Paper – 20: Financial Analysis & Business Valuation

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

Working Notes should form part of the answer.

"Whenever necessary, suitable assumptions should be made and indicated in answer by the candidates."

Section A

(Answer Question No. 1 and Question No. 2 which are compulsory and any two from the rest in this section)

Q. 1. Basanti Ltd. a large professionally managed consumer durable manufacturer, is seeking a medium term loan of ₹ 500 lakh essentially to finance part of its working capital requirements, following its decision to significantly improve credit terms to its customers, with a view to substantially increasing the demand for its products. The following are the company's summarized financial data, compiled from published accounts:

(₹ lakhs)

Particulars	2013	2012
Gross fixed assets at cost	2,200	2,000
Accumulated depreciation	(1,600)	(1,500)
Trade investments	100	100
Inventories	480	390
Receivables	590	400
Trade creditors	(170)	(90)
Tax and other provisions	(400)	(400)
Net assets employed	1,200	900
Financed by:		
Equity capital	300	300
Reserves	250	200
Long-term loans	400	200
Overdraft and short-term facilities	250	200
	1,200	900
Sales income	1,800	1,600
Profit before interest and tax (PBIT)	280	280
Interest	100	60
Tax	100	120
Dividends	30	30
Retentions	50	70

The company's fully paid-up equity shares having face value of ₹ 10 per share are quoted at ₹ 15 per share in the stock market. It is known that the plant utilization of the company's facilities is around 60% of its capacity, and there are adequate technical and marketing skills in the company to handle a much higher volume of business.

Answer the following:

(a) Calculate the ratios which can be considered as the key indicators having bearing on the company's financial position.

(b) Make an analysis on the basis of the ratios, calculated above having impact on the company's financial position and its credit and liquidity status from prospective lender's view point.

[8+7]

Q. 2. The extracts of Balance sheet and Income statement of M/s. Tineto Company over the last 3 years are as follows:

(₹ '000)

Particulars	2011	2012	2013
Cash	561	387	202
Receivables	1,963	2,870	4,051
Inventories	2,031	2,613	3,287
Current Assets	4,555	5,870	7,540
Net fixed assets	2,581	4,430	4,364
Total Assets	7,136	10,300	11,904
Payables	1,862	2,944	3,613
Accruals	301	516	587
Bank loan	250	900	1,050
Current Liabilities	2,413	4,360	5,250
Long-term debt	500	1,000	950
Shareholders' equity	4,223	4,940	5,704
Total Liabilities and Equity	7,136	10,300	11,904
Sales	11,863	14,952	16,349
Cost of goods sold	8,537	11,124	12,016
Selling, general and administrative expenses	2,349	2,659	2,993
Profit before tax	977	1,169	1,340
Taxes	390	452	576
Profit after tax	587	717	764

You are required to —

(a) Prepare Common Size Balance Sheet and Common Size Income Statement for the years 2011 – 2013 and analyse the results.

(b) Also perform Index Analysis of the Balance Sheet and Income Statement and analyse it and interpret the result.

[8+7]

Q. 3. (a) Consider the following figures of Earth Ltd.

	2012	2013
Sales (₹)	23,40,000	27,01,000
Cost of goods sold (₹)	18,00,000	24,42,000
Units sold	36,000	37,000

Account for change in sale price and cost price.

(b) Write the differences between Univariate Approach and Multivariate Approach to Sickness Prediction.

[6+4]

Q. 4. (a) The selected financial data for P, Q and R companies for the current year ended March 31st are as follows:

Particulars	P	Q	R
Variable expenses as a percentage of sales	66.67	75	50
Interest expenses (₹)	200	300	1,000
Degree of operating leverage (DOL)	5	6	6
Degree of financial leverage (DFL)	3	4	2
Income-tax rate	0.30	0.30	0.30

(i) Prepare income statements for P, Q and R companies.
(ii) Comment on the financial position and structure of these companies.

(b) A company's capital structure consists of:

Particulars	₹
Equity Shares of ₹ 100 each	20,00,000
Retained Earnings	10,00,000
9% Preference Shares	12,00,000
7% Debentures	8,00,000
Total	50,00,000

The company earns 12% on its capital. The income-tax rate is 50%. The company requires a sum of ₹ 25,00,000 to finance its expansion programme for which the following alternatives are available:

(i) Issue of 20,000 Equity Shares at a premium of ₹ 25 per share.
(ii) Issue of 10% Preference Shares; and
(iii) Issue of 8% Debentures.

It is estimated that the P/E ratio in the case of equity shares, preference shares and debentures financing would be 26.75, 21.25 and 19.625 respectively.

Which of the three financing alternatives would you recommend and why?

[(3+2)+5]

Question 5.

From the following Profit and Loss Account of Bihan Ltd., prepare a Gross Value Added Statement. Show also the reconciliation between Gross Value Added and Profit before Taxation:

Profit and Loss Account (Extract) for the year ended 31st March, 2014

Particulars	Notes	₹ lakhs	₹ lakhs
Income			
Sales			206.42
Other income			10.20
			216.62
Expenditure			
Production and operational expenses	1	166.57	
Administration expenses	2	6.12	
Interest and other charges	3	8.00	
Depreciation		5.69	186.38
Profit before tax			30.24
Provision for tax			3.00

			27.24
Investment allowance reserve written back			0.46
Balance as per last Balance Sheet			1.35
			29.05
Transferred to:			
General reserve		24.30	
Proposed dividend		3.00	27.30
Surplus carried to Balance Sheet			1.75
			29.05

Notes:

(1)

Production and Operational Expenses (₹ lakhs)

Increase in stock	30.50
Consumption of raw materials	77.76
Consumption of stores	8.11
Salaries, wages, bonus and other benefits	12.80
Cess and local taxes	3.20
Other manufacturing expenses	34.20
	166.57

(2) Administration expenses include inter alia audit fees of ₹ 1 lakh, salaries and commission to directors ₹ 2.20 lakhs and provision for doubtful debts ₹ 2.50 lakhs.

(3)

Interest and Other Charges (₹ lakhs)

On fixed loans from financial institutions	3.90
On debentures	1.80
On working capital loans from bank	2.30
	8.00

[6+4]

Section B

(Answer Question No. 6 and Question No. 7 which are compulsory and any two from the rest in this section)

Q. 6. The following is the extract from the Balance Sheets of X Ltd.:

Liabilities	31.03.2013 ₹ lakhs	31.03.2014 ₹ lakhs	Assets	31.03.2013 ₹ lakhs	31.03.2014 ₹ lakhs
Share capital	5000	5000	Fixed Assets	5500	6500
General reserve	4000	4250	10% investment	2500	2500
Profit & Loss A/c	600	900	Stock	2600	3000
18% term loan	1800	1650	Debtors	1700	1100
Sundry Creditors	350	450	Cash at bank	460	450
Provision for tax	110	130	Fictitious Assets	100	80
Proposed dividend	1000	1250			
Total	12860	13630	Total	12860	13630

Additional information:

(i) Replacement values of fixed assets were ₹11000 lakhs on 31.03.2013 and ₹12500 lakhs on 31.03.2014 respectively.
(ii) Rate of depreciation adopted on fixed assets was 5% p.a.
(iii) 50% of the stock is to be valued at 120% of its book value.
(iv) 50% of investments were trade investments.
(v) Debtors on 31st March, 2014 included foreign debtors of $ 350000 recorded in the books at ₹45 per U.S. Dallar. The closing exchange rate was $ 1 = ₹49.
(vi) Creditors on 31st march, 2014 included foreign creditors of $ 600000 recorded in the books of $ 1 = ₹43. The closing exchange rate was $ 1 = ₹49.
(vii) Profits for the year 2013-14 included ₹600 lakhs of government subsidy which was not likely to recur.
(viii) Future maintainable profits (pre-tax) are likely to be higher by 10%.
(ix) Tax rate during 2013-2014 was 50%, effective future tax rate will be 45%.
(x) Normal rate of return expected is 13%

One of the directors of the company Sudip fears that the company does not enjoy a good will in the prevalent market circumstances.

Critically examine this and establish whether X Co. has or has not any goodwill. If your answer were positive on the existence of goodwill, show the leverage effect it has on the company's result.

Industry average return was 10% on long term funds and 13% on equity funds.

[15]

Q. 7. (a) The following data relates to Sunrise Ltd. profit & loss data

	Year 2012 ₹ in lakhs	Year 2013 ₹ in lakhs
Turnover	19900	23600
Pre-tax accounting Profit	4200	5300
Taxation	1260	1600
Profit after tax	2940	3700
Dividends	1000	1200
Retained Earnings	1940	2500

Balance Sheet Data

	Year 2012 ₹ in lakhs	Year 2013 ₹ in lakhs
Fixed Assets	7400	9600
Net Current Assets	8000	10000
	15400	19600
Finance by shareholders funds	11900	14400
Medium and long term Bank loan	3500	5200
	15400	19600

Pre-tax accounting profit is taken after deducting the economic depreciation of the company's fixed Assets (also the depreciation used for tax purposes)

Additional Information

- Economic depreciation was ₹1900 lakh in 2012 and ₹2100 lakh in 2013.
- Interest expenses were ₹260 lakh in 2012 and ₹360 lakh in 2013.
- Other non cash expenses were ₹640 lakh in 2012 and ₹720 lakh in 2013.
- The tax rate in 2012 and 2013 was 30%.
- Sunrise Ltd. has non-capitalized leases valued at ₹700 lakh in each year 2012 – 2013.
- The company's pre-tax cost of debt was estimated as 7% in 2012 and 8% in 2013.
- The company's cost of equity was estimated as 15% in 2012 and 17% in 2013.
- The target capital structure is 80% equity and 20% debt.
- Balance sheet capital employed at the end of 2011 was ₹13900 lakh.

Estimate the economic value added for Sunrise Ltd. for 2012 and 2013.

(b) A company belongs to a risk class for which the appropriate capitalization rate is 10 per cent. It currently has outstanding 25000 shares selling at ₹100 each. The firm is contemplating the declaration of dividend of ₹5 per cent share at the end of the current financial year. The company expected to have a net income of ₹2.5 lakhs and has a proposal for making a new investment of ₹5 lakhs.

Show that under the Modigliani and Millar assumptions, the payment of dividend does not affect the value of the firm.

[7+8]

Q. 8. (a) An equipment is leased for 3 years and its useful life is 5 years. Both the cost and the fair market value of the equipment are ₹6,00,000. The amount will be paid in 3 installments and a the termination of lease, lessor will get back the equipment. The unguaranteed residual value at the end of 3 year is ₹80,000. The (internal rate of return) IRR of the investment is 10%. The present value of annuity factor of Re. 1 due at the end of 3rd year at 10% IRR is 2.4868. the present value of Re. I due at the end of 3rd year at 10% rate of interest is 0.7513.

(i) State with reason whether the lease constitutes finance lease.

(ii) Calculate unearned finance income.

(b) Calculate the price of 3 month ABC futures, if ABC (FV ₹10) quotes ₹260 on NSE, and the 3 month futures prices quotes at ₹266, and the one month borrowing rate is given as 15% and the expected annual dividend yield is 25% p.a. payable before expiry.

(c) M/s. Gopi Industries is planning to issue a bond series on the following terms –
Face value ₹100

Terms of maturity 10 years

Yearly coupon rate

Years	Rate
1-4	8%
5-8	9%

9-10	13%

The current market rate of similar bonds is 14% per annum. The company proposes to price the issue in such a manner that is can yield 15% compounded rate of return to the investors. The company also proposes to redeem the bonds at 5% premium on maturity. You are required to determine the issue price of the bonds.

Year	1	2	3	4	5	6	7	8	9	10
P.V. factor of ₹1 @ 15%	0.8695	0.7561	0.6575	0.5717	0.4971	0.4323	0.3759	0.3269	0.2842	0.2471

[(2+2) +2+4]

Q. 9. (a) ABC Ltd. acquire 40% of XYZ Ltd's shares on April 2, 2013, the price paid was ₹ 2,80,000. XYZ Ltd's shareholder equity shares are as follows:

Equity Shares (Paid-up)	1,00,000
Share Premium	3,00,000
Retained Earning	1,00,000
	5,00,000

Further XYZ Ltd. reported a net income of ₹ 60,000 and paid dividends of ₹ 20,000. ABC Ltd. has subsidiary on 31.03.2011. Calculate the amount at which the investment in XYZ Ltd. should be shown in the consolidated Balance Sheet of ABC Ltd as on 31.03.2014.

(b) State with reference to accounting standard, how you will value the inventories in the following cases:

(i) In a production process, normal waste is 5% of input 10,000 MT of input were put in process resulting in a wastage of 600 M.T. cost per MT of input is ₹2000. The entire quantity of waste is on stock at the end of the year.

(ii) Per Kg. of finished goods consisted of :

Material Cost	₹50 per Kg.
Direct labour cost	₹10 per Kg.
Direct variable production overhead	₹5 per Kg.

Fixed production charges for the year on normal capacity of 50,000 Kgs. are ₹5,00,000. 1,000 Kgs of finished gods are on stock at the year end.

(c) A company has purchased plant and machinery in the year 2010-11 for ₹90 lakhs. A balance of ₹10 lakhs is still payable to the supplier for the same. The suppler waived off the balance amount during the financial year 2013-14. The company treated it as income and credited to profit and loss account during 2013-14. Whether accounting treatment of the company is correct. If not, state with reasons.

[4+(2+2)+2]

Q. 10. (a) X Ltd. expects that a plant has become useless which is appearing in the books at ₹40 lakhs gross value. The company charges SLM – depreciation on a period of 10 years estimated life and estimated scrap value of 3%. At the end of the 7th year the plant has been assessed as useless. Its estimated net realizable value is ₹12,40,000. Determine the loss/gain on retirement of the fixed assets.

(b) ABC Ltd. has substantial cash flow and until the surplus funds are utilized to meet the future capital expenditure, likely to happen after several months, are invested in a portfolio of short-term investments, details for which are given below:

Investment	No. of Shares	Beta	Market Price per share	Expected yield
A	8,000	1.16	4.29	19.50%
B	10,000	2.28	2.92	24.00%
C	11,200	0.90	2.17	17.50%
D	14,500	1.50	3.14	24.00%

The current Market Return is 20% and the Risk Free Rate is 12%

Required to:

(i) Calculate the Risk of ABC's short-term investment portfolio relative to that of the market;

(ii) Whether ABC should change the composition of its portfolio.

(c) An unquoted long term investment is carried in the books at a cost of ₹4 lakhs. The published accounts of the unlisted company received in May 2013 showed that the company was incurring cash losses with declining market share and the long term investment may not fetch more than ₹ 40,000. How would you deal with this in financial statements.

[3+(2+2)+3]