Paper – 20: Financial Analysis & Business Valuation

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

Working Notes should form part of the answer.

"Whenever necessary, suitable assumptions should be made and indicated in answer by the candidates."

Section A

(Answer Question No. 1 and Question No. 2 which are compulsory and any two from the rest in this section)

Question 1.

Pawan Ltd.

The summarized Balance Sheets of the company as on 31st March 2012 and 2013 were:

Liabilities	2012 ₹	2013 ₹	Assets	2012 ₹	2013 ₹
Issued Share Capital	1,00,000	1,50,000	Freehold Property at cost	1,10,000	1,30,000
Securities Premium	15,000	35,000	Plant & Machinery at cost	1,20,000	1,51,000
Profit & Loss A/c	28,000	70,000	Furniture & Fixture at cost	24,000	29,000
Debentures	70,000	30,000	Stocks	43,000	44,000
Bank Overdraft	14,000	---	Debtors	37,000	51,000
Creditors	34,000	48,000	Bank	---	16,000
Proposed Dividends	15,000	20,000	Premium on Redemption of debentures	---	1,000
Depreciation:					
Plant:	45,000	54,000			
Fixtures:	13,000	15,000			
	3,34,000	4,22,000		3,34,000	4,22,000

The following additional information is relevant:

(i) There had been no disposal of freehold property in the year.
(ii) The Machine tool which has cost ₹ 8,000 and in respect of which ₹ 6,000 depreciation has been provided, was sold for ₹ 3,000, and fixtures, which had cost ₹ 5,000 in respect of which depreciation of ₹ 2,000 has been provided, were sold for ₹ 1,000. The Profit and losses on these transactions had been dealt with through the Profit and Loss Account.
(iii) The actual premium of the redemption of debentures was ₹ 2,000 of which ₹ 1,000 had been written-off to the Profit and Loss A/c.
(iv) No interim dividend has been paid.
(v) Interest paid on debentures amounted to ₹ 4,500.

After reading the above financial statements and informations, answer the following questions:

(a) Calculate the cash flows from the operating activities. Necessary workings should be part of the answer.

(b) Find out those ratios which are essential to analyse the financial position of the company, based on cash flows. Provided —

Net cash flows from Investing Activities: (-) ₹ 65,000
Net cash flows from Financing Activities: ₹ 8,500

(c) Interpret and comment on the financial position of the company, based on the data obtained from above point (b).

[6+4+5]

Question 2.

Akash Ltd.

Profit and Loss Account (Extract)
for the year ended 31.03.2013

	₹		₹
To Opening Stock `` Purchases `` Gross Profit c/d	4,00,000 16,00,000 6,00,000	By Sales `` Closing Stock	24,00,000 2,00,000
	26,00,000		26,00,000
To Office and Administration Expenses `` Selling & Distribution `` Net Profit	2,00,000 1,00,000 3,00,000	By Gross Profit b/d	6,00,000
	6,00,000		6,00,000

Balance Sheet (Extract)
as at 31.03.2013

Liabilities	**₹**	**Assets**	**₹**
Share Capital: 50,000 Equity Shares of ₹ 10 each, fully paid	5,00,000	Land & Building Plant & Machinery Stock	3,00,000 3,50,000 2,00,000
General Reserve	1,00,000	Debtors	3,50,000
Profit & Loss Account	3,00,000	Bills Receivable	1,00,000
8% Debentures	2,00,000	Cash at Bank	1,00,000
Sundry Creditors	50,000		
Bank Overdraft	1,00,000		
Bills Payable	1,50,000		
	14,00,000		14,00,000

Note: Dividend declared on Equity Share Capital amounted to ₹ 50,000.

You are required to answer the following questions:

(a) Calculate the ratios which will analyse the liquidity and solvency position of the company. Comment on the result.

(b) Find out any five ratios which will measure the profitability of the company and also analyse them.

(c) Analyse the financial statement from the management efficiency perspective with the suitable ratios.

[5+5+5]

Question 3.

(a) Using Altman's 1983 Multiple Discriminant Function, calculate Z-score of Somlata & Co. Ltd., where the five accounting ratios are as follows and comment about its financial position:

Working Capital to Total Assets=0.350
Retained Earnings to Total Assets = 50%
EBIT to Total Assets = 19%
Book Value of Equity to Book Value of Total Debt= 1.65
Sales to Total Assets = 3 times

(b) A ₹ 1,000 par value bond bears a coupon rate of 14 percent and matures after 5 years. Interest is payable semi-annually. Compute the value of the bond if the required rate of return is 16 percent. Given $PVIFA_{8\%,\ 10\ years}$ = 6.710 and $PVIF_{8\%,\ 10\ years}$ = 0.463.

(c) What is the relation between Financial Leverage and Debt-to-equity Ratios in relation to the profitability analysis?

[5+3+2]

Question 4.

(a) The accompanying balance sheet and profit and loss account relate to T Ltd. Convert these into common-size statements.

Balance Sheet as at 31st March (Extract) **(Amount in ₹ lakhs)**

Particulars	Previous year	Current Year
Liabilities		
Equity share capital (of ₹ 10 each)	240	240.0
General reserves	96	182.0
Long-term loans	182	169.5
Creditors	67	52.0
Outstanding expenses	6	-
Other current liabilities	19	6.5
	610	650.0
Assets		
Plant [net of accumulated depreciation]	402	390
Cash	54	78
Debtors	70	65
Inventories	84	117
	610	650

Income Statement for the Year Ended 31st March (Extract) **(Amount in ₹ lakhs)**

Particulars	Previous year	Current year
Gross sales	370	480
Less: Returns	20	30
Net sales	350	450
Less: Cost of goods sold	190	215
Gross profit	160	235
Less: Selling, general and administrative cost	50	72
Operating profit	110	163
Less: Interest expenses	20	17

Earnings before taxes	90	146
Less: Taxes	31.5	51.5
Earnings after taxes	58.5	94.5

(b) There are different types of financial models. One of them is Macroeconomic Financial Model. Write few sentences about this model.

[8+2]

Question 5.

(a) A firm has sales of ₹75,00,000, variable cost of ₹42,00,000 and fixed cost of ₹6,00,000. It has a debt of ₹ 45,00,000 at 10% and equity of ₹ 55,00,000.

(i) What is the firm's Return on Investment (ROI)?
(ii) Does it have favourable financial leverage?
(iii) If the firm belongs to an industry whose asset turnover is 3, does it have a high or low asset leverage?
(iv) What are the operating, financial and combined leverages of the firm?
(v) If the sales drop to ₹ 50,00,000, what will be the new EBIT?
(vi) At what level the EBT of the firm will be equal to zero?

(b) When a firm can be called as "no growth firm" in connection to the growth analysis?

[8+2]

Section B – Business Valuation

(Full Marks: 50)

(Answer Question No. 6 and Question No. 7 which are compulsory and any two from the rest in this section)

Question 6.

Super Cars Ltd. is engaged in the business of manufacture of electric Passenger Cars. The Company requires you to determine the value of its goodwill also showing the leverage effect on goodwill. Its Balance Sheet is as on 31.03.2013 is as under – (₹ Lakhs)

Liabilities	₹	Assets	₹	₹
Share Capital – Equity Shares of ₹10 each	1,500	Gross Fixed Assets	1,500	
General Reserve	500	Less: Depreciation till date	500	1,000
12% Term Loan from Bank	500	Investments:		
Creditors	210	Non- trade	300	
Provision for Tax	10	Trade	90	390

Proposed Dividend	140	Current Assets:		
		Overseas Debtors (1$= INR 42)	420	
		Indian Debtors	400	820
		Stock in Trade		350
		Cash and Bank Balances		300
	2,860			**2,860**

Additional Information:

(i) The closing exchange rate for the U.S. dollar was INR 48. Income from Non- trade Investments was a loss for the year ended 31.03.2013 owing to write down of cost of acquisition by 4%. There was no other transaction under Non-trade Investments during the year.

(ii) Current Year Depreciation changed on Historical Cost was ₹100 Lakhs. Current Cost of Fixed Assets is determined at ₹2,000 Lakhs.

(iii) While Current Cost of Closing Stock is ₹367 Lakhs, that of the Opening Stock was ₹200 lakhs against its Historical Cost of ₹148 Lakhs. The Market Value of Non- Trade Investments at the year end was ₹300 lakhs. The Overseas debtors made settlements in U.S.$ only.

(iv) The Industry Average rate of return on current cost of capital employed is 12% on long term debt and 15% on equity. The opening balance in General reserve was ₹150 Lakhs. While prevailing tax rate is 30% such is expected to decline by 5%.

(v) Using the above information you are required to arrive at value of the goodwill of the company under equity and long-term fund approached and also show the leverage effect on goodwill. **[15]**

Question 7.

Reliable Industries Ltd. (RIL) is considering a takeover of Sunflower Industries Ltd. (SIL). The particulars of two companies are given below:

Particulars	RIL	SIL
Earnings After Tax (₹)	20,00,000	10,00,000
Equity shares (No.)	10,00,000	10,00,000
EPS (₹)	2	1
P/E ratio (times)	10	5

Required:

(i) What is the market value of each company before merger?

(ii) Assuming that the management of RIL estimates that the shareholders of SIL will accept an offer of one share of RIL for four shares of SIL. If there are no synergic effects, what is the market value of the post-merger RIL? What is the new price for share? Are the shareholders of RIL better or worse off than they were before the merger?

(iii) Due to synergic effects, the management of RIL estimates that the earnings will increase by 20%. What is the new post-merger EPS and price per share? Will the shareholders be better off or worse off than before the merger? **[3+(2+2+2)+(2+2+2)]**

Question 8.

(a) Who are the participants in the Merger and Acquisition Process?

(b) The following financial share date pertaining to TECHNO LTD an IT company is made available to you:

Year ended March 31st	**2014**	**2013**	**2012**
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 Techno Ltd. **[4+6]**

Question 9.

(a) The stock of MOULIN LTD is currently trading at ₹500 and call option exercisable in three months time and has an exercise rate of ₹488. The standard deviation of continuously compounded stock price change for MOULIN LTD is estimated to be 20% per year. The annualized Treasury bill rate corresponding to this option life is 6% p.a. The company is going to declare a dividend of ₹15 and it is expected to be paid in two months time. Requirements:

(i) Determine the value of a three-month call option on the stock of MOULIN LTD (using Black Scholes model)

(ii) What would be the value of Put Option if the current price of stock is considered to be ₹ 485.15?

Note: Extracted from tables:

(1) Natural Logarithm: ln (0.99416) = - 0.005857
ln (1.02459) = 0.024929

(2) Value of e^{-x} : $e^{-0.02} = 0.9802$, $e^{-0.015} = 0.9851$

(3) For N (x) : Where X ≥ 0 : N(0.1414) = 0.5562

N(0.0414) = 0.5165

Where X ≤ 0 : N(- 0.144) = 0.4438

N(- 0.0414) = 0.4835

(4) PVIF (6%, 0.25 years) = 0.9852, PVIF (6%, 1/6 years) = 0.9901

(b) Identify the Factors that favour external growth and diversification through Mergers and Acquisitions? **[(5+2)+3]**

Question 10.

(a) A company has a capital base of ₹3 crore and has earned profits of ₹33 Lakhs. Return on investment of the particular industry to which the company belongs is 12.5%. If the services of a particular executive are acquired by the company, it is expected that the profits will increase by ₹7.5 lakhs over and above the target profit. Determine the amount of maximum bid price for that particular executive and the maximum salary that could be offered to him.

Particulars	₹
Capital Base	3,00,00,000
Actual profit	33,00,000
Target profit (₹3Cr ×12.5%)	37,50,000

(b) Describe the situations when FCFE models and dividend discount valuation models provide similar as well as dissimilar results. **[5+5]**