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:

<table>
<tr><th></th><th>Learning objectives</th><th>Verbs used</th><th>Definition</th></tr>
<tr><td rowspan="29">LEVEL C</td><td rowspan="3">KNOWLEDGE

What you are expected to know</td><td>List</td><td>Make a list of</td></tr>
<tr><td>State</td><td>Express, fully or clearly, the details/facts</td></tr>
<tr><td>Define</td><td>Give the exact meaning of</td></tr>
<tr><td rowspan="5">COMPREHENSION

What you are expected to understand</td><td>Describe</td><td>Communicate the key features of</td></tr>
<tr><td>Distinguish</td><td>Highlight the differences between</td></tr>
<tr><td>Explain</td><td>Make clear or intelligible/ state the meaning or purpose of</td></tr>
<tr><td>Identity</td><td>Recognize, establish or select after consideration</td></tr>
<tr><td>Illustrate</td><td>Use an example to describe or explain something</td></tr>
<tr><td rowspan="7">APPLICATION

How you are expected to apply
your knowledge</td><td>Apply</td><td>Put to practical use</td></tr>
<tr><td>Calculate</td><td>Ascertain or reckon mathematically</td></tr>
<tr><td>Demonstrate</td><td>Prove with certainty or exhibit by practical means</td></tr>
<tr><td>Prepare</td><td>Make or get ready for use</td></tr>
<tr><td>Reconcile</td><td>Make or prove consistent/ compatible</td></tr>
<tr><td>Solve</td><td>Find an answer to</td></tr>
<tr><td>Tabulate</td><td>Arrange in a table</td></tr>
<tr><td rowspan="6">ANALYSIS

How you are expected to analyse the detail of what you have learned</td><td>Analyse</td><td>Examine in detail the structure of</td></tr>
<tr><td>Categorise</td><td>Place into a defined class or division</td></tr>
<tr><td>Compare and contrast</td><td>Show the similarities and/or differences between</td></tr>
<tr><td>Construct</td><td>Build up or compile</td></tr>
<tr><td>Prioritise</td><td>Place in order of priority or sequence for action</td></tr>
<tr><td>Produce</td><td>Create or bring into existence</td></tr>
<tr><td rowspan="3">SYNTHESIS

How you are expected to utilize the information gathered to reach an optimum
conclusion by a process of reasoning</td><td>Discuss</td><td>Examine in detail by argument</td></tr>
<tr><td>Interpret</td><td>Translate into intelligible or familiar terms</td></tr>
<tr><td>Decide</td><td>To solve or conclude</td></tr>
<tr><td rowspan="3">EVALUATION

How you are expected to use your learning to evaluate, make decisions or recommendations</td><td>Advise</td><td>Counsel, inform or notify</td></tr>
<tr><td>Evaluate</td><td>Appraise or asses the value of</td></tr>
<tr><td>Recommend</td><td>Propose a course of action</td></tr>
</table>

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)(i). A company manufacturing electronic equipments is currently buying 'Component A' from a local supplier at a cost of ₹ 30 each. The company has a proposal to install a machine for the manufacture of the component. Two alternatives are available as under:

A. Installation of Semiautomatic machine involving an annual fixed expenses of ₹ 18 lakhs and a variable cost of ₹ 12 per component manufactured.

B. Installation of Automatic machine involving an annual fixed cost of ₹ 30 lakhs and a variable cost of ₹ 10 per component manufactured.

Required:

(I) Find the annual requirement of components to justify a switch over from purchase of components to (A) manufacture of the same by installing semiautomatic machine and (B) manufacture of the same by installing automatic machine.

(II) If the annual requirements of the component is 5,50,000 units, which machine would you advise the company to install?

(III) At what annual volume would you advise the company to select automatic machine instead of semiautomatic machine? **[5]**

1(a)(ii). Calculate the trend percentage from the following figures of Tenta Ltd. and interpret them.

Year	Sales Revenue (₹ '000)	Inventory (₹ '000)	Earnings before Tax (₹ '000)
2010-11	1,995	820	325
2011-12	2,390	910	422
2012-13	2,805	940	478
2013-14	3,140	1,055	549
2014-15	3,650	1,368	699

[5]

1(b). The following informations are related to the financial statements of Square Infotech Ltd. are as follows:

(₹ in crores)

Particulars	As at 31.03.15	As at 31.03.14
	(₹)	**(₹)**
1. Share capital	1,121	931
2. Reserves and surplus	8,950	7,999
3. Secured loans	—	259
4. Unsecured loans	74	—
5. Finance Lease Obligations	171	115
6. Deferred tax liabilities (Net)	320	—
7. Other current liabilities	513	572
8. Short-term provisions	10,109	7,902
9. Gross Block	6,667	5,747
Less: Accumulated Depreciation	3,150	2,561
10. Capital work-in-progress	27	28
11. Non-current investments	288	222
12. Inventories	2,709	2,540
13. Trade receivables	9,468	9,428
14. Cash and cash equivalents	3,206	662
15. Short-term loans and advances	2,043	1,712
16. Sales	23,436	17,849
17. Other income	320	306
18. Cost of materials	15,179	10,996
19. Personnel expenses	2,543	2,293
20. Other expenses	3,546	2,815
21. Depreciation	419	383
Less: Transfer from Revaluation Reserve	7	6
22. Interest	164	88
23. Profit before Tax [1-2]	1,912	1,586
24. Current tax	450	371
25. Deferred tax	(6)	—
26. Profit after tax [3-4]	1,468	1,215

You are required to:

(I) Compute and analyse the return on capital employed (ROCE) with the help of Du-Pont analysis.

(II) Compute and analyse the average inventory holding period and average collection period.

(III) Compute and analyse the return on equity (ROE) by bringing out clearly the impact of financial leverage. **[10]**

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

2(a). You are given the following Cash-Flow Statement of Merit Ltd. for the year ended 31.03.2015:

Inflow	₹	Outflow	₹
Opening Bank Balance	1,80,000	Purchase of Fixed Assets	2,70,000
Cash from Operation	2,17,500	Redemption of Debentures	1,00,000
Issue of Shares	75,000	Payment of Income-tax	1,37,500
Closing Bank Balance (Overdraft)	69,000	Payment of Dividend	34,000
	5,41,500		**5,41,500**

The capital structure of the company as on 31.3.2015 consisted of:

	₹
Equity Share of ₹ 10 each fully paid	3,00,000
Reserves & Surplus	1,00,000
10% Debentures	2,00,000

The operating profit of the company (before tax, but after interest) for the year ended 31.03.2015 was ₹ 2,50,000. The tax rate of the company is 35%.

You are required to:

(I) redraft the Cash Flow Statement as per AS-3.

(II) analyse the position and performance of the company on the basis of Cash Flow Statement and other information given above. Make suitable assumptions, if necessary. **[15]**

2(b). A Ltd. has been in existence for two years. The most important facts from its published account are:

Balance Sheet at year-end

Particulars	1st Year	2nd Year
	₹	₹
Shareholders' Fund:		
Equity Shares of ₹ 100 each	1,00,000	1,00,000
Reserves	10,000	20,000
Profit and Loss Account	14,000	2,000
Non-current Liabilities:		
Loan on Mortgage	1,10,000	80,000
Current Liabilities:		
Bank Overdraft	—	20,000
Creditors	30,000	90,000
Provision for Taxation	34,000	13,000
Proposed Dividend	10,000	15,000
	3,08,000	3,40,000
Non-current Assets:		
Fixed Assets (Less : Depreciation)	2,08,000	1,98,000

Current Assets:		
Stock-in-trade	30,000	60,000
Debtors	40,000	80,000
Cash and Bank Balances	30,000	2,000
	3,08,000	3,40,000

Other relevant information:

Particulars	1st Year	2nd Year
	₹	₹
Interest on Mortgage		
Loan	2,400	4,800
Directors' Remuneration	10,000	30,000
Provision for Taxation	34,000	13,000
Dividend	10,000	15,000
Transfer to Reserve	10,000	10,000
Closing balance of P/L A/c	14,000	2,000
Opening balance of P/L A/c	—	14,000
Profit for the year after normal running cost and depreciation	80,400	60,800

You are informed that the total sales amounted to ₹ 5,00,000 in the first year and ₹ 4,00,000 in the second year.

Examine the details from the point of view of: (1) Profitability, (2) Solvency, (3) Sales, and (4) Capital Structure.

Make such other computations as seem expedient to you and write a thorough overall internal analysis of the company. **[15]**

2(c)(i). The following particulars are presented by Pi Ltd. for the year 2014-15. You are asked to calculate Sales Margin Variances:

Budgeted Sales			Actual Sales		
Product	**Qty.**	**Selling Price**	**Standard Cost**	**Qty.**	**Selling Price**
(Units)	**(Per unit)**	**₹**	**(Per unit)**	**(Units)**	**(Per Unit)**
A_1	450	10	7.5	600	12
A_2	300	7.50	5	450	6
	750			1,050	

[10]

2(c)(ii). Calculate the Earnings per share (EPS) of each company assuming that profit before interest and tax is same for both Shine Ltd. and Fine Ltd. at ₹ 40,00,000. Assume corporate tax rate at 40%.

(₹)

Particulars	Shine Ltd.	Fine Ltd.
Profit before interest and tax	40,00,000	40,00,000
Less: Interest on debentures	2,25,000	3,50,000
Interest on term loans	3,60,000	---
	34,15,000	36,50,000
Less: Corporate tax @ 40%	13,66,000	14,60,000
	20,49,000	21,90,000
Less: Preference dividend	---	3,84,000
Profit available for equity shareholders	20,49,000	18,06,000
Number of equity shares	5,00,000	3,00,000

[5]

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

3. (a) Compute EVA of Swastik Ltd for 3 years from the information given –

(in ₹ Lakhs)

Year	1	2	3
Average Capital Employed	3,000.00	3,500.00	4,000.00
Operating Profit before Interest (adjusted for Tax Effect)	850.00	1250.00	1600.00
Corporate Income Taxes	80.00	70.00	120.00
Average Debt ÷ Total Capital Employed (in %)	40.00	35.00	13.00
Beta Variant	1.10	1.20	1.30
Risk Free Rate (%)	12.50	12.50	12.50
Equity Risk Premium (%)	10.00	10.00	10.00
Cost of Debt (Post Tax) (%)	19.00	19.00	20.00

[10]

3. (b) Exclusive Ltd and Common Ltd furnish you with their Balance Sheets as at 30th September-

(₹ in Crores)

Equity & Liabilities	**E Ltd**	**C Ltd**	**Assets**	**E Ltd**	**C Ltd**
(1) Shareholders' Funds:			(1) Non-Current Assets:		
(a) Share Capital			Fixed Assets:		
(i) Equity Share Capital (₹ 100)	500	100	(i) Tangible Assets Cost	300	1,000
(ii) 12% Preference Shares		300	Less: Depreciation	250	500
(b) Reserves & Surplus	1,500	1,200	Net Block	50	500
(2) Non-Current Liabilities:			(2) Current Assets (Net)	1,950	1,500

Long Term Borrowings					
-15% Loan	-	400			
Total	2,000	2,000	Total	2,000	2,000

For the above year, the ratio of sale to year-end funds has been 5 times in the case of Exclusive Ltd and 50 times in the case of Common Ltd. The ratio of Net Profit before Interest to Sales has been 10% in the case of Exclusive Ltd and 5% in the case of Common Ltd. The anticipated pre-tax yield is 10% on investment in Equity Shares. You are asked to value the Equity Shares of both the Companies on yield basis. Ignore taxation.

Decide the impact of taxation of 40% on the Value per Share. **[10]**

4. (a) (i) Describe the different types of Mergers. **[5]**

4. (a) (ii) Trimurti Ltd gives the following information -

- Profits After Tax for the period = ₹ 100 Lakhs, Expected Compound Growth Rate = 8% p.a.
- Cash Flows After Taxes for the period = ₹125 Lakhs, Expected Compound Growth Rate = 7% p.a.
- Current Market Price per Equity Share = ₹ 900, Equity Share Capital = ₹ 50,00,000 into Shares of ₹ 50 each.

Compute the value of Trimurti Ltd by projecting its PAT / CFAT for a eight year period. Use 10% Discount Rate for your calculations. Also calculate the value of the business by capitalising the current PAT / CFAT. **[10]**

4. (b) (i) Are brands assets? **[3]**

4. (b) (ii) Given below is the Balance Sheet as on 31st March of Khan Limited for the past three years.

(Amount in ₹ 000's)

Equity and Liabilities	2013	2014	2014	Assets	2013	2014	2015
(1) Shareholders' Funds:				(1) Non-Current Assets			
(a) Share Capital	500	600	700	Fixed Assets:			
(b) Reserves & Surplus				Gross Block	1,500	1,700	1,900
(i) General Reserve	100	150	150	Less: Depreciation	400	500	650
(ii) P&L Account	100	150	--	Net Block	1,100	1,200	1,250
(2) Non-Current Liabilities:				(2) Current Assets			
Long Term Borrowings				(a) Inventories	250	450	500
-12% Debentures	400	600	700	(b) Trade Receivable–Debtors	200	350	400

(3) Current Liabilities:				(c) Cash & Cash Equivalents	25	120	100
(a) Short Term Borrowings							
-Bank Overdraft	200	250	300				
(a) Trade Payables-Creditors	100	200	400				
(b) Short Term Provisions							
(i) Provision for Taxation	100	50	---				
(ii) Proposed Dividend	75	120	---				
Total	1,575	2,120	2,250		1,575	2,120	2,250

- The Company is going to sell its losing division for ₹ 5,00,000. This division caused Cash Loss to the extent of ₹ 1,00,000 in 2014-15.
- It has planned to buy a running factory for ₹ 7,50,000. This new addition is expected to produce 20% return before charging Depreciation and Interest.
- Excess amount required of the acquisition of the new factory will be taken at 16% p.a. from an Industrial Bank.

The Company decided to calculate Goodwill considering the following -

I. The Company decided to calculate Goodwill on the basis of excess cash earnings for 5 years.

II. 10% Discount Rate shall be used.

III. Goodwill will be calculated by taking Cash Return on Capital Employed. For this purpose, Weighted Average Cash Return may be computed for the years 2013 - 2014, 2014 - 2015 and 2015- 2016 whereas Capital Employed on 31.03.2015 may be taken up with suitable changes for replacements.

IV. The industry, to which the Company belongs, returns Cash at 4% of the Investment. **[12]**

4. (c) (i) State Investment value. Distinction between investment value and FMV. **[2+4]**

4. (c) (ii) Company X acquires Company Y on "Share exchange" basis. The position before takeover was as under:

Particulars	Company X	Company Y
Number of Shares	10,000	5,000
Total Earnings	₹ 1,00,000	₹ 50,000
Market Price per Share (MPS)	₹20	₹15

The Shareholders of Company Y are offered 3 Shares of Company X for 4 shares Company Y.

Calculate the EPS of the Amalgamated Company vis-a-vis before takeover position of the Two Companies and Gain/Loss of the Shareholders of both the Firms consequent to amalgamation.

[2+3+4]