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 following are the income statement of Khan Ltd. for the years ended 31st March 2015 and 31st March 2016.

Particulars	31.03.15 ₹	31.03.16 ₹
Net Sales	1,82,000	1,99,000
Less: Cost of Goods Sold	1,13,000	1,26,000
Gross Profit (A)	69,000	73,000
Administrative Expenses (B)	14,500	15,200
Selling Expenses :		
Advertisement Expenses	3,500	4,200
Other Selling Expenses	39,000	41,000
Total Selling Expenses (C)	42,500	45,200
Operating Expenses (B + C)	57,000	60,400
Operating Profit (D) [D = A - (B + Q]	12,000	12,600
Other Incomes (E)	5,200	7,500
Other Expenses (F)	5,900	5,200
Profit before Tax (PBT) [PBT = D + E - F]	11,300	14,900
Income Tax (T)	5,300	7,200
Profit after Tax (PAT) [PAT = PBT - T]	6000	7,700

Prepare a comparative income statement and comment on the performance of the company. **[5+5]**

(b) Firms A, B and C is engaged in diverse operations. Some of their particulars for the next accounting year are:

Firms	A	B	C
Output (units)	8,000	20,000	12,000
Selling Price (p.u.) (₹)	10	20	2
Variable Cost (p.u.) (₹)	4	10	1

Operating Fixed Cost p.a. (₹)	36,000	1,60,000	8,000
Fixed financial charges p.a. (₹)	10,000	20,000	Nil

You are required to make a comparative analysis of operating financial and total risks of the firm on the basis of leverage, and comments thereon. **[5+5]**

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

2. (a) (i) Discuss Financial Modelling. State the attributes of a financial model. $\left[2\frac{1}{2}+2\frac{1}{2}\right]$

(a) (ii) The following figures apply to a small manufacturing company:

Particulars	Amount (₹)
Annual sales for the previous year	4,60,000
Profit after tax for the previous year	27,096
Budgeted annual sales for the next year	4,84,000
Budgeted profit after tax for the next year	28,000

In the first of the two years, the average total assets amounted to ₹4,00,000, and are estimated to be ₹4,40,000 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]**

(a) (iii) On 1st January 2016, EFG issued 20,000 5% convertible bonds at their par value of ₹ 50 each. The bonds will be redeemed on 1st January 2021. Each bond is convertible at the option of the holder at any time during the five year period. Interest on the bond will be paid annually in arrears.

The prevailing market interest rate for similar debt without conversion options at the date of issue was 6%.

At what value should the equity element of the hybrid financial instrument be recognised in the financial statements of EFG at the date of issue? **[5]**

2. (b) The following ratio of C Ltd. and their corresponding Industry averages are available.

Ratios	C Ltd.	Industry
Current	1.75	2.10
Liquid	0.85	2.25
Stock to working capital	25%	20%
Inventory turnover	6.5	8.2
Debt collection period	35 days	30 days
Return on Assets	9.2%	10.7%.
Earning per share	₹ 3.50	₹ 2.75

You are required to comment on the financial position and performance of C Ltd. **[15]**

2. (c) (i) Sweta Ltd. has a machine having an additional life of 5 years, which costs ₹2,00,000 and which has a book value of ₹50,000. A new machine costing ₹4,40,000 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 ₹ 1,40,000 p.a. The life of the machine will be 5 years at the end of which it will have a scrap value of ₹80,000. The rate of income tax is 30% and Sweta Ltd. does not make an investment, if it yields less than 12%. The old machine, if sold, will fetch ₹20,000.

Advise Sweta 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]**

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

Particulars	2014 (₹)	2015 (₹)	2016 (₹)
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 2013-14 as the base and also interpret the result.

[4+3+3]

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

3. (a) The following figures relates to Pankaj Ltd which has ₹ 10,00,000 in Equity Shares and ₹ 3,00,000 in 9% Preference Shares, all of ₹ 100 each.

Year	2014	2015	2016
Average Net Worth (excluding Investment)	18,60,000	21,50,000	21,90,000
(₹) Adjusted Profit After Tax	1,90,000	2,10,000	2,50,000

The Company has Investments worth ₹ 2,80,000 (at Market Value) on the valuation date, the yield in respect of which has been excluded in arriving at the above adjusted Profit figures. It is customary for similar types of Companies to set aside 25% of the Profit after Tax for rehabilitation and replacement purposes.

On the valuation date, the Net Worth (excluding Investments) amount to ₹ 22,50,000. The Normal Rate of Return expected is 9%. The Company has paid Dividends consistently within a range of 8% to 10% on Equity Shares over the Previous Years and it expects to maintain the same.

Ascertain the value of each Equity Share on the basis of post-tax Productivity on Capital Employed, applying suitable weighted avg. **[10]**

(b) The following information (as of 31.03.2016) is supplied to you by Fox Ltd.

Particulars	₹ Crores	
(i) Profit after Tax (PAT)		205.90
(ii) Interest		4.85
(i) Equity Share Capital	40.00	
Accumulated Surplus	700.00	
Shareholders Fund	740.00	
Loans (Long term)	37.00	
Total Long Term Funds		777.00
(iv) Market Capitalization		2,892.00

Additional Information:

(a) Risk Free Rate						12.00 percent
(b) Long Term Market Rate (Based on BSE Sensex)						15.50 percent
(c) Effective Tax Rate for the company						25.00
(d) Beta (β) for last few years						
Year	1	2	3	4	5	
Beta	0.48	0.52	0.60	1.10	0.99	

Using the above data you are requested to calculate the Economic Value Added of Fox Limited as on 31st March 2016. **[10]**

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

4. (a) (i) Company A will acquire Company B with shares of common stock. The financial details are given hereunder:

(Amounts in ₹)

Particulars	Company A	Company B
Present earnings	20 million	5 million
EPS	4.00	2.50
Market Price	64	30
P/E	16	12

It is given that Company B has agreed on an offer of ₹35 in common stock of Company A. Analyze the merger proposal for both companies. **[9]**

(a) (ii) Common factors that spurred the mergers and acquisition activity worldwide? **[6]**

4. (b) The Balance Sheet of D Ltd on 31st March 2016 is as under-

Balance Sheet as at 31st March 2016

Equity and Liabilities	₹	Assets	₹
(1) Shareholders' Funds:		**(1) Non-Current Assets:**	
(a) Share Capital -		Fixed Assets:	
1,25,000 Shares of ₹ 100	1,25,00,000	**(i)** Tangible Assets	
each fully paid		- Building	80,00,000
(b) Reserves & Surplus		-Machinery	70,00,000
-P&LA/c	53,00,000	**(ii)** Intangible Assets	
(2) Current Liabilities:		- Goodwill	10,00,000
(a) Short Term Borrowings		**(2) Current Assets:**	
- Bank Overdraft	46,50,000	**(a)**Inventories	80,00,000
(b) Trade Payables		**(b)**Trade Receivables	
-Creditors	52,75,000	- Debtors	50,00,000
(c) Short Term Provisions			
- Provision for Tax	12,75,000		
Total	**2,90,00,000**	**Total**	**2,90,00,000**

The Profit/Loss for the last five years is as follows –

- 2011-2012 Loss ₹ (13,75,000),
- 2012-2013 Profit ₹ 24,55,000,
- 2013-2014 Profit ₹ 29,25,000,
- 2014-2015 Profit ₹ 36,25,000,
- 2015-2016 Profit ₹ 42,50,000.

There is no change in the paid up capital of the company since its inception.

Income Tax Rate so far has been 40% and the above Profits have been arrived at on the basis of such tax rate. From 2016-2017, the rate of Income Tax should be taken at 45%, 10% Dividend is 2012-2013, 2013-2014 and 15% dividend in 2014-2015 and 2015-2016 has been paid. Market Price of this Share on 31st March, 2016 is ₹ 125 with effect from 1st April, 2016, the Managing Directors remuneration will be ₹ 20,00,000 instead of ₹ 15,00,000. The Company has secured a contract from which it can earn an additional ₹ 10,00,000 per annum for the next five years.

Calculate the value of Goodwill at 3 years purchase of Super Profit, (for calculation of Future Maintainable Profits weighted average is to be taken). **[15]**

4. (c) (i) Describe the underlying assumptions of Black Scholes option pricing formulae. **[7]**

(c) (ii) The following financial share date pertaining to CMC LTD an IT company is made available to you:

Year ended March 31st	2016	2015	2014
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	35%		
Capitalization Factor	16%		

You are required to calculate the Brand Value for CMC Ltd. **[8]**