Paper 20 - Financial Analysis and Business Valuation

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

Question No. 1 which is compulsory and carries 20 marks and answer any 5 questions from Q. No. 2 to Q. No. 8.

1(a). State whether the following statements are true or false: **[1×8=8]**

(i) Valuation, Sensitivity analysis and presentation are not a part of Financial Modeling Process.

(ii) Financial analysis which is made by prospective investors is known as internal analysis.

(iii) If Z-Score is greater than 2.99 it is predicted that the firm belongs to bankrupt class.

(iv) Whenever the yield on a bond is more than coupon rate, the bond will be trading at a discount.

(v) A brand is nothing but a glorified product name; hence it has no value.

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

(vii) Higher the Dividend Pay-out Ratio of a company, higher is its Price/Earning (P/E) Ratio.

(viii) If a company has built up intangibles over a period of time, then it can show them in its Balance Sheet and thus, the book value of the company's share will increase.

1(b). The operating and cost data of ABC Ltd. are: Sales ₹20,00,000 Variable Costs ₹14,00,000 Fixed Costs ₹4,00,000(including 15% interest on ₹10,00,000). You are required to Calculate its operating, financial and combined leverage? **6**

1(c). For Goal Ltd. the FCFE projected for next 3 years are stated below along with the immediately past year FCFE. You are required to value equity share by DCF approach. From Year 4 FCFE is expected to grow at 3% p.a. Cost of equity is measured at 15% p.a. Number of shares outstanding is 1,00,000. **6**

2. The following are condensed comparative financial statement, of Rajarshi Ltd. for the three years ended 31st March, 2014, 2015 and 2016:

	2015-16 (₹)	**2014-15 (₹)**	**2013-14 (₹)**
Current Assets:			
Bank	20,500	7,600	17,000
Debtors	38,000	30,000	20,000
Stock	60,000	40,000	30,000
Prepaid expenses	1,500	2,400	3,000
Total Current Assets	1,20,000	80,000	70,000
Non-current Assets:			
Plant and Equipment	2,60,000	1,50,000	76,000
Total Assets	**3,80,000**	**2,30,000**	**1,46,000**
Current Liabilities:			
Creditors	98,000	78,000	48,500
Provision for Income Tax	2,000	2,000	1,500
Total Current Liabilities	1,00,000	80,000	50,000
Non-current Liabilities:			
Debentures	50,000	50,000	-
Shareholders' Fund:			
Equity Share Capital(₹100 shares)	2,00,000	80,000	80,000
Profit and Loss A/c	30,000	20,000	16,000

Total Liabilities	3,80,000	2,30,000	1,46,000

	2016 (₹)	2015 (₹)	2014 (₹)
Sales	2,10,000	1,20,000	1,00,000
Cost of Sales	1,57,500	80,000	55,000
Gross Profit	52,500	40,000	45,000
General and Selling Expenses	42,500	36,000	37,000
Net Profit	10,000	4,000	8,000

Additional Information:

i) The company's closing inventory on 31st March, 2013 was ₹10,000

ii) Credit terms are net 60 days from the date of invoice

You are required to calculate the following ratios with brief comments thereon:

(i) Current Ratio, (ii) Acid – test Ratio, (iii) Inventory turnover Ratio, (iv) Debtors' collection period (or average age of outstanding), (v) Gross profit margin percentage, (vi) Earnings per share, and (vii) Fixed assets to shareholders' equity. **16**

3(a). From the information given below relating to Bad Past Ltd., calculate Altman's Z-Score and comment:

$$\frac{\text{Working capital}}{\text{Total Assets}} = 25\%$$

$$\frac{\text{Retained Earnings}}{\text{Total Assets}} = 30\%$$

$$\frac{\text{Earnings before interest and taxes}}{\text{Total Assets}} = 15\%$$

$$\frac{\text{Market value of equity}}{\text{Book value of total debt}} = 150\%$$

$$\frac{\text{Sales}}{\text{Total Assets}} = 2 \text{ times}$$

8

(b). Ved Ltd. which is considering two financial plans provides you the following information's:

- Total funds to be raised, ₹4,00,000
- Financing Plans: A- 50% Equity and balance 8% Debt.
  B – 50% Equity and balance 8% Preference Shares
- Tax rate: 35%
- Equity shares of face value ₹10 each
- Expected EBIT, ₹1,60,000.

You are required to determine:

i) Earnings per share (EPS) and Financial break-even point.

ii) Indicate if any of the plans dominate, and compute the EBIT range among the plans for difference. **8**

4(a). From the following information as contained in the income statement (extract) and balance Sheet (extract), calculate – (i) cash receipts from customers, (ii) cash payment to suppliers and employees, (iii) cash flows from operating activities and (iv) cash flows from financing activities.

Income Statement (extracts) for the year ended, 31st March, 2016

	₹	₹
Net Sales		40,32,000
Less: Cost of Sales	31,68,000	
Depreciation	96,000	
Salaries & Wages	3,84,000	
Operating expenses	1,28,000	
Provision for taxation	1,40,800	39,16,800
Net Operating profit		1,15,200
Non-recurring Income:		
Profit on sale of equipment		19,200
Profit for the year		1,34,400

Comparative Balance Sheet (extracts)

	As on 31.3.2015 **(₹)**	As on 31.3.2016 **(₹)**
Fixed Assets:		
Land	76,800	1,53,600
Building, Plant and Equipments	5,76,000	9,21,600
Current Assets:		
Cash and Cash equivalents	96,000	1,15,200
Debtors	2,68,800	2,97,600
Stock	4,22,400	1,53,600
Advances	12,480	14,400
	14,52,480	16,56,000
Capital	5,76,000	7,10,400
Surplus in Profit & Loss A/c	2,42,880	2,62,080
Sundry creditors	3,84,000	3,74,400
Outstanding expenses	38,400	76,800
Income-tax expenses	19,200	21,120
Accumulated depreciation on building, plant and equipments	1,92,000	2,11,200
	14,52,480	16,56,000

12

(b). A 10 year's bond of ₹1,000 has an annual rate of interest of 12%. The interest is paid half-yearly. What is the value of the bond if the required rate of return is (I) 12% and (II) 16%?
4

5. Super Garments Ltd. is a company which produces and sells to retailers certain range of fashion clothing. They have made the following estimates of prudential cash flows for the next 10 years.

₹ in lakhs

Yr.	1	2	3	4	5	6	7	8	9	10
Cash flow	3,750	4,250	5,000	6,250	7,500	8,500	9,500	11,250	12,500	15,000

SONA Ltd. is a company which owns a series of boutiques in a certain locality. The boutiques buy clothes from various suppliers and retail them. Each boutique has a manager and an assistant but all purchasing and policy decisions are taken centrally. An independent cash flow estimate of SONA Ltd. was as follows:

₹ in lakhs

Yr.	1	2	3	4	5	6	7	8	9	10
Cash flow	300	400	500	700	850	1,150	1,300	1,500	1,650	2,000

SUPER Garments Ltd. is interested in acquiring SONA Ltd. in order to get some additional retail outlets. They make the following cost-benefit calculation;

i) Net Value of assets of SONA Ltd.

	₹ in lakhs
Sundry fixed assets	2,000
Investments	500
Stock	1,000
Total	3,500
Less: Sundry creditors	1,000
Net Assets	2,500

ii) Sundry fixed assets amounting to ₹1,25,00,000 cannot be used and their net realizable value is ₹1,12,50,000

iii) Stock can be realized immediately at ₹1,175 lakh

iv) Investments can be disposed off for ₹530 lakhs

v) Some workers of SONA Ltd. are to be retrenched for which estimated compensation is ₹325 lakh.

vi) Sundry creditors are to be discharged immediately

vii) Liabilities on account of retirement benefits not accounted for in the balance sheet by SONA Ld. Is ₹120 lakhs.

viii) Expected cash flows of the combined business will be as follows:

₹ in lakhs

Yr.	1	2	3	4	5	6	7	8	9	10
Cash flow	4,500	4,750	5,750	7,375	8,750	10,000	11,250	13,250	14,500	17,250

Find out the maximum value of SONA Ltd. which SUPER Garments Ltd. can quote. Also show the difference in valuation had there been no merger. Use 20% as discount factor.

Year	1	2	3	4	5	6	7	8	9	10
Discounting factor @20%	0.8333	0.6944	0.5787	0.4823	0.4019	0.3349	0.2791	0.2326	0.1938	0.1615

16

6(a). You are given following information about Sandeep Ltd.

i)	Beta for the year 2015-16	1.05
ii)	Risk free rate	12%
iii)	Long Range Market Rate (based on BSE Sensex)	15.14%
iv)	Extracts from the liabilities side of balance sheet as at 31st March, 2016	

	₹
Equity	29,160
Reserves and surplus	43,740
Shareholder's Fund	72,900
Loan funds	8,100
Total funds (long-term)	81,000

v)	Profit after tax	₹20,394 .16 lakhs
vi)	Interest deducted from profit	₹487.00 lakhs
vii)	Effective tax rate (i.e. Provision for Tax/PBT x 100)	24.45%

Calculate Economic values Added of Sandeep Ltd. as on 31st March 2016. **8**

6(b). The following financial share date pertaining to TECHNO LTD. an IT company is made available to you:

Year ended March 31st	**2016**	**2015**	**2014**
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 (₹)	1112.00		
Corporate Tax Rate	35%		
Capitalization Factor	16%		

You are required to calculate the Brand Value for Techno Ltd. **8**

7(a). A Ltd. is considering the acquisition of B Ltd., with stock. Relevant financial information is given below:

Particulars	**A Ltd.**	**B Ltd.**
Present earnings (₹)	7.5 lakhs	2.5 lakhs
Equity (No. of shares)	4.0 lakhs	2.0 lakhs
EPS (₹)	1.875	1.25
P/e ratio	10	5

Answer the following question:

i) What is the market price of each company?

ii) What is the market capitalization of each company?

iii) If the P/E of A Ltd. changes to 7.5, what is the market price of A Ltd.?

iv) Does market value of A Ltd. change?

v) What would be the exchange ratio based on Market Price? (Take revised Price of A Ltd.) **8**

(b). Given – (i) future maintainable Profit before Interest = ₹125 lakhs; (ii) Normal rate of Return on Long Term Funds is 19% and on Equity Funds is 25%; (iii) Long Term Funds of the Company is ₹320 Lakhs of which Equity funds is ₹210 Lakhs; (iv) Interest on Loan Fund is 18%. Find out leverage effect on goodwill if tax rate = 30%. **8**

8. Short note on any four of the below: **[4×4]**

a) Financial Synergy Vs Operating Synergy

b) Common error in Business Valuation

c) Financial forecasting

d) Financial models

e) Hostile Takeover