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)

1. One impetus to the development of the common-size statements came from the problems in comparing the financial statements of firms that differ in size. Hawk Ltd. has long-term debt of ₹95.719 million and that Pablo Ltd. have long-term debt of ₹76.810 million. Due to possible size differences between the two companies, it would be misleading to always infer that Hawk Ltd. was more highly leveraged than Pablo Ltd. One way of controlling for size differences is to express the components of the balance sheet as a percentage of total assets (liabilities + equity) and the components of the income statement as a percentage of total revenues. The derived statements are termed common- size statements. For instance, in 2012-13 Hawk Ltd. had total assets (liabilities and equities) of ₹530.301 million, while Pablo Ltd. had total assets (liabilities and equities) of ₹243.915 million. Their respective common – size balance sheets show —
Hawk Ltd.: Long-term debt of 18.0% (₹95.719/₹530.301)
Pablo Ltd.: Long-term debt of 31.05% (₹76.810/₹243.915)

Table 1 Common-size financial statements

A. Common size Balance Sheet, 2012-13

Particulars	Hawk Ltd.	Bedant Ltd.	Colours Ltd.	Pablo Ltd.
Assets				
Cash and marketable securities	4.0%	5.0%	10.2%	2.3%
Accounts receivables	7.1%	6.6%	6.3%	10.0%
Inventories	21.3%	6.9%	11.2%	26.2%
Other current assets	1.2%	2.2%	3.7%	1.2%
Properties plant and equipment	64.2%	74.0%	67.7%	56.1%
Other assets	2.2%	5.3%	0.9%	4.2%
	100.0%	100.0%	100.0%	100.0%
Liabilities + Equity				
Accounts payable	15.9%	7.6%	5.4%	22.2%
Other current liabilities	10.0%	9.1%	9.7%	20.6%
Long – term debt	18.0%	22.2%	0.0	31.5%
Capital leases	0.0	0.0	0.0	1.3%
Other long-term liabilities	0.0	0.0	0.9%	2.0%
Deferred credits	11.0%	13.2%	9.6%	7.2%
Minority preferred shareholders	0.0	7.1%	0.0	0.0
Shareholders' equity	45.1%	40.8%	74.4%	15.2%
	100.0%	100.0%	100.0%	100.0%

B. Common size Balance Sheet, 2012-13

Particulars	Hawk Ltd.	Bedant Ltd.	Colours Ltd.	Pablo Ltd.
Revenues				
Sales	99.4%	99.8%	99.1%	99.6%
Other revenues	0.6%	0.2%	0.9%	0.4%
	100.0%	100.0%	100.0%	100.0%
Expenses and Net Income				
Excise taxes	13.1%	9.3%	10.5%	14.1%
Cost of goods sold	61.7%	61.7%	57.5%	67.7%
Marketing, general, and administrative	16.5%	18.3%	17.7%	16.1%
Interest expense	0.7%	1.2%	0.1%	1.2%
Other expense	0.0%	0.3%	1.8%	0.1%
Taxation, current	2.2%	2.0%	4.0%	(0.3) %%
Taxation, deferred	1.5%	2.0%	1.3%	0.7%
Net income	4.3%	5.2%	7.1%	0.4%
	100.0%	100.0%	100.0%	100.0%
Total assets (₹ million)	₹530	₹4,330	₹1,156	₹244
Total revenues (₹ million)	₹1,334	₹6,671	₹1,254	₹804

(a) Make a comparative analysis among the four firms from the Balance Sheet as well as the Income Statement perspectives.

(b) If the percentage in shareholder's equity has been reduced from 74.4% to 40.45% for Colours Ltd., what does it imply?

(c) The short term and long term borrowing element in the capital structure is too high in the case of Pablo Ltd. Analyse it from leverage point of view.

(d) If it is assumed that the percentage of net income was 3.2% in the previous year (2011-12) for Hawk Ltd., then what are the possible causes for such increment in profit?

[5+3+3+4]

2. Financial Highlights Roombit Industries Ltd.

Particulars	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07
Turn Over	1,39,269	1,18,354	89,124	73,164	56,247	50,096	45,404
Total income	1,44,898	1,18,832	89,807	74,614	57,385	51,097	46,186
EBIDT	28,935	20,525	14,982	14,261	10,983	9,366	8,658
Depreciation	4,847	4,815	3,401	3,724	3,247	2,837	2,816
Profit after tax	19,458	11,943	9,069	7,572	5,160	4,104	3,243
Equity dividend (%)	130	110	100	75	52.5	50	47.5
Dividend payout	1,631	1,440	1,393	1,045	733	698	663
Equity share capital	1,454	1,393	1,393	1,393	1,396	1,396	1,054
Equity Share suspense	-	60	-	-	-	-	342
Equity Share warrants	1,682	-	-	-	-	-	-
Reserves and surplus	78,313	62,514	48,411	39,010	33,057	28,931	26,416
Net worth	81,449	63,967	49,804	40,403	34,453	30,327	27,812
Gross fixed assets	1,27,235	1,07,061	91,928	59,955	56,860	52,547	48,261
Net fixed assets	84,889	71,189	62,675	35,082	35,146	34,086	33,184
Total assets	1,49,792	1,17,353	93,095	80,586	71,157	63,737	56,485
Market capitalization	3,29,179	1,98,905	1,10,958	76,079	75,132	38,603	41,989
No. of employees	25,487	24,696	12,540	12,113	11,358	12,915	12,864
Contribution to							

National exchequer	13,696	15,344	15,950	13,972	12,903	13,210	10,470
Earnings per share (₹)	133.90	82.20	65.10	54.20	36.8	29.3	23.4
Turnover per share (₹)	958.10	814.20	639.60	525.0	402.08	358.8	325.2
Book value per share (₹)	560.3	440.0	357.4	289.9	246.7	217.2	199.2
Debt: Equity ratio	0.45:1	0.44:1	0.44:1	0.46:1	0.56:1	0.60:1	0.64:1
EBDIT/ Gross turnover (%)	20.8	17.3	16.8	19.5	19.5	18.7	19.1
Net profit margin (%)	14.0	10.1	10.2	10.3	9.2	8.2	7.1
RONW(%)	28.8	23.5	22.7	21.9	17.0	14.8	16.1
ROCE (%)	20.3	20.5	20.5	21.3	14.0	13.2	15.3

(a) Calculate the capital employed for the last three years based on the above data.

(b) What is debt-service coverage ratio? If the amount of depreciation was ₹3,587 crore in the year 2012-13, then what will be the revised debt-service coverage ratio?

(c) If the company wants to change its price-earnings ratio to 16.87 in 2012-13 how much increment in EPS is needed? (assume the current market price of equity share is same)

(d) How defensive-interval ratio is calculated? Compute this ratio for the last two years.

[6+4+1+4]

3. (a) The following informations are related to financial position of Rungta Ltd for 3 years which ended on 31st March every year:

Particulars	2011 (₹)	2012 (₹)	2013 (₹)
Share capital	1,65,000	1,90,000	1,85,000
Current Liabilities	35,000	?	?
Working Capital	95,000	60,000	1,20,000
Long-term Loan	1,25,000	?	1,41,000
Fixed assets	2,25,000	2,60,000	2,15,000
Net Worth	3,00,000	2,10,000	2,45,000
Current Assets	?	1,30,000	1,80,000
Capital Employed	3,50,000	?	?
Reserves & Surplus	?	45,000	75,000

You are required to prepare a Vertical Trend Balance Sheet taking 2011 as the base.

(b) State the usefulness of the trend ratios.

[8+2]

4. (a) From the following particulars of Teen Ltd. compute the value of Z and comment on the sickness of the company:

Share capital (consisting of 10,000 shares of ₹10 each) — ₹1,00,000.
Reserve & Surplus — ₹50,000
Outstanding expenses — ₹65,000
Sundry creditors — ₹85,000
8% Debenture — ₹2,60,000
Fixed assets — ₹4,10,000
Inventory — ₹40,000
Book debts — ₹60,000
Cash at bank — ₹50,000
Market value per share — ₹13.50

EBIT — ₹1,50,000

(b) Which factors are responsible for changes in income?

[7+3]

5. Write a short on **any two** of the following:

(a) Du Pont Analysis

(b) Financial Modeling

(c) Quality of Earnings

[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 sheet of Ramana Ltd. for the years ended on 31.03.2010, 31.03.2011 and 31.03.2012 are as follows:

₹

Liabilities	31.03.20100	31.03.2011	31.03.2012
3,20,000 equity shares of ₹ 10 each fully paid	32,00,000	32,00,000	32,00,000
General Reserves	24,00,000	28,00,000	32,00,000
Profit and Loss account	2,80,000	3,20,000	4,80,000
Creditors	12,00,000	16,00,000	20,00,000
Total	**70,80,000**	**79,20,000**	**88,80,000**

₹

Assets	31.03.2010	31.03.2011	31.03.2012
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
Total	**70,80,000**	**79,20,000**	**88,80,000**

Actual valuations were as under:

₹

	31.03.2010	31.03.2011	31.03.2012
Building and 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 2009-2010 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 Ramana Ltd. is 12.5%.

The balance in the general reserve account on 1st April, 2009 was ₹ 20 lakhs.

The goodwill shown on 31.3.2010 was purchased on 1.4.2009 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.

Goodwill 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 31.03.2012 **[15]**

7. The Balance Sheet of Sajjan Private Ltd. discloses the following position on 31st December, 2012.

Liabilities	₹	Assets	₹
Share Capital:		Land and Buildings	3,00,000
Subscribed		Plant and Machinery	4,00,000
20,000 5% preference shares		Stock	2,00,000
of ₹10each fully paid	2,00,000	Sundry debtors	2,00,000
30,000 ordinary shares of ₹ 10		Cash at bank	1,00,000
each fully paid	3,00,000		
	5,00,000		
General Reserve	2,00,000		
Profit and Loss	50,000		
Trade Creditors	4,50,000		
	12,00,000		**12,00,000**

It is proposed to convert Sajjan Private Ltd. into a public limited company and for this purpose you are asked to value the goodwill of Sajjan Private Ltd.

The following additional information is supplied to you.

a) Sajjan Private Ltd. was incorporated on 1st January, 1994 and its first accounts were made up to 31st December, 2004.
b) It manufactures abrasive materials involving technical skill and it has engaged two foreign consultants since 2004.
c) No provision for taxation is required.
d) The fixed assets of the company have been adequately depreciated.
e) The present market value of its land and building is ₹ 5,00,000 and of plant and machinery ₹ 6,00,000.
f) The profits and losses of the company for the last 3 years after charging depreciation and taxation, have been as follows.

Year	₹
2010	1,01,000
2011	1,50,000

2012 1,69,000

g) The sales of the company during last 3 years were ₹ 12,99,000, ₹13,77,000 and ₹ 18,22,000.

The reasonable return on capital invested in the class of business carried on by Sajjan Private Ltd. is 10 percent.

It may be assumed that the company will be able to maintain its profits for the next few years on the same level as in the past. Wherever appropriate, you may make further suitable assumption. **[15]**

8. Following are the information of two companies for the year ended 31st March, 2013.

₹

Particulars	Company X	Company Y
Equity shares of ₹ 10 each	8,00,000	10,00,000
10% Preference shares of ₹ 10 each	6,00,000	4,00,000
Profit after tax	3,00,000	3,00,000

Assume that the market expectation is 18% and 80% of the profits are distributed

i. What is the rate you would pay to the equity shares of each company?

a. If you are buing a small lot.

b. If you are buying controlling interest shares.

ii. If you plan to invest only in preference shares, which company's preference shares would you invest?

iii. Would your rates be different for buying small lot, if the company 'X' retains 30% and company 'Y' 10% of the profits? **[4+3+3=10]**

9. (a) "There may be cases where Cash Flow Return on Investment increases while reducing Firm Value."
Discuss this statement, giving two examples.

(b) Explain the difference between financial and operating synergy? **[5+5=10]**

10. Halfway online, an interest service provider has 1million existing subscribers. Each subscriber is expected to remain for 3 years. Halfway experts to generate ₹ 100 net after-tax cash flow (subscription revenue minus costs of providing service) per subscriber each year. Halfway has a cost of capital of 15%. Furthermore, assume that Halfway expects to add 1,00,000 subscribers each year for the next 10 years and that the value added by each subscriber will grow from the current level at the inflation rate of 3% every year. The cost of adding a new subscriber is ₹ 100 currently, assumed to be growing at the inflation rate.

Based on the information given, find out the value of the firm and the value per existing subscriber.
(Note: ₹ 1 million = ₹ 10,00,000) **[10]**