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). Consider the following figures of Delta Ltd.

	2013-14	2014-15
Sales (₹)	23,76,000	27,01,000
Cost of goods sold (₹)	18,00,000	24,05,000
Units sold	36,000	37,000

Analyse the reasons for change in sale price and cost price. **[10]**

1(b). The Balance Sheet (Extracts) of Ignu Ltd as at 31.03.14 and 31.03.15 are presented:

Balance Sheets (Extracts) as at 31st March,

(₹ in Lakhs)

Equities & Liabilities	**2014**	**2015**	**Assets**	**2014**	**2015**
	₹	₹		₹	₹
Shareholders' Fund:			Non-Current Assets:		
Share Capital	300.00	300.00	Freehold Property (at cost)	225.00	240.00
Reserves	225.00	240.00	Plant & Machinery	135.00	165.00
Non-current Liabilities:			(at cost less Depreciation)		
6% Debentures (unsecured)	75.00	75.00	Investment in shares of companies under the management (unquoted)	150.00	150.00
Mortgage on Freehold Property	27.00	14.25	Investment in shares of other companies (quoted) (Market value 2014 : ₹ 120 lakhs; 2013 : ₹ 150 lakhs)	112.50	112.50
Current Liabilities:			Current Assets:		
Creditors	45.00	45.00	Stock	52.50	75.00

Proposed Dividend (Subject to deductions of tax)	22.50	23.25	Debtors	45.00	75.00
Provision for Taxation	21.00	37.50	Bank	10.50	—
Secured Overdraft	15.00	82.50			
(by a floating charge on assets)					
	730.50	**817.50**		**730.50**	**817.50**

The following additional information for the year 2014-15 is relevant:

(1) Credit Sales ₹ 675 lakhs
(2) Credit Purchases ₹ 520 lakhs
(3) Overhead ₹ 85.75 lakhs
(4) Depreciation on Plant & Machinery ₹ 17.50 lakhs
(5) Dividend for 2013-14 was paid in full
(6) Amount paid towards taxation for the year 2013-14 ₹ 21.50 lakhs

In view of Credit squeeze, the company has been asked by the Bank to reduce the overdraft substantially within six months, if possible by 50%.

You are required to prepare a Cash Flow Statement and briefly comment on the financial position of the company on the basis of information of Cash Flow Statement and suggest remedial measures to overcome the financial crises. **[10]**

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

2(a). Below are given Summaries Balance Sheet and Income Statement of ABC Ltd.:

Income Statement for the year ended 31.03.2015	
	(₹ in thousands)
Sales	1,600
(-) Cost of goods sold	1,310
Gross Margin	290
Less: Selling and Administrative expenses	40
	250
Less: Interest expense	45
Earnings before tax	205
Tax paid	82
Earnings per share (EPS) ₹ 3.075	123

Balance Sheet as at 31.03.2015 (₹ in thousands)

Equity & Liabilities	₹	Assets	₹
Shareholders' Fund:		Non-current Assets:	
Paid up Capital (40,000		Net Fixed Assets	800
Shares of ₹ 10 each fully paid)	400	Current Liabilities:	
Retained Earnings	120	Inventory	400
Non-current Liabilities:		Debtors	175
Debenture	700	Marketable Securities	75
Current Liabilities:		Cash	50
Creditors	180		
Bills Payable	80		
Other Current Liabilities	20		
	1,500		1,500
Market Price per share ₹ 15			
Industry's average ratios are :			
Current ratio			2.4
Quick ratio			1.5
Sales to Inventory			8
Average Collection Period			36 days
Times Interest Earned			6
Profit margin			7%
Price to Earning Ratio			15
Return on total assets			11%

ABC Ltd. would like to borrow ₹ 5,00,000 from a bank for less than a year. Evaluate the firm's current financial position by calculating ratios that you feel would be useful for the banks evaluation. **[15]**

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

Particulars	2013 (₹)	2014 (₹)	2015 (₹)
Share capital	1,40,000	1,80,000	1,90,000
Current Liabilities	40,000	?	?
Working Capital	60,000	50,000	1,40,000
Long-term Loan	1,00,000	?	1,20,000
Fixed assets	2,40,000	2,50,000	2,35,000
Net Worth	2,00,000	2,20,000	2,55,000
Current Assets	?	1,20,000	2,00,000
Capital Employed	3,00,000	?	?
Reserves & Surplus	?	40,000	65,000

You are required to find out the values of the missing figures and prepare a Vertical Trend Balance Sheet taking 2012-13 as the base and also interpret the result. **[4+3+3]**

2(b)(ii). Emmie Ltd. has a machine having an additional life of 5 years, which costs ₹1,00,000 and which has a book value of ₹25,000. A new machine costing ₹2,20,000 is available. Though its capacity is same as that of the old machine, it will mean a saving in variable costs to the extent of ₹ 70,000 p.a. The life of the machine will be 5 years at the end of which it will have a scrap value of ₹40,000. The rate of income tax is 60% and Emmie Ltd. does not make an investment, if it yields less than 12%. The old machine, if sold, will fetch ₹10,000.

Advise Emmie Ltd. whether the old machine should be replaced or not.

Note:

P.V. of ₹ 1 receivable annually for 5 years at 12% = 3.605

P.V. of ₹ 1 receivable at the end of 5 years at 12% = 0.567

P.V. of ₹ 1 receivable at the end of 1 year at 12% = 0.893 **[5]**

2(c)(i). The following figures apply to a small manufacturing company:

Particulars	Amount (₹)
Annual sales for the previous year	2,30,000
Profit after tax for the previous year	13,548
Budgeted annual sales for the next year	2,42,000
Budgeted profit after tax for the next year	14,000

In the first of the two years, the average total assets amounted to ₹2,00,000, and are estimated to be ₹2,20,000 for the next year.

Assuming full budget realization and taking turnover into account, calculate the alteration that will take place in the ratio representing return on capital employed and discuss the reasons for such alteration. **[5]**

2(c)(ii). A company has an operating leverage of leverage 1.1 as against 1.25 during the previous year. If the current fixed cost is 25% more than that of the previous year, to what extent has the contribution earned by the firm changed over the previous year? **[5]**

2(c)(iii). Discuss Financial Modelling. State the attributes of a financial model.

$\left[2\frac{1}{2}+2\frac{1}{2}\right]$

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

3 (a). Following is the Profit and Loss Account and Balance Sheet for M/s Henry Ltd.

(₹ in lakhs)

	2014	2015
Turnover	652	760
Pre-tax accounting profit	134	168
Taxation	46	58
Profit after tax	88	110
Dividends	30	36
Retained earnings	58	74

Balance Sheet extracts are as follows: (₹ in lakhs)

	2014	2015
Fixed Assets	240	312
Net current assets	260	320
Total	500	632
Equity Share holders funds	390	472
Medium and long-term bank loan	110	160

The Companies performance in regard to turnover had increased by 17% along with increase in pre-tax profit by 25% but shareholders are not satisfied by the company's preference in the last 2 years. You are required to calculate economic value added as suggested by M/s. Stern Stewerts & Co., USA, so that reasons of non-satisfaction can be evaluated. You are also given

SN.	Particulars	2014	2015
1.	Pre-tax cost of debt	9%	10%
2.	Cost of equity	15%	17%
3.	Tax rate	35%	35%
4.	Interest expense	₹ 8	₹ 12

[10]

3 (b). Khan Ltd. wishes to acquire Putul Ltd. The shares issued by the two companies are 10,00,000 and 5,00,000 respectively:

(1) Calculate the increase in the total value of Putul Ltd. resulting from the acquisition on the basis of the following conditions:

Current expected growth rate of Putul Ltd.	7%
Expected growth rate under control of Khan Ltd., (without any additional capital investment and without any change in risk of operations)	8%
Current Market price per share of Khan Ltd.	₹ 100
Current Market price per share of Putul Ltd.	₹ 20
Expected Dividend per share of Putul Ltd.	₹ 0.60

(2) On the basis of aforesaid conditions calculate the gain or loss to shareholders of both the companies, if Khan Ltd. were to offer one of its shares for every four shares of Putul Ltd.

(3) Calculate the gain to the shareholders of both the Companies, if Khan Ltd. pays ₹ 22 for each share of Putul Ltd., assuming the P/E Ratio of Khan Ltd. does not change after the merger. EPS of Khan Ltd. is ₹ 8 and that of Putul Ltd. is ₹ 2.50. It is assumed that Khan Ltd. invests its cash to earn 10%. **[3+3+4]**

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

4(a)(i). Shah Ltd had earned a PAT of ₹48 Lakhs for the year just ended. It wants you to ascertain the value of its business, based on the following information.

(1) Tax Rate for the year just ended was 36%. Future Tax rate is estimated at 34%.
(2) 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.
(3) 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 instalment 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). **[8]**

4(a)(ii). List the steps of formulating a strategy? **[3]**

4(a)(iii). Following information is obtained from Pankaj Ltd.

Opening Stock	Finished goods	1,000 Kg	₹ 25,000
	Raw material	1,100 Kg	₹ 11,000
Purchases		10,000Kg	₹1,00,000
Labour			₹ 76,500
Overheads (fixed)			₹75,000
Sales		10,000Kg	₹ 2,80,000
Closing Stock	Raw materials	900 Kg	
	Finished goods	1200 Kg	

The expected production for the year was 15,000 Kg of the finished product. Due to fall in market demand, the sales price for the finished goods was ₹ 20 per Kg. and the replacement cost for the material was ₹ 9.50 per Kg on the closing day. You are required to calculate the closing stock as on that date. Compute closing stock as on that date. **[4]**

4(b)(i). Given – **(1)** Future maintainable Profit before Interest = ₹125 Lakhs; **(2)** Normal Rate of Return on Long Term Funds is 19% and on Equity Funds is 24%; **(3)** Long Term Funds of the Company is ₹320 Lakhs of which Equity Funds is ₹210 Lakhs; **(4)** Interest on Loan Fund is 18%. Find out leverage effect on Goodwill if tax rate = 30%. **[6]**

4(b)(ii). Shyam Ltd. has announced issue of warrants on 1:1 basis for its equity share holders. The current price of the stock ₹10 and warrants are convertible at an exercise price of ₹11.71 per share. Warrants are detachable and are trading at ₹3. Calculate the minimum price of the warrant and the warrant premium. Now had the current price been ₹16.375, then calculate the minimum price and warrant premium? (Consider warrants are tradable at ₹9.75). **[4]**

4(b)(iii). ABC reported earnings per share of ₹ 2.40 in 2014, and paid dividends per share of ₹ 1.06. The earnings had grown 7.5% a year over the prior five years, and were expected to grow 6% a year in the long term (starting in 2015). The stock had a beta of 1.05 and traded for ten times earnings. The Treasury bond rate was 7%.

(1) Estimate the P/E Ratio for ABC.
(2) Calculate the long term growth rate which is implied in the firm's current P/E ratio.
(3) Find the value of an equity share if P/E is 8 (assuming current EPS). **[2+2+1]**

4 (c). Sundar Manufacturing Company Limited's Operating Profits and Operating Capital Employed during last five years are –

(₹ in Lakhs)

Particulars	Operating Profit	Opening Capital	Closing Capital
2010 – 2011	410	4,000	6,000
2011-2012	690	6,000	7,000
2012-2013	800	7,000	9,000
2013-2014	1500	9,000	10,000
2014-2015	1800	10,000	12,000

The Company is expected to commission a new project in April 2015 at a cost of ₹ 9,000 Lakhs, which would generate operational flow amounting to ₹ 1,200 Lakhs p.a. for atleast 4 years. Moreover the Company expects a 2% annual growth of existing profits over the next 4 years. Industry Average Rate of Return is 6% p.a.

Determine the Company's Goodwill taking 4 years purchase of Discounted Super Profit. The Company is in 25% tax bracket. Consider 5% Capital Growth and 10% WDV depreciation from

April 2015 onwards. 60% of Capital Employed comprise of depreciable Fixed Assets. Use 10% Discount Factor.

Also assume that the Company has the following Capital Structure as on 31.03.2015 - (a) Equity Share Capital (₹ 10 each) = ₹ 5,000 Lakhs, (b) Reserves and Surplus = ₹ 4,000 Lakhs, (c) 14% Debentures = ₹ 3,000 Lakhs.

The funds for the new project (₹ 9,000 Lakhs) are to be raised by issue of shares and availing loans. The Company wants to maintain the existing Debt-Equity Ratio. It can arrange for 16% Term Loan.

How much maximum premium should the Company fix for its new Equity Issue? Assume that the Company desires to link Premium to the Intrinsic Value of Shares after taking into account the Value of Goodwill. **[15]**