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). The Balance Sheet of Aadhar Ltd. at the end of 2013-14 and 2014-15 are given below:

(Amount in ₹)

	As at 31.03.2015	As at 31.03.2014
Equity & Liabilities:		
Shareholders' Fund:		
Share capital	4,50,000	3,00,000
Reserve & surplus:		
Profit & Loss Account	70,000	75,000
General reserve	50,000	55,000
Debenture redemption reserve	9,400	5,000
Non-current Liabilities:		
10% Debentures	2,00,000	1,00,000
Current liabilities:		
Creditors	40,000	30,000
Bills payables	20,000	10,000
Provision for depreciation	1,10,000	60,000
Total	9,49,400	6,35,000
Assets:		
Non-current Assets:		
Land	1,14,000	1,14,000
Buildings	2,35,000	85,000
Machinery	2,00,000	1,40,000
Long-term investments	58,000	84,000
Current assets:		
Stock	38,000	28,000
Debtors	60,000	50,000
Bills receivables	18,400	20,000
Cash & Bank	2,26,000	1,14,000
Total	9,49,400	6,35,000

Prepare a Comparative Balance sheet and analyse the financial position of the company. **[5+5]**

1(b). In connection with a proposal to secure additional finance for meeting its expansion as well as the working capital requirements, the following figures have been projected to a bank by a borrower. The figures have been adjusted for borrowal, debt redemption and interest payments.

		1	2	3	4	5	6	7
Current ratio	Borrower	2.0	2.0	2.5	2.2	2.0	2.5	2.0
	Industry's average	1.8	1.8	2.0	2.0	2.5	2.5	2.5
Debt equity ratio	Borrower	1.8	1.8	1.6	1.6	1.5	1.5	1.2
	Industry's average	1.5	1.5	1.8	1.8	1.8	1.6	1.8
Return on investment	Borrower	20	20	18	18	15	15	18
	Industry's average	18	18	20	20	18	18	18

You are required to ascertain the trend (base year = 1) and interpret the result. Kindly indicate how the bank would react to the proposal of financing put forward by the borrower. **[6+3+1]**

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

2(a)(i). Ved Ltd. which is considering two financial plans provides you the following informations:

- Total funds to be raised, ₹ 4,00,000.
- Financing Plans: A – 50% Equity and balance 8% Debt.
  B – 50% Equity and balance 8% Preference shares.
- Tax rate: 30%
- Equity shares of face value ₹ 10 each.
- Expected EBIT, ₹ 2,00,000.

You are required to determine:

(I) Earnings per share (EPS) and Financial break-even point.

(II) Indicate if any of the plans dominate, and compute the EBIT range among the plans for difference. **[(2+1)+2]**

2(a)(ii). Home Grades Co. is considering building an assembly plant. The decision has been narrowed down to two possibilities. The company desires to choose the best plants at a level of operation of 10,000 gadgets a month. Both plants have an expected life of 10 years and are expected not to have any salvage value at the time of their retirement. The cost of capital is 12%. Assuming a Zero income-tax rate, suggest what would be the durable choice? Cost of 10,000 gadgets per month output level:

	Large Plant ₹	Small Plant ₹
Initial Cost	30,00,000	22,93,500
Direct Labour:		
First Shift	15,00,000 (p.a.)	7,80,000 (p.a.)
Second Shift	—	9,00,000 (p.a.)
Overheads	2,40,000 (p.a.)	2,10,000 (p.a.)

The present value of an ordinary annuity of ₹ 1 for 10 years, at 12%, is 5.6502. **[5]**

2(a)(iii). From the information given below relating to Bad Past Ltd., calculate Altman's Z-score and comment:

$$\left(\frac{\text{Working capital}}{\text{Total assets}}\right) = 25\%$$

$$\left(\frac{\text{Retained earnings}}{\text{Total assets}}\right) = 30\%$$

$$\left(\frac{\text{Earnings before interest and taxes}}{\text{Total assets}}\right) = 15\%$$

$$\left(\frac{\text{Market value of equity}}{\text{Book value of total debt}}\right) = 150\%$$

$$\left(\frac{\text{Sales}}{\text{Total assets}}\right) = 2 \text{ times}$$

[5]

2(b).

Cash Flow Statement
for the year ended 31st March, 2015

	₹	₹	₹
Cash Flows from Operating Activities :			
Net Profit during the year :			
Net Profit for the year 2014-15	70,000		
Less : Net Profit for the year 2013-14	28,000		
		42,000	
Add : Non-Operating Expenses:			
Depreciation (₹ 15,000 + ₹ 4,000)	19,000		
Loss on Sale of Fixtures	2,000		
Discount on Debenture	1,000		
Proposed Dividend	20,000		
Debenture Interest (15% on ₹ 30,000)	4,500		
		46,500	
		88,500	
Less : Non-Operating Income:			
Profit on Sale of Plant		1,000	
		87,500	
Add : Decrease in Current Assets or Increase in Current Liabilities			
Decrease in Current Assets		Nil	
Increase in Current Liabilities: Increase in Creditors	14,000		
		14,000	
		1,01,500	
Less: Increase in Current Assets or Decrease in Current Liabilities			
Increase in Current Assets Increase in Stock Increase in Debtors	1,000 14,000	15,000	
Net Cash Flows from Operating Activities			86,500
Cash Flows from Investing Activities:			
Sale of Plant & Machinery	3,000		

Sale of Fixture & Fittings	1,000	4,000	
Less: Purchase of Plant & Machinery Purchase of Fixture & Fittings Purchase of Freehold Properties	39,000 10,000 20,000	69,000	
Net Cash Flow from Investing Activities			(-)65,000
Cash Flows from financing Activities :			
Issue of Share		70,000	
Less: Redemption of Debenture (including Premium) Dividend Paid Debenture Interest	42,000 15,000 4,500	61,500	
Net Cash Flows from Financing Activities			8,500
Net Increase in Cash or Cash Equipment			30,000
Less: Cash and Cash equivalent at the beginning– Bank Overdraft			(-)14,000
Cash or Cash equivalent at the end – Cash at Bank			16,000

Additional information:

- Total assets as at 31.03.2015 amounting to ₹ 4,21,000.
- Equity share capital, Securities Premium Account and Profit & Loss Account as at 31.03.2015 are amounted to ₹ 1,50,000, ₹ 35,000 and ₹ 69,000 respectively.

From the above calculate the relevant ratios to analyse the cash flow statement and interpret the result. **[8+7]**

2(c)(i). The following Financial Statement is summarised from the books of Neel Ltd. as at 31st March, 2015:

Equity and Liabilities	₹	Assets	₹
Shareholders' Fund:		Non-current Assets:	
Paid-up Capital	15,00,000	Fixed Assets (at cost)	25,00,000
Reserves and Surplus	6,00,000	Current Assets:	
Non-current Liabilities:		Stock-in-trade	9,10,000
Long-term borrowings:			
Debentures	5,00,000	Book Debts	12,40,000
Long term Provision:			
Accumulated depreciation on Fixed Assets	8,50,000		
Current Liabilities:		Investment (Short-term)	1,60,000
Bank Overdraft	12,00,000	Cash	40,000
Sundry Creditors	2,00,000		
	48,50,000		48,50,000

Annual Sales — ₹ 74,40,000. Gross Profit — ₹ 7,44,000.

You are required to calculate the following ratios for the year and comment on the financial position as revealed by these ratios:

A. Debt Equity Ratio,
B. Current Ratio,
C. Proprietary Ratio,
D. G. P. Ratio,
E. Debtors' Turnover Ratio,
F. Stock Turnover Ratio.

Bank Overdraft is payable on demand. **[6+6]**

2(c)(ii). State Sustainable Growth Rate and its importance in relation to the growth of a firm. Also state the formula which is to be used in this context. **[1+1+1]**

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

3 (a). The following information has been extracted from the Annual Report 2014-15 of Hudco Limited:

Balance Sheet of Hudco Limited as at 31st March 2015

Particulars	(₹ in crores) 2015
EQUITY AND LIABILITIES	
Shareholder's Funds	
Share Capital	8,245.46
Reserves and Surplus	65,045.71
	73,291.17
Non-Current Liabilities	
Long- Term Borrowings	47,975.23
Other long term liabilities	2, 332.76
	50,307.99
Current Liabilities	
Trade payables	4,468.07
Other current Liabilities	12,770.57
	17,238.64
Total	1,40,837.80
ASSETS	
Non-Current Assets	
Fixed Assets:	
Tangible assets	45,046.47
Intangible assets	211.89
Capital work-in-progress	41, 827.82
Intangible assets under Development	0.04
	87,086.22
Non-current investments	9,583.92
Long-term loans and advances	3,883.26
Other non-current assets	1,371.88

	14,839.06
Current Assets:	
Current investments	1,622.46
Inventories	3,702.85
Trade receivables	5,832.51
Cash and bank balance	16,146.11
Short- term loans advances	2,754.73
Other current assets	8,853.86
	38,912.52
Total	1,40,837.80

Statements of Profit and Loss of Hudco Limited for the year ending on 31st March 2015

Particulars	(₹ in crores) 2015
Revenue from operations (Gross)	62,480.88
Less: Excise Duty	428.65
Revenue from operations (Net)	62, 052.23
Other Income	2,778.42
Total Revenue	64,830.65
EXPENSES:	
Fuel	41, 635.46
Employee benefits expense	3, 090.48
Finance Costs	1, 711.64
Depreciation and amortization expense	2,791.70
Administration & other expenses	3,588.79
Total Expenses	52,818.07
Profit/ (Loss) Before Tax	12,012.58
Note: Profit on sale of Non-Current Assets (included in Other Income above) being exceptional items.	313.58

Tax expense is 30% of the profit.

The directors of Tentex Ltd. are considering a takeover of Hudco Ltd. As the consultant of Tentex Ltd., determine the value of a share of Hudco Limited on the basis of the Profit-Earning Capacity (Capitalization) Method by considering the following additional information:

(i) The face value of the share is ₹ 10.
(ii) Profit on sale on Non-current Assets is an exceptional item of the profit and it is expected that in future no such profits are likely to occur.
(iii) In subsequent years, additional expenses on advertisements of ₹ 25 crores and on depreciation of ₹ 50 crores each year are expected to be incurred.
(iv) The Capitalization rate on the similar business is 9.50%.
(v) All other items of the above financial statements are expected to remain same in the future.

[10]

3 (b). ABC Ltd. wants to acquire PQR Ltd. The cash flow of ABC Ltd. & the merged entity is given as follows:

Year (₹ in Lakhs)	1	2	3	4	5

ABC Ltd.	275	302.5	324.5	641	357.5
Merged entity	440	495	563.75	591.25	618.75

After 5 years, earnings would have witnessed 5% constant growth rate without merger and 6% with merger on account of economies of operation. The cost of capital is 15%. The exchange ratio agreed upon is 0.6. From the viewpoint of ABC Limited, find out the value of acquisition, make suitable assumptions. **[10]**

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

4(a)(i). XYZ Ltd Company currently sells for ₹ 32.50 per share. In an attempt to determine if XYZ Ltd is fairly priced, an analyst has assembled the following information.

- The before-tax required rates of return on XYZ Ltd debt, preferred stock, and common stock are 7.0 percent, 6.8 percent, and 11.0 percent, respectively.
- The company's target capital structure is 30 percent debt, 20 percent preferred stock, and 50 percent common stock.
- The market value of the company's debt is ₹145 million and its preferred stock is valued at ₹65 million.
- XYZ Ltd's FCFF for the year just ended is ₹28 million. FCFF is expected to grow at a constant rate of 4 percent for the foreseeable future.
- The tax rate is 35 percent.
- XYZ Ltd has 8 million outstanding common shares.

Compute XYZ Ltd's estimated value per share. Is XYZ Ltd's stock under priced? **[5+1]**

4(a)(ii). State Slump Sale. Give one examples. **[3]**

4(a)(iii). Sentek Ltd furnishes the following Cash Flows estimate -

Year 1	₹ 20.00 Lakhs
Years 2 to 4	Compounded Growth Rate 6.5%
Years 5 to 8	Compounded Growth Rate 9.5%

Apply 18% Discount Rate and determine the Value of Business. **[6]**

4(b)(i). The following financial data pertaining to ZIZO LTD. an IT company are made available

Year ended 31st March	2015	2014	2013
EBIT (₹)	696.03	325.65	155.86
Non-branded income (₹)	53.43	35.23	3.46
Inflation compound factor @ 8%	1.000	1.087	1.181
Remuneration of capital	5% of average capital employed		
Average capital employed(₹)	1112.00		
Corporate tax rate	30%		
Capitalization factor	16%		

You are required to calculate the Brand Value for ZIZO Ltd. **[7]**

4(b)(ii). A company needs ₹12.75 crores to finance its investments for which ₹2.75 crore is available out of profits. The market price per share at the end of the current financial year is expected to be ₹100. If the discount rate is 10%, determine the present value of a share using the M-M Model. (Outstanding shares=5 lakhs). **[8]**

4 (c). The following Balance Sheet of Forex Ltd. is given:

Balance Sheet of Forex Ltd. as on 31st March, 2015

Equity and Liability	₹	Assets	₹
(1) Shareholders Fund:		(1) Non-Current Assets:	
(a) Share Capital		(a) Fixed Assets	
Equity Share Capital of ₹ 10 each	50,00,000	(i) Tangible Assets:	
(b) Reserve & Surplus		—Land and Building	32,00,000
P & L Appropriation Account	21,20,000	—Plant and Machinery	28,00,000
		(ii) Intangible Assets:	
(2) Current Liabilities:		—Goodwill	4,00,000
(a) Short Term Borrowings – Bank O/D	18,60,000		
(b) Trade Payables		(2) Current Assets:	
—Sundry Creditors	21,10,000	(a) Inventories	32,00,000
(c) Short Term Provision		(b) Trade Receivables	
—Provision for Taxation	5,10,000	—Sundry Debtors	20,00,000
Total	1,16,00,000	Total	1,16,00,000

In 1995 when the company commenced operation the paid up capital was same. The Loss/Profit for each of the last 5 years was - years 2010-2011 - Loss (₹ 5,50,000); 2011-2012 ₹ 9,72,000; 2012-2013 ₹ 11,70,000; 2013-2014 ₹ 14,60,000; 2014-2015 ₹ 17,00,000;

Although income-tax has so far been paid @ 40% and the above profits have been arrived at on the basis of such tax rate, it has been decided that with effect from the year 2014-2015 the Income-tax rate of 30% should be taken into consideration. 10% dividend in 2011-2012 and 2012-2013 and 15% dividend in 2013-2014 and 2014-2015 have been paid. Market price of shares of the company on 31st March, 2015 is ₹ 125. With effect from 1st April, 2015 Managing Director's remuneration has been approved by the Government to be ₹ 8,00,000 in place of ₹ 6,00,000. The company has been able to secure a contract for supply of materials at advantageous prices. The advantage has been valued at ₹ 4,00,000 per annum for the next five years.

Ascertain goodwill at 3 year's purchase of super profit (for calculation of future maintainable profit weighted average is to be taken). **[15]**