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) Point estimation of the value of a business is the right way to determine its value.

(ii) Higher debt/Equity ratio implies higher valuation of a company.

(iii) The key importance of annual reports information is that it is used by investors when they from there expectation about the firm's future earnings and dividends and riskiness of those of cash flow.

(iv) Management by out is not a takeover method.

(v) Paying a onetime extraordinary dividend is a defensive financial technique.

(vi) The corporate valuation model cannot be used for a company that doesn't pay dividends.

(vii) Free cash flow should be discounted at the weighted average cost of capital to find the value of a company's operations.

(viii) An ESOP can be used to improve workers' productivity and to prevent hostile takeovers.

(ix) In a synergistic merger, the post-merger value exceeds the sum of the separate companies' pre-merger values.

(x) Since the basic rationale for any operating merger is synergy, in planning such mergers, the development of accurate pro forma cash flows is the single most important aspect of the analysis.

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

(i) The value of the patent does not show up if it is ______________ generated. (internally/externally).

(ii) The risk that the cash flows will not be delivered is called ______________ (liquidity risk/default risk).

(iii) Normal yield curves indicate that short term borrowing costs are ____________ long term borrowing costs (above/below).

(iv) Organizational capital is a ______________ component of intellectual capital (primary/ secondary).

(v) ______________ method of valuation is used. (direct capitalization/yield capitalization).

(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. The following abridged Balance Sheet as at 31.03.2014 pertains to Jupiter Ltd.

(₹Lakhs)

Equity & Liabilities	₹
(1) Shareholders' Funds:	
(a) Share Capital - Equity Share Capital	
(i) 180 Lakhs Shares of ₹10, fully paid up	1,800
(ii) 90 Lakhs Shares of ₹10, ₹8 paid up	720
(iii) 150 Lakhs Shares of ₹5, fully paid up	750
(b) Reserves & Surplus	5,628
(2) Non-Current Liabilities:	
Long Term Borrowings - Secured Loans	4,500
(3) Current Liabilities:	
(a) Other Current Liabilities	1,242
(b) Short Term Provisions	960
Total	**15,600**
Assets	
(1) Non-Current Assets:	
(a) Fixed Assets:	
(i) Tangible Assets	11,166
(ii) Intangible Assets - Goodwill	420
(b) Other Non-Current Assets	
- Miscellaneous Expenditure	171
(2) Current Assets:	
(a) Short Term Loans & Advances	943
(b) Other Current Assets	2,900
Total	**15,600**

You are required to calculate the following for each one of three categories of Equity Shares appearing in the above mentioned Balance Sheet -

- Intrinsic Value on the basis of Book Values of Assets and Liabilities including Goodwill,
- Value per Share on the basis of Dividend Yield. Normal Rate of Dividend in the concerned Industry is 15%, whereas Jupiter Ltd has been paying 20% Dividend for the last four years and is expected to maintain it in the next few years, and
- Value per Share on the basis of EPS, For the year ended 31st March, 2014 the Company has earned ₹1,371 Lakhs as Profit after tax, which can be considered to be normal for the Company. Average EPS for a fully paid Share of ₹10 of a Company in the same Industry is ₹2. **[7+3+5]**

3. **(a)** The following information is provided related to the acquiring Firm Black Ltd. and the target Firm White Ltd.

Particulars	Black Ltd.	White Ltd.
Earnings after tax (₹)	4000 lakhs	800 lakhs
Number of shares outstanding	400 lakhs	200 lakhs
P/E ratio (times)	20	10

Required:

(i) What is the swap Ratio based on current market prices?

(ii) What is the EPS of Black Ltd. after acquisition?

(iii) What is the expected market price per share of Black Ltd after acquisition assuming P/E ratio of Black Ltd. remains unchanged?

(iv) Determine the market value of the merged firm.

(v) Calculate gain/loss for shareholders of the two independent companies after acquisition. **[3+2+1+1+3]**

(b) A company has a total investment of ₹10,00,000 in assets and 1,00,000 outstanding ordinary shares at ₹10 per share (par value). It earns a rate of 15 per cent on its investment and has a policy of retaining 50 per cent of the earnings. If the appropriate discount rate of the firm is 10 per cent, determine the price of its share using Gordon's model. What shall happen to the price of the share if the company has a payout of 80 per cent or 20 per cent? **[5]**

4. **(a)** Following information are available in respect of ABC Ltd. which is expected to grow at a higher rate for 4 years after which growth rate will stabilize at a lower level:

Base year information:

Particulars	₹in lakhs
Revenue	20,000
EBIT	3,000
Capital Expenditure	2,800
Depreciation	2,000

Information for high growth and stable growth period are as follows:

Particulars	High Growth	Stable Growth
Growth in Revenue & EBIT	20%	10%
Growth in capital expenditure and depreciation	20%	Capital expenditure are offset by depreciation
Risk free rate	10%	9%
Equity beta	1.15	1
Market risk premium	6%	5%
Pre tax cost of debt	13%	12.86%
Debt equity ratio	1:1	2:3

For all time, working capital is 30% of revenue and corporate tax rate is 35%.
What is the value of the firm? **[11]**

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

5. (a) Supreme Ltd. is comprised of only four major investment projects, details of which are as follows:

Project	% of market value	Annual % return during last 5 years	Risk % of standard deviation	Correlation with the market
A	30	10	15	0.55
B	15	18	20	0.75
C	29	15	14	0.84
D	26	13	18	0.62

The risk free rate is expected to be 6% per year, the market return is 15% per year and the standard deviation of market returns is 14%.

Assume that Supreme Ltd's shares are currently priced based upon the assumption that the last five years experience of returns will continue for the foreseeable future.
Evaluation whether or not the share price of Supreme Ltd. is undervalued/overvalued.

[7]

(b) Black Ltd., a lessee, acquired a machinery on lease from White Ltd., (lessor) on January 1, 2013. The lease term covers the entire economic life of the machinery, i.e., 3 years. The F.V. of the machinery on January 1, 2013 is ₹10.50 lakhs. The lease agreement requires the lessee to pay an amount of ₹4.50 lakhs p.a. beginning December 31, 2013. The lessee has guaranteed an RV of ₹34,200 on December 31, 2015 to the lessor. The lessor however estimates that the machinery will have a salvage value of only ₹30,000 on December 31, 2015. The implicit rate of interest is 15%, compute the value of machinery, to be recognized by the lessee, and also the finance charges, every year, on the basis of AS – 19. **[4+4]**

6. (a) Khan International Ltd. is developing a new production process. During the financial 31st March 2013, the total expenditure incurred on this process was ₹150 lakhs. The production process met the criteria for recognition as an intangible on 1st December, 2012. Expenditure incurred till this date was ₹66 lakhs.

Further expenditure incurred on the process for the financial year ending 31st March, 2014, the recoverable amount of know-how embodied in the process is estimated to be ₹216 lakhs. This includes estimates of future cash outflows as well as inflows.

You are required to work out:

(i) What is the expenditure to be charged to be profit and loss account for the financial year ended 31st March, 2013? (Ignore depreciation for this purpose).

(ii) What is the carrying amount of the intangible asset as at 31st March 2013?

(iii) What is the expenditure to be charged to profit and loss account for the financial year ended 31st March 2014? (Ignore depreciation for this purpose).

(iv) What is the carrying amount of the intangible asset as at 31st March, 2014? **[1+1+3+2]**

(b) XYZ Ltd's shares are currently selling at ₹26 per share. There are 20,00,000 shares outstanding. The firm is planning to raise ₹40 lakhs to finance a new project to be started soon at Mumbai.

You are required to calculate the ex-right price of shares and the value of a right.

(i) The firm offers one right share for every two shares held

(ii) The firm offers one right share for every four shares held

(iii) How does the shareholder's wealth change from (i) to (ii) above? How does right issue increases shareholder's wealth? **[3+3+2]**

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]**

(b) A company has been making a machine to order for a customer but the customer has, however, since gone into liquidation and there are no prospects than any money will be obtained from the winding up of his company.

Cost incurred to-date in manufacturing the machine are ₹1,00,000 and progress payments of ₹30,000 have been received from the customer prior to the liquidation. The sales department has found another company willing to buy the machine for ₹68000 once it is completed. To complete the work, the following costs have to be incurred:

(1) Material – These have been bought at a Cost of ₹12000. They have no other use and if the machine is not finished, they would be sold as scrap for ₹4000.

(2) Further labour costs would be ₹16000. Labour is in short supply and if the machine is not finished, the workforce would be switched over to another job, which earns ₹60000 in revenue, and incurs direct costs (not including direct labour) of ₹24000 and absorbs (fixed) overhead of ₹16000.

(3) Consultancy fees ₹8000. If the work is not completed, the consultant's contract would be cancelled at a cost of ₹3000.

(4) General overheads of ₹16000 would be added to the cost of the additional work. Should the new customer's offer be accepted? Prepare a statement showing the economics of the proposition. **[9]**

8. Write Short Notes on (*any three*): **[5×3= Marks]**

(i) Reasons for mergers and acquisition.

(ii) Net realizable value of Inventories

(iii) Walter's valuation Model.

(iv) Fair Market value of Intangible assets

(v) Characteristic of Brand