Paper – 20: Financial Analysis & Business Valuation

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

Group-A

(Answer Question 1 and 2 which are compulsory and any two from the rest)

Question 1.

(A) Selected Financial Statistics of Rudo Ltd.

(₹ in lakhs)

(Index: Base Year 2003-04 = 100)

	2012-13	2011-12	2010-11
Total Income (₹)	10,615	9,093	8,280
Index	498	427	389
Depreciation (₹)	225	126	101
Index	479	268	215
Profit before tax (₹)	803	815	540
Index	453	460	305
Taxation (₹)	405	474	315
Index	526	616	409
Dividend (₹)	91	91	70
Index	260	260	200
Retained Profits (₹)	307	250	155
Index	473	385	238
Assets, Liabilities and Net Worth:			
Fixed Assets (₹)	1,655	991	914
Index	338	202	187
Investment (₹)	177	165	165
Index	358	358	358
Indebtedness (₹)	1,097	885	760
Index	213	172	148
Share capital (₹)	917	603	603
Index	321	211	211
Reserves (₹)	806	795	615
Index	413	408	315
Net Worth (₹)	1,723	1,399	1,218
Index	358	291	253

(B) Significant Ratios (₹ in lakhs)

		2012-13	2011-12	2010-11
1.	Measurement of Investment			
	Percentage of Return on Investment	32.7	39.5	32.9
	Percentage of Return on Equity	29.9*	25.9	19.7
	Dividend cover (Ratio)	4.67*	3.99	3.48
2.	Measurement of Performance:			
	Percentage of Profit before tax to Sales	7.7	9.3	6.7
	Percentage of Profit after tax to Sales	3.8	3.9	2.8
	Assets Turnover (Ratio)	3.6	3.8	4.1
3.	Measurement of Financial Status			
	Percentage of Term Loans to Tangible net worth	4.12	14.2	19.4
	Current Ratio	1.25	1.25	1.15

4.	General Dividend per Equity Share (₹) Earning per Equity Share (₹)	 1.60 7.48*	 1.60 6.39	 1.20 4.17

* Excluding bonus shares issued on March 31st, 2013.

(C) Statement of Changes in Financial Position (₹ in lakhs)

Funds obtained from:	2012-13	2011-12
Profit after tax	415.21	341.17
Depreciation	225.09	125.94
Long-term loans	466.30	---
Sale of investments	---	0.44
	1,106.60	467.55
Funds used for:		
Repayment of long-term loans	---	23.05
Plant expenditure	889.16	202.47
Increase in investment	11.97	0.85
Dividends	90.96	161.04
Increase in working capital	114.51	80.14
	1,106.60	467.55
Changes in Working Capital Increase/(Decrease):		
Cash and Bank Balances	274.23	12.08
Inventories	55.63	236.08
Sundry Debtors	(66.91)	292.47
Loans and Advances	163.20	(0.20)
	426.15	540.43
Creditors and other Liabilities	616.80	244.10
Short-term Borrowings	(254.30)	197.31
Provision for Taxation	(50.86)	18.88
	311.64	460.29
Increase in Working Capital	114.51	80.14

After reading the above informations of Rudo Ltd., answer the following questions:

(a) Analyse the financial position of Rudo Ltd. from the profitability, liquidity, solvency and overall performance perspectives.

(b) What aspects are to be considered to review the financial position of Rudo Ltd.?

(c) Mr. X, an investor of Rudo Ltd., wants to know about the financial implications related to earnings and value of shares. Write it from an investor's perspective.

[8+2+5]

Question 2.

The following data is available from the books of ABC Ltd.

(₹)

Balance Sheet (extract) as on	31-03-2012	31-03-2013
Assets		
Land and buildings	8,00,000	8,55,000
Furniture, fixtures and fittings	90,000	76,500
Stock	5,32,500	5,96,300
Debtors	1,87,300	1,84,200
Cash in hand	18,200	13,400
Cash at bank	1,15,200	1,62,000

Bills receivable	30,000	50,000
Advance payment of income-tax	2,55,000	2,70,000
Preliminary expenses	21,000	14,000
	20,49,200	22,21,400
Liabilities		
Equity share capital	10,00,000	11,00,000
Securities premium	---	30,000
General reserve	4,00,000	5,01,000
Bills payable	60,000	20,000
Creditors	2,07,200	1,57,400
Outstanding expenses	30,000	35,000
Provision for Income-tax	2,52,000	2,68,000
Proposed dividend	1,00,000	1,10,000
	20,49,200	22,21,400

Profit and Loss Account (extract) for the year ended 31st March, 2013

	(₹)
Sales	46,37,200
Cost of goods sold	(37,21,200)
Gross profit	9,16,000
Sundry operating expenses	(3,17,500)
Depreciation on land and buildings	(45,000)
Depreciation on furniture, fixtures and fittings	(8,500)
Loss on disposal of furniture	(2,000)
Preliminary expenses amortised	(7,000)
Net profit before Income-tax	5,36,000
Provision for Income-tax	(2,68,000)
Net profit after Income-tax	2,68,000
Provision for Income-tax (2011 – 12)	(2,000)
Interim dividend	(55,000)
Proposed dividend	(1,10,000)
Transfer to general reserve	(1,01,000)
	NIL

ABC Ltd. also provides the following informations:

(i) Liability for income-tax for the accounting year 2011-12 was fixed at ₹ 2,54,000 and hence, a refund of ₹ 1,000 was received out of the advance tax paid for that year.

(ii) Book value of furniture sold during the year was ₹ 5,000.

Read the above financial statements and answer the following questions:

(a) What is the treatment of non-cash transactions in cash flow statement?

(b) What is the amount would be payable to suppliers and employees during the year in the given case of ABC Ltd.?

(c) What is the financing activity in cash flows? Mention those items of financing activities which will come in the cash flow statement of ABC Ltd.?

(d) How cash flows from operating activities under indirect method is calculated? Also show the computation of the same under direct method.

[3+3+3+6]

Question 3.

(a) From the following informations and particulars of Zed Ltd. for the year ended 31.03.2013 calculate — (1) Book Value per Share, (2) Earnings per Share, (3) Dividend Yield, (4) Earning Yield, (5) P/E Ratio and (6) P/B Ratio.

The informations which are available from the Books of Accounts of Zed Ltd. are as follows: (All ₹ in lakhs)

Sales — ₹18.26, Cost of goods sold — ₹10.25, Administrative expenses — ₹0.46, Selling and distribution expenses — ₹1.47, Depreciation — ₹1.05, Interest on debt — ₹1.13, Tax provision — ₹1.08, Proposed dividend — ₹0.90, Equity share capital (consisting of 7,000 equity shares of ₹100 each) ₹7.00, Reserve & surplus — ₹1.15, 8% Debentures — ₹9.0, 9% Public deposits — ₹3.4, Trade creditors — ₹3.28, Outstanding liabilities for expenses — ₹0.23, and Fixed assets (less accumulated depreciation for ₹4.6) ₹15.6.

Monthly average market price per share during month of March, 2013 was ₹247.

Industry averages: P/E ratio 10, P/B 1.6, Dividend yield 8%.

(b) What is the impact of leverage on capital turnover ratio, working capital turnover ratio, and shareholders wealth (by using ROI and ROE).

[6+4]

Question 4.

(a) Following are the Balance Sheet extracts of Mayuri Ltd. as on 31.03.2012 and 31.03.2013. Prepare Comparative Balance Sheet of Mayuri Ltd. and interpret it.

(₹ in crores)

Balance Sheet (extracts) as at	31.03.2012	31.03.2013
Share Capital and Liabilities:		
Share capital	6,393.21	6,453.39
Equity share suspense	60.14	1.56
Equity share warrants	214.80	1,682.40
Reserves and surplus	57,513.78	73,312.81
Secured loans	9,569.12	6,600.17
Unsecured loans	18,256.61	29,879.51
Current liabilities	16,865.53	21,045.47
Provisions	1,712.87	2,992.62
Deferred tax liability	6,982.02	7,872.54
	1,17,353.28	1,49,838.91
Assets:		
Net fixed assets	63,660.46	61,883.63
Capital work-in-progress	9,528.13	25,005.84
Investments	16,251.34	22,063.60
Current Assets:		
Inventories	10,136.51	12,247.54
Sundry debtors	3,732.42	6,227.58
Cash and bank balances	1,835.35	4,280.05
Other current assets	3.07	72.54
Loans and advances	12,206.00	18,058.13
	1,17,353.28	1,49,838.91

(b) Why inventories are not considered as quick assets?

[8+2]

Question 5.

(a) The following informations are given regarding Bhor Ltd. Some key ratios are provided for the particular industry to which Bhor Ltd. belongs. You are required to calculate the relevant ratios for Bhor Ltd. compare them with those particular industry norms and give the comments on the performance of the company.

The following balances are available from the Books of Accounts of Bhor Ltd. as at 31st March, 2013:

Equity Share Capital — ₹27,00,000, 12% Debentures — ₹5,00,000, Sundry Creditors — ₹3,80,000, Bills Payable — ₹3,20,000 and Other Current Liabilities — ₹2,00,000, Net Fixed Assets — ₹17,00,000, Cash — ₹4,00,000, Sundry Debtors — ₹7,50,000 and Stock — ₹12,50,000.

The sales for the company for the year ending 31.03.2013 amounted to ₹60,00,000 and the gross profit was 17,00,000.

Industry Norms	Ratio considered
Current ratio	2.4
Sales/Debtors	7.7
Sales/Stock	7.9
Sales/Total assets	2.39
Gross Profit ratio	36%

(b) What is Financial Modelling? Describe different types of financial models.

[5+5]

Section B – Business Valuation
(Full Marks: 50)

Answer Question no.6 and 7 and any two from the rest in this section.

6. The balance sheets of Sudha Ltd. for the year ended on 31.3.2011, 31.3.2012 and 31.3.2013 are as follows:

Liabilities	31.03.11 ₹	31.03.12 ₹	31.03.13 ₹
3,20,000 Equity Shares of ₹ 10 each fully paid	32,00,000	32,00,000	32,00,000
General Reserve	24,00,000	28,00,000	32,00,000
Profit & Loss Account	2,80,000	3,20,000	4,80,000
Creditors	12,00,000	16,00,000	20,00,000

	70,80,000	79,20,000	88,80,000

Assets	**31.03.11** ₹	**31.03.12** ₹	**31.03.13** ₹
Goodwill	20,00,000	16,00,000	12,00,000
Building and Machinery (Less: Depreciation)	28,00,000	32,00,000	32,00,000
Stock	20,00,000	24,00,000	28,00,000
Debtors	40,000	3,20,000	8,80,000
Bank Balance	2,40,000	4,00,000	8,00,000
	70,80,000	79,20,000	88,80,000

	31.03.11 ₹	**31.03.12** ₹	**31.03.13** ₹
Actual valuation were as under			
Building & Machinery	36,00,000	40,00,000	44,00,000
Stock	24,00,000	28,00,000	32,00,000
Net Profit (including opening balance) after writing off depreciation and goodwill, tax provision and transfer to General Reserve	8,40,000	12,40,000	16,40,000

Capital employed in the business at market values at the beginning of 2010-2011 was ₹ 73,20,000 which included the cost of goodwill. The normal annual return on Average Capital employed in the line of business engaged by Sudha Ltd. is $12\frac{1}{2}\%$.

The balance in the General Reserve account on 1st April, 2010 was ₹ 20 lakhs.
The Goodwill shown on 31.3.2011 was purchased on 1.4.2010 for ₹ 20,00,000 on which date the balance in the Profit and Loss Account was ₹ 2,40,000. Find out the average capital employed each year.
Calculate the value of goodwill which is to be valued at 5 years purchase of super profits (Simple average method).
Also find out the total value of the business as on 31.3.2013. **[15]**

7. Mr. Tapan stated at the paper in front of him. He has just finished projections for his startup company, Export Dotcom Pvt. Ltd. He was in need of money and intended to use his valuations for this purpose. He was almost convinced that he would be able to influence lenders about the potential of this startup firm in online-export documentation. However, he was not sure about whether the lenders would accept his valuations. He considered the options in front of him.

He considered his projections to be reasonable, although he guessed that he only had a 30% chance of hitting those numbers and an equal 30% chance of achieving half of the projected cash flows. He is also aware that there is a relatively high probability (40%) of not getting any cash flow at all.

In estimating cash flow, Tapan thought that he would only need ₹ 5 million in cash to run the business. Anything above ₹ 5 million would be considered as excess cash. Because the firm was just getting off the ground, there was no working capital and no fixed assets at the beginning of 2012. Any working capital and net fixed at the end of year 2012 would be a net investment.

Mr. Tapan has made projections for next six years (Exhibit 1) and he thought that after six year the net earnings firm is expected to grow at around 7% per year, although he wondered what a somewhat more modest growth rate of 4% would do to the expected value of the firm.

Mr. Tapan thought of approaching venture capitalists too for raising money. He is fully aware that traditional lending institutions are averse to lending in his kinds of business. But he was aware that venture capitalists are always skeptical about any projections made by the prospective borrower and hence he has decided to show only the best case projections to the venture capitalists. He approached one venture capitalist with his cash flow projections and the venture capitalist has flatly said that they would require a 51% rate of return on their investment in his type of firm.

Mr. Tapan knew that he would not be taking on any debt for the foreseeable future. However, he was wondering how being an all equity firm would affect his cost of capital. The long term equity risk premium is around 7.5%. However, illiquid stocks carry 100 basis point more premium. Current 364-day treasury bills yield 7% on an effective annual rate. Swarup a friend of Tapan has suggested that Export Dotcom might be able to take on debt later once it has stabilized.

Tapan knew that in order to value a startup, he has to gather information on existing pure players or at least comparable firms. He found three publicly traded firms directly comparable to his kind of business (pure players) (Exhibit 2). He wondered how he should use this information in determining value of his firm. The following questions came to his mind:

(i) Should he use beta of these publicity traded firms? What about the fact that he was still private? **[2]**

(ii) What is the value of the firm based on discounted cash flows? (Use market value weighted beta of the pure players.) **[10]**

(iii) Does venture capital method of valuation give any better insight? (Use average P/E multiple-equally weighted.) **[3]**

Help Mr. Tapan find answer to these questions. (Refer Exhibits 1 & 2 given below):

Exhibit 1: Projected Financials (best case) of Export Dotcom Pvt. Ltd.

(Figs. In ₹ '000s)

	2012	**2013**	**2014**	**2015**	**2016**	**2017**
Income Statement						
Net Sales	42,500	75,000	1,77,500	2,30,000	2,60,000	3,00,000
Cost of goods sold	16,000	28,000	70,000	90,500	1,00,500	1,22,500

Selling and general admn. Exp.	17,500	27,050	32,000	26,500	36,000	39,000
R & D expenses	5,500	12,500	20,500	27,000	32,500	35,000
EBIT	3,500	7,450	55,000	86,000	91,000	1,03,500
Tax (35%)	1,225	2,607.5	19,250	30,100	31,850	36,225
Net earnings	2,275	4,842.5	35,750	55,900	59,150	67,275
Balance Sheet						
Cash	5,000	5,000	23,965	69,535	1,23,495	1,85,210
Accounts receivable	7,085	12,500	29,585	38,335	43,335	50,00
Inventories	2,000	3,500	8,750	11,315	12,565	15,315
Other	1,770	3,125	7,400	9,585	10,835	12,500
Net Fixed Assets	4,530	11,500	16,000	20,000	21,500	22,500
Total Assets	20,385	35,625	85,700	1,48,770	2,11,730	2,85,525
Accounts payable	2,665	4,665	11,665	15,085	16,750	20,415
Accrued expenses	3,035	5,355	12,680	16,430	18,570	21,430
Net worth	14,685	25,605	61,355	1,17,255	1,76,405	2,43,680
Total liabilities and net worth	20,385	35,625	85,700	1,48,770	2,11,725	2,85,525

Exhibit 2: Financial details of pure players for the year 2011
(Figs. In ₹ Lakhs)

	Player 1	Player 2	Player 3
Net earnings	26.35	108.75	7.5
Debt	35.9	34	0.85
Net worth	60.5	1056	187.8
Equity beta	1.4	1.3	1.2
P/E Ratio	20	37	20

8.

(a) The settlement price of sensex futures contract on a particular day was ₹ 4,600. The initial margin was set at ₹ 10,000, while the maintenance margin was fixed at ₹ 8,000. The multiple of each contract is 50.

The settlement prices on the following four days were as follows:

Day	Settlement Price ₹
1	4,700
2	4,500
3	4,650
4	4,750

5	4,700

Calculate the mark to market cash flows and the daily closing balances in the accounts of
(i) An investor who has gone long, and
(ii) An investor who has gone short at 4600.
Calculate net profit (loss) on each of the contracts.

(b) What factors are considered for selecting a target in a business acquisition strategy?
[7+3=10]

9.

(a) In valuing a firm should you use the marginal or effective tax rate?

(b) Explain how would you value a business and the component of value that is attributable to the key person? **[5+5=10]**

10.

(a) Mr. R. K. Sinha had purchased 500 shares of the Company X at the rate of ₹ 60 per share. He held the shares for 2 years and got a dividend of 15% and 20%, in the first year and second year respectively on the face value of ₹ 10 each share. At the end of the second year, the shares are sold at the rate of ₹ 75 per share. Determined the effective rate of return per year which Mr. Sinha has earned on this share.

(b) The following information along with other necessary information has been extracted from the Annual Report-2012 of Supreme Limited:
Profit and Loss Account of Supreme Limited for the year ending on March 31,2012

Particulars	Amount (₹ in millions)
INCOME:	
Domestic Sales	13156.183
Export Sales	2283.370
Total Sales	15439.553
Other Income	82.637
Total	15522.190
EXPENDITURE	
Material Consumed and Purchase of goods	6922.881
Manufacturing and Other Expenses	5198.698
Interest	265.289
Depreciation	793.258
Other Expenses	461.366
Impairment Loss on Fixed Assets	123.192
Adjustment due to (increase)/decrease in stock of finished goods and work-in-progress	175.843
	13940.527

PROFIT/(LOSS) BEFORE TAXATION	1581.663
Provision for Tax	597.000
PROFIT/(LOSS) AFTER TAXATION	984.663
Balance brought forward	499.218
PROFIT/(LOSS) AVAILABLE FOR APPROPRIATION	1483.881
APPROPRIATION	
Dividends:	
Interim	337.468
Final Proposed	433.871
Corporate Dividend Tax	86.776
Total Dividend	858.115
General Reserve	98.466
Balance Carried to the Balance Sheet	527.300
Total	1483.881

Other Information:

(i) The company had declared total dividend (interim plus final) of 80% for the year 2011-12 on a share with face value of ₹ 10.

(ii) Net Worth of the company -- ₹ 2887.355 million.

(iii) Interest on Risk Free Debt – 7.50%.

(iv) Company's Beta – 1.15.

(v) Rate of Return on Equity Benchmark Index – 15.50%.

Assuming that the Constant Dividend Growth Model is an appropriate model for determining the value of the company's share, you are required to use the above information and determine the value of the company's share. **[4+6=10]**