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. From the following Balance Sheet (extract) and Income Statement (extract) of X Ltd. evaluate its financial position and performance with reference to the standard value of ratio.

Balance Sheet (Extract)
As at 31.3.14

Liabilities	₹	Assets	₹
Equity Share of ₹ 10 each	10,00,000	Fixed Assets	32,50,000
Reserve	22,50,000	Inventory	20,00,000
Long term Debt	12,50,000	Receivable	15,00,000
Bank O/D	15,00,000	Cash	5,00,000
Creditors	10,00,000	Prepaid expenses	2,50,000
Provision	5,00,000		
	75,00,000		75,00,000

Income Statement (Extract)
For the year ended 31.3.14

		₹
	Sales	95,00,000
Less	Cost of goods sold	72,00,000
	Gross Profit	23,00,000
Less	Operating expenses	7,90,000
	Earnings before interest & tax (EBIT)	15,10,000
Less	Interest	5,00,000
	Earnings before tax (EBT)	10,10,000
Less	Tax	5,00,000
	Net Profit	5,10,000
Less	Dividend	1,80,000
	Retained Profit	3,30,000

Standard values of the ratios are as follows:

	Standard Ratio
1. Current Ratio	1.5
2. Liquid Ratio	0.8
3. Debt-equity Ratio	1.5
4. Interest Coverage	3.6 times
5. Inventory turnover	4 times
6. Debt Collection period	60 days
7. Total Asset Turnover	1 time
8. Net margin on sales	6%
9. Return on Investment	10%
10. Return on Equity	12%

Answer the following questions:

(a) Calculate the ratios which are relevant for the analysis of liquidity, profitability. Also calculate the Debt-equity ratio as a part of Capital Structure ratio and Interest coverage ratio as a part of Coverage ratio.

(b) Analyse and comment of the position of the company as compared to the standard on the basis of those ratios which are calculated in point (a).

[10+5]

Q. 2. From the summarised balance sheets of Sunrise Ltd. as at 31st March 2013 and 31st March 2014 respectively, prepare a cash flow statement and comment on the financial position based on cash flow information.

Balance Sheets (Extract) as at 31.03.13 & 31.03.14

Liabilities	31.03.13 ₹	31.03.14 ₹	Assets	31.03.13 ₹	31.03.14 ₹
Equity Share Capital	75,000	1,20,000	Fixed Assets at cost	2,40,070	2,53,730
8% Redeemable			Less: Dep.	90,020	98,480
Preference Share Capital	1,00,000	80,000		1,50,050	1,55,250
Reserve for replacement			Investments	61,000	76,000
of Machinery	15,000	10,000	Stock	98,000	1,04,000
Long term Loans	-	40,000	Trade Debtors	88,000	85,000
Bank overdraft	22,000	-	Bank	11,750	32,000
Trade Creditors	84,450	75,550			
Proposed dividends on					
equity Shares	12,000	24,000			
Profit & Loss A/c	1,00,350	1,02,700			
	4,08,800	4,52,250		4,08,800	4,52,250

Additional Information:

(1) During the year, additional equity shares were issued to the extent of ₹ 25,000 by way of bonus shares fully paid up.

(2) Final dividend on preference shares and an interim dividend of ₹ 4,000 on equity shares were paid 31st March 2014.

(3) Proposed dividends for the year ended 31st March 2013 were paid in October 2013.

(4) Movement in Reserve for re-placement of machinery account represents transfer to profit and loss Account.

(5) During the year, one item of Plant was up valued by ₹ 3,000 and credit for this was taken in the Profit & Loss Account.
(6) ₹1,700 being expenditure on fixed assets for the year ended 31st March 2013 wrongly debited to Sundry Debtors then, was corrected in the next year.
(7) Fixed assets costing ₹ 6,000 (accumulated depreciation ₹ 4,800) were sold for ₹ 250. Loss arising therefrom was written off.
(8) Preference shares redeemed in the year (June 13) were out of a fresh issue of equity shares. Premium paid on redemption was 10%.

Answer the following questions:

(a) Prepare cash flow statement for the year ended 31.03.14. also show the necessary workings.

(b) Analyse and interpret the cash flow statement on the basis of the relevant ratios and comment on them.

[8+7]

Q. 3. (a) From the ratios and other data set forth below for the Marine Accessories Ltd., indicate your interpretation of the company's financial condition:

Particulars	Year 3	Year 2	Year 1
Current ratio (per cent)	302	278	265
Acid-test ratio	99	110	155
Working capital turnover (times)	3.25	3.00	2.75
Receivable turnover (times)	7.2	8.41	9.83
Collection period (days)	50	43	37
Inventory to working capital (per cent)	110	100	95
Inventory turnover (times)	5.41	6.01	6.11
Income per equity share (₹)	2.5	4.05	5.10
Net income to net worth (per cent)	7	8.5	11.07
Operating expenses to net sales (per cent)	25	23	22
Sales increase during the year (per cent)	23	16	10
Cost of goods sold to net sales (per cent)	73	71	70
Dividend per share (₹)	3	3	3
Fixed assets to net worth (per cent)	22.7	18.0	16.4
Net profit on net sales (per cent)	2.0	5.09	7.03
Gross profit on net sales (per cent)	26.5	28.0	29.6

(b) Prepare the income statement of a firm which gives the following details relating to its operations:

Operating leverage	4
Financial leverage	2
Annual interest paid	₹ 10 lakhs
Contribution/sales	0.4
Tax rate	30%

[6+4]

Q. 4. (a) From the following income statement (extract) prepares a common-size income statement and also interprets the result.

Particulars	2012-13 (₹ crores)	2013-14 (₹ crores)
Sales/Income from operations	1,18,353.71	1,39,269.46
Excise duty, sales tax etc.	6,660.99	5,826.46
Net sales	1,11,692.72	1,33,443.00
Other income	478.28	5,628.79
Total income	1,12,171.00	1,39,071.79
Variation in stocks	(654.60)	1,867.16
Purchases	1,821.28	6,007.71
Raw material consumed	76,871.66	90,303.85
Manufacturing expenses	5,855.06	4,074.66
Payment for employees	2,094.09	2,119.33
Sales and distribution expenses	3,661.45	3,229.59
Establishment expenses	2,108.76	2,710.31
Preoperative expenses of projects under commissioning	(111.21)	(175.46)
Total Expenditure	91,646.49	1,10,137.15
Profit before Interest, Depreciation and Tax	20,524.51	28,934.64
Interest and Finance charges	1,188.89	1,077.36
Profit before Depreciation and Tax	19,335.62	27,857.28
Depreciation	4,815.15	4,847.14
Profit before tax	14,520.47	23,010.14
Provision for tax : Current	1,657.44	2,651.96
Deferred	919.63	899.89
Profit after tax	11,943.40	19,458.29

(b) There are two types of models generally used for prediction of Corporate Distress, viz. Univariate Model and Multivariate Model. Write down the steps which are followed under Univariate Model of Distress Prediction.

[8+2]

Q. 5. (a) Following figures have been extracted from the records of Agni Ltd.:

Year	2012	2013
Sales (₹) Cost of Goods Sold (₹) Gross Profit (₹)	2,60,000 2,00,000 60,000	3,60,000 3,30,000 30,000

It is learnt that cost price for the year 2013 has increased by 10% over the year 2012. Show changes in gross profit in the year 2013.

(b) Rowdy Company's equity shares are being traded in the market at ₹ 54 per share with a price-earnings ratio of 9. The Company's dividend payout is 75%. It has 1,00,000 equity shares of ₹ 10 each and no preference shares. Book value per share is ₹ 47.

Calculate: (i) Earnings per share, (ii) net income, (iii) Dividend yield, and (iv) return on equity.

[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 Balance Sheet as at 31st December 2013 of Techno group Ltd.

Liabilities	Amount (₹)	Assets	Amount (₹)
Share Capital:		Fixed Assets:	
8000 Equity shares of ₹10 each fully paid up	80000	Goodwill	10000
5000 Equity shares of ₹10 each ₹8 paid up	40000	Plant & Machinery	80000
3600 Equity shares of ₹5 each fully paid up	18000	Land and Building	100000
3000 Equity shares of ₹5 each ₹4 paid up	12000	Furniture and Fixtures	10000
300, 10% Preference shares of ₹100 each fully paid up	30000	Vehicles	20000
		Investments	30000
Reserve and Surplus:			
General reserve	14000	Current Assets:	21000
Profit & Loss account	21000	Stock	19500
Secured loan; 12% Debenture	20000	Debtors	4000
Unsecured loan : 15% term loan	15000	Prepaid Expenses	4500
Deposits	10000	Advances	20000
Current Liabilities:		Cash and Bank balance	1000
Bank Loan	5000	Preliminary expenses	
Creditors	15000		
Outstanding expenses	2000		
Provision for tax	20000		
Proposed Dividend:			
Equity	15000		

Preference	3000		
	320000		320000

Additional Information

(a) In 2011 a new machinery costing ₹5000 was purchased, but wrongly charged to revenue (no rectification has yet been made for the same)
(b) Stock is overvalued by ₹1000 in 2012. Debtors are to be reduced by ₹500 in 2013, some old furniture (Book value ₹1000) was disposed of for ₹600.
(c) Fixed assets are worth 5 per cent more than their actual book value. Depreciation on appreciated value of Fixed assets except machinery is not be considered for valuation of goodwill.
(d) Of the investment 20 per cent is trading and the balance is non-trading. All trade investment are to be valued at 20 per cent below cost. Trade investment were purchased on 1st January, 2013. So per cent of the non-trade investments were acquired on 1st January, 2012 and the rest on 1st January, 2011. As uniform rate of dividend of 10 per cent is earned on all investments.
(e) Expected increase in expenditure without commensurate in selling price is ₹2000.
(f) Research and Development expenses anticipated in future ₹3000 per annum.
(g) In a similar business a normal return on capital employed is 10%.
(h) Profit (after tax) are as follows:
In 2011 – ₹ 21,000, in 2012 – ₹ 19,000 and in 2013 ₹ 20,000.
(i) Current income tax rate is 50%, expected income tax rate will be 45%.

From the above, ascertain the ex-dividend and cum-dividend intrinsic value for different categories of equity shares. For this purpose goodwill may be taken as 3 years purchase of super profit. Depreciation is charged on machinery @ 10% on reducing system. **[15]**

Q. 7. RAYMONDS Garments Ltd. is a company which produces and sells to retailers a 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	3750	4250	5000	6250	7500	8500	9500	11250	12500	15000

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	1150	1300	1500	1650	2000

RAYMONDS 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 lakh

Sundry fixed assets	2000
Investments	500
Stock	1000
Total	3500
Less : Sundry Creditors	1000
Net Assets	2500

(ii) Sundry fixed assets amounting to ₹125,00,000 cannot be used and their net realisable value is ₹112,50,000

(iii) Stock can be realised 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 Ltd. 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	4500	4750	5750	7375	8750	10000	11250	13250	14500	17250

Find out the maximum value of SONA Ltd. which RAYMONDS 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

[15]

Q. 8. (a) Bikram Ltd has hired a Marketing Consultancy Firm for doing market research and provides data relating to Tyre industry for the next 10 years. The following were the observations and projections made by the consultancy firm -----

I. The Tyre Industry in the target area i.e., whole of India, is expected to grow at 5% p.a. for the next 3 years, and thereafter at 7% p.a. over the subsequent seven years.

II. The market size in terms of unencumbered basic sales of tyres was estimated at ₹8,000 lakhs in the last year, dominated by medium and large players. This includes roughly 9.0% of fake brands and locally manufactured tyres. Market share of this segment is expected in increase by 0.5%.

III. Cheap Chinese imports accounts for 40% of the business (but 60% of the volume. This is expected to increase by 0.25% over the next decade.

IV. The other large players account for roughly 35% of the business value, which is expected to go down by 0.5% over the next ten years, due to expansion of Bikram Ltd's product portfolio.

V. The Company is in the process of business re-engineering, which will start yielding results in 2 years time, and increase its profitability by 3% from its existing 12%.

If the appropriate discount rate is 16% what is the Brand Value of Bikram Ltd., under Market oriented Approach.

(b) The 6-months forward price of a security is ₹ 208.18. The borrowing rate is 8% per annum payable with monthly rests. What should be the spot price? **[8+2]**

Q. 9 . (a) State the various methods of payment in case of mergers and amalgamations.

(b) Explain the concept of Human Resource Accounting (HRA) and outline the basic models for HRA. **[4+6]**

Q. 10. (a) As the finance manager of R Ltd., you are investigating the acquisition of S Ltd. company. The following facts are given:

Particulars	R Ltd.	S Ltd.
Earning per share	₹67.50	₹25
Dividend per share	₹32.50	₹10
Price per share	₹480.00	₹150
Number of shares	600 lakhs	200 lakhs

Investors currently expect the dividends and earnings of S Ltd. to grow a steady rate of 7% after acquisition this growth rate would increase to 8% without any additional investment.

Required:

(i) What is the benefit of this acquisition?

(ii) What is the cost of this acquisition to R Ltd. if it pays

I. ₹170 per share compensation (cash) to R Ltd. and

II. Offers 2 shares for every 6 shares of S Ltd? **[2+(1+2)]**

(b) S. Mondal has just completed his post qualification internship in a reputed medical hospital. He wants to buy the running practice of Dr. Mukherjee, a renowned child specialist located at Lansdowne in Kolkata. The revenue and the costs of this practice in 2013 – 2014 were as under:

Particulars	₹
Revenue	1,00,000
Employee expenses	30,000
Annual rent for the facilities	10,000
Rental of medical equipments	8,000
Medical insurance	9,000
The tax rate on the income	
Including local taxes and subscription	40%
The cost of capital for this practice	10%

The above revenue and all the associated expenses are estimated to grow at 4% p.a. for the next 10 years if Dr. Mukherjee continues to run the practice.

Dr. S Mondal anticipates that upon the changeover there will be drop in revenue by 25% in the first year of his practice. The growth rate in revenue and expenses will remain at 4% p.a. thereafter i.e., for year 2 onwards.

Dr. S Mondal wants your advice for the price he should offer to Dr. Mukherjee to purchase the latter's practice at Lansdowne, Kolkata. **[5]**