PAPER – 20: FINANCIAL ANALYSIS & BUSINESS VALUATION

The following table lists the learning objectives and the verbs that appear in the syllabus learning aims and examination questions:

	Learning objectives	Verbs used	Definition
LEVEL C	KNOWLEDGE What you are expected to know	List	Make a list of
		State	Express, fully or clearly, the details/facts
		Define	Give the exact meaning of
	COMPREHENSION What you are expected to understand	Describe	Communicate the key features of
		Distinguish	Highlight the differences between
		Explain	Make clear or intelligible/ state the meaning or purpose of
		Identity	Recognize, establish or select after consideration
		Illustrate	Use an example to describe or explain something
	APPLICATION How you are expected to apply your knowledge	Apply	Put to practical use
		Calculate	Ascertain or reckon mathematically
		Demonstrate	Prove with certainty or exhibit by practical means
		Prepare	Make or get ready for use
		Reconcile	Make or prove consistent/ compatible
		Solve	Find an answer to
		Tabulate	Arrange in a table
	ANALYSIS How you are expected to analyse the detail of what you have learned	Analyse	Examine in detail the structure of
		Categorise	Place into a defined class or division
		Compare and contrast	Show the similarities and/or differences between
		Construct	Build up or compile
		Prioritise	Place in order of priority or sequence for action
		Produce	Create or bring into existence
	SYNTHESIS How you are expected to utilize the information gathered to reach an optimum conclusion by a process of reasoning	Discuss	Examine in detail by argument
		Interpret	Translate into intelligible or familiar terms
		Decide	To solve or conclude
	EVALUATION How you are expected to use your learning to evaluate, make decisions or recommendations	Advise	Counsel, inform or notify
		Evaluate	Appraise or asses the value of
		Recommend	Propose a course of action

Paper – 20: Financial Analysis & Business Valuation

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

This paper contains 4 questions, representing two separate sections as prescribed under syllabus 2012. All questions are compulsory, subject to the specific guidance/ instructions stated against every question. All workings, wherever necessary, must form a part of your answer. Assumptions, if any, should be clearly stated.

Question No. 1. (Answer **all** questions. Each question carries **10 marks**)

1. (a) M & Co. furnished the following data for the years 2013-14 and 2014-15. You are required to calculate: (i) Percentage Change in Cost Price; (ii) Percentage Change in Selling Price and (iii) Account for Changes in Gross Profit in the year 2014.

Year	2013-14	2014-15
Sales (₹)	2,25,000	2,32,875
Cost of Goods Sold (₹)	1,65,000	1,60,380
Gross Profit (₹)	60,000	72,495

During 2014-15 there was a decrease in volume by 10%. **[10]**

1. (b) During the past year, M & N Ltd., had net income of ₹1,00,000, paid dividends of ₹50,000 to its preference shareholders, and paid ₹30,000 in dividends to its equity shareholders. M & N's Equity Share Account showed the following:

January 1	Shares issued and outstanding at the beginning of the year	10,000
April 1	Shares issued	4,000
July 1	10% dividend on shares	
September 1	Shares repurchased for the treasury	3,000

Compute the weighted average number of equity shares outstanding during the year, and compute EPS. **[10]**

Question No. 2 (Answer **any two** questions. Each question carries **15 marks**)

2. (a) Prepare comparative & common-size income statement and Balance Sheet of A Ltd. & B Ltd. from the following:

Income Statement for the year ended 31.03.2015

	A Ltd. (₹)	B Ltd. (₹)
Net Sales	25,38,000	9,70,000

Cost of goods sold	14,22,000	4,75,000
Gross Profit	11,16,000	4,95,000
Selling Expenses	7,20,000	2,72,000
Administrative Expenses	1,84,000	97,000
Total operating expenses	9,04,000	3,69,000
Operating Profit	2,12,000	1,26,000
Other Income	26,000	10,000
	2,38,000	1,36,000
Other Expenses	40,000	29,000
Profit Before Tax	1,98,000	1,07,000
Income Tax	68,000	28,000
Profit after tax (PAT)	1,30,000	79,000

	A Ltd. (₹)	**B Ltd. (₹)**
Current Assets:		
Cash	54,000	72,000
Debtors	4,40,000	2,26,000
Trading Stock	2,00,000	1,74,000
Prepaid Expenses	22,000	21,000
Other current assets	20,000	21,000
Total Current Assets	7,36,000	5,14,000
Fixed Assets (Less) accumulated dep.	12,70,000	5,13,000
	20,06,000	10,27,000
Current Liabilities:		
Creditors	84,000	1,34,000
Other current liability	1,56,000	62,000
Total Current Liabilities	2,40,000	1,96,000
Debentures	4,50,000	3,18,000
	6,90,000	5,14,000
Capital & Reserves	13,16,000	5,13,000
	20,06,000	10,27,000

[15]

2. **(b)** The following are the accounts of Umar Ltd.

Statement of financial position (summarized)
as on 31st March, 2015 and 31st March, 2014.

Liabilities	**2014 - 15**		**2013 - 14**	
	₹ '000	**₹ '000**	**₹ '000**	**₹ '000**
Non-current assets				
Plant & Machinery		260		278
Current Assets				
Inventory	84		74	
Trade receivables	58		46	
Bank	6	148	50	170
Total		408		448

Capital and Reserves				
Ordinary Share Capital @ ₹ 50 each		70		70
8% Preference Shares		50		50
Securities Premium		34		34
Revaluation Reserve		20		--
Profit and Loss Account		62		84
		236		238
Non-current Liabilities				
5% Secured Loan Stock		80		80
Current Liabilities				
Trade Payables	72		110	
Provision for Taxation	20	92	20	130
		408		448

Summarized Income Statement for the year ended 31st March, 2015 and 31st March, 2014

Liabilities	2014 - 15		2013 - 14	
	₹ '000	₹ '000	₹ '000	₹ '000
Sales		418		392
Opening Inventory	74		58	
Purchases	324		318	
	398		376	
Closing Inventory	(84)	(314)	(74)	(302)
Gross Profit		104		90
Interest	4		4	
Depreciation	18		18	
Sundry Expenses	28	(50)	22	(44)
Profit before Tax		54		46
Provision for Taxation		(20)		(20)
Profit after Tax		34		26
Equity Dividend	12		10	
Preference Dividend	4	(16)	4	(14)
Retained Profit		18		12

Calculate and comment on the following ratios for Umar Ltd.

(1) ROCE
(2) Gross Profit margin
(3) Asset turnover
(4) Current ratio
(5) Quick ratio
(6) Inventory Turnover ratio
(7) Inventory holding period
(8) Debtors collection period
(9) Creditors payment period
(10) Equity gearing

(11) Total gearing
(12) Interest coverage
(13) Dividend coverage
(14) EPS
(15) PE if current market value of ordinary share is ₹ 2.40. **[15]**

2. (c) Following is the extract of a Balance Sheet of a company as on 31st March, 2015:

Liabilities	₹	Assets	₹
Equity Share Capital (₹ 100)	4,00,000	Fixed Assets	10,00,000
Reserves & Surplus	2,25,000	Trade Investment	2,00,000
12% Debentures	3,00,000	Stock	1,25,000
10% Bank Loan	2,00,000	Debtors	75,000
Current Liabilities	3,00,000	Preliminary Expenses	25,000
	14,25,000		**14,25,000**

Additional Information:
(I) Net sales for 2014-15 were ₹ 20,00,000.
(II) Price-Earnings Ratio is ₹ 10.
(III) Dividend Pay-out Ratio is 50%.
(IV) Dividend per Share in 2014-15 is ₹ 20.
(V) Corporate Tax Rate is 50%.
Using Altman's Model, calculate the Z-score of the company and interpret the result. **[15]**

Question No. 3. (Answer **all** questions. Each question carries **10 marks**)

3. (a) Your Clients Strong Ltd. have approached you for valuation of their shares in the context of their forthcoming Share Issue. The Company was incorporated on 01.04.2012. The following information is extracted from their annual reports for the last 3 years -

(₹ in Lakhs)

Particulars for the year ended 31st March	2013	2014	2015
Gross Fixed Assets	200	700	750
Accumulated Depreciation	20	80	150
Net Current Assets	300	600	750
Loans	---	500	400
Share Capital : Equity Shares of ₹ 10 each	400	500	500
Profit Before Tax	20	60	120
Preliminary Expenses Carried Forward	30	20	10

The Company has implemented a major project in 2014 which has started yielding results in 2014-15. Practices of Merchant Bankers indicate that an average of values based on Net Assets and on Yield is normally adopted in such cases. The normal industry expectation of yield is 15%. Tax rate is 40%.
Compute the value of the Company's Equity Shares based on the above information. **[10]**

3. (b) Jayadev Ltd. had earned at PAT of ₹ 48 Lakhs for the year just ended. It wants you to ascertain the value of its business, based on the following information.

(I) Tax Rate for the year just ended was 36%. Future Tax Rate is estimated at 34%.

(II) The Company's Equity Shares are quoted at ₹ 120 at the Balance Sheet date. The Company had an Equity Capital of ₹ 100 Lakhs, divided into Shares of ₹ 50 each.

(III) Profits for the year have been calculated after considering the following in the P&L Account -

- Subsidy ₹ 2 Lakhs received from Government towards fulfillment of certain social obligations. The Government has withdrawn this subsidy and hence, this amount will not be received in future.
- Interest ₹ 8 lakhs on Term Loan. The final installment of this Term Loan was fully settled in the last year.
- Managerial Remuneration ₹ 15 Lakhs. The Shareholders have approved an increase of ₹ 6 Lakhs in the overall Managerial Remuneration, from the next year onwards.
- Loss on sale of Fixed Assets and Investments amounting to ₹ 8 Lakhs. (Ignore Tax Effect thereon) **[10]**

Question No. 4. (Answer **any two** questions. Each question carries **15 marks**)

4. (a) (i) A company belongs to a risk class for which the approximate capitalisation rate is 10 per cent. It currently has outstanding 25,000 shares selling at ₹ 100 each. The firm is contemplating the declaration of a dividend of ₹ 5 per share at the end of the current financial year. It expects to have a net income of ₹ 2,50,000 and has a proposal for making new investments of ₹ 5,00,000. Show that under the MM assumptions, the payment of divided does not affect the value of the firm. **[5+5]**

4. (a) (ii) List the common sequential steps in business valuation. **[5]**

4. (b) (i) Calculate the value of the intangible assets of Khan Ltd. considering the excess returns earned by it, from the following information for the year ended 31.03.2015.

- Average PBT ₹ 2,520 Lakhs
- Average year end tangible assets ₹ 14,000 Lakhs
- Cost of equity of the company is 15%
- Return on Assets (ROA) industry average is 12%
- Tax rate is 30% **[4]**

4. (b) (ii) Describe the situations when FCFE models and dividend discount valuation models provide similar as well as dissimilar results. **[7]**

4. (b) (iii) Amit Group of company provides you the following information:

Profits (after tax @ 40%) and Equity Dividend:

Year	Profits	Equity Dividend
2012-13	1,32,000	12%
2013-14	1,92,000	18%
2014-15	1,50,000	15%

Share Capital:

30,000 Equity Shares of ₹ 10 each fully paid

40,000 Equity Shares of ₹ 10 each, ₹ 5 paid

1,000 9% Preference Shares of ₹ 100 each fully paid.

Normal Rate of Expectation is 10%.

Calculate the Value of an Equity Share assuming that only a few shares are to be transferred. **[4]**

4. (c) In recent board meeting of Sun Ltd., it was decided to increase the company's presence in the southern part of India and for that, it is further decided to acquire Moon Ltd. and merged it with itself. In this respect, you have been provided the following information:

Balance Sheet as on March 31, 2015 **(₹ in Crores)**

Equities and Liability	**Sun Ltd**	**Moon Ltd**
Equity Share Capital (₹ 10 par)	6,000.00	2,500.00
Reserves and Surplus	5,750.00	3,650.00
Shareholders' Funds	**11,750.00**	**6,150.00**
Non-Current Liabilities:		
Long Term Debt	3,775.00	2,435.00
Deferred Tax liabilities (Net)	675.00	250.00
Current Liabilities	1,775.00	985.00
Total Liabilities	**17,975.00**	**9,820.00**
Assets		
Non-Current Assets:		
Net Fixed Assets	10,275.00	6,700.00
Investments	2,250.00	375.00
Current Assets	5,450.00	2,745.00
Total Assets	**17,975.00**	**9,820.00**

Profit and Loss Account for the year ending on March 31, 2015 **(₹ in Crores)**

Particulars	**Sun Ltd**	**Moon Ltd**
Income:		
Net Revenue	42,150.00	22,305.00
Other Income	925.00	955.00
Total Income	43,075.00	23,260.00
Less: Expenses		
Total Operating Expenses	25,613.14	14,780.70
Operating Profit	17,461.86	8,479.30
Less: Interest	319.00	265.00
Profit Before Tax	17,142.86	8,214.30
Less: Tax	5,142.86	2,464.29
Profit After Tax	12,000.00	5,750.01
Price/Earnings Ratio	21.65	15.75

Since Sun Ltd. has a policy of maximizing EPS, it is decided to consider the exchange ratio (or swap ratio) on the basis of Book Value, EPS and Market Price of both the companies and select that which maximizes EPS.

On the basis of the above information, you are required to answer the following:

(I) Determine the exchange ratio or swap ratio for the said merger that will maximize EPS post merger. It is estimated that there are likely to be some synergy gains which will increase the earnings of new merged entity by 5%.

(II) Assuming that the Price/Earnings Ratio of Sun Ltd. after merger will be 24.50, determine the market price of the share of Sun Ltd. **[10+5]**