000	1.087	1.181
Remuneration of Capital	5% of average Capital employed		
Average Capital Employed (₹)	1200.00		
Corporate Tax Rate	30%		
Capitalization Factor	15%		

You are required to calculate the Brand Value for ALPHA Ltd. **[7]**

6. Consider two firms that operate independently and have following characteristics:

Particulars	**ABC Ltd. ₹in lakhs**	**XYZ Ltd. ₹in lakhs**
Revenues	600	300
COGS	350	180
EBIT	250	120
Expected Growth rate	6%	8%
Cost of capital	9%	10%

Both firms are in steady state with capital spending offset by depreciation. Both firms have an effective tax rate of 40% and are financed only by equity. Consider the following two scenarios:-

Scenario – I: Assume that combining the two firms will create economics of scale that will reduce the COGS to 50% of Revenue.
Scenario – II: Assume that as a consequence of the manager, the combined firm is expected to increase its future growth to 8% while COGS will be 60%.

It is given that scenario I & II are mutually exclusive.

You are required to:
(1) Compute the values of both the firms as separate entities.
(2) Compute the values of both the firms together if there were absolutely no synergy at all from the merger.
(3) Compute the value of cost of capital and the expected growth rate.
(4) Compute the value of synergy in (i) Scenario – I & (ii) Scenario – II.

[(2+2)+1+(1+1)+(4+4)]

7. 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]**

8. Write short notes (*any three*): **[3×5=15]**

(i) Intrinsic Value

(ii) Valuation of Preference Share

(iii) Fair Market Value of Intangible assets.

(iv) Put Option