Paper – 20: Financial Analysis & Business Valuation

Time Allowed: 3 hours Full Marks: 100

Section A

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

Question 1. Gyan Co. Ltd.

The summarized Balance Sheets of the Company for the past two years are as under:

	(In lakh of ₹)			
	As at 31.03.2013		As at 31.03.2012	
Share Capital and Liabilities:				
Share Capital		75.00		50.00
Cash Credit Loan from Bank @ 16.5% Int.		80.00		100.00
Working Capital Term Loan from Bank @ 16.5% Int.		20.00		
Unsecured Inter-corporate Loan @ 18% Interest		60.00		
		235.00		150.00
Assets:				
Fixed Assets Less Depreciation		35.00		37.00
Current Assets				
Inventories including WIP	100.00		70.00	
Debtors	60.00		30.00	
Cash/Bank	10.00		10.00	
	170.00		110.00	
Less: Current Liabilities				
Creditors	120.00		140.00	
Advances etc.	60.00	<u> </u>	60.00	
	180.00	(10.00)	200.00	(90.00)
Profit and Loss A/c		210.00		203.00
		235.00		150.00

The following additional information is available:

(i) Sales and Profitability for the past two years are as under:

	(In ₹ Lakh)		
	Sales	Profit/(Loss)	
2011-12	100	(150)	
2012-13	350	(7)	

(ii) By introducing some new products, for which no additional capital expenditure is involved, but Working Capital will be necessary. The company is expecting a 20% growth in sales volume every year and 10% profit (before interest) on sales.

You are required to answer the following questions:

(a) What are the possible causes of industrial sickness in relation to production management, labour management, marketing management and financial management?

- (b) Write a comparative study of the financial statement on the basis of working capital, sales and loss.
- (c) What are the potentialities the company has in making profits in future if only inter-corporate debt is considered?

[6+3+6]

Question 2.

Aryaan Company Ltd.

(i) Selected financial statistics

Particulars		(₹ in lakhs) (Index Base Year 1 = 100)	
	Year 10 (Index)	Year 9 (Index)	Year 8 (Index)
Total income	10,615(498)	9,093 (427)	8,280 (389)
Depreciation	225(479)	126 (268)	101(215
Profit before tax	803(453)	815 (46)	540 (305)
Taxation	405 (526)	474 (616)	315 (409)
Profit after tax	398 (398)	341 (341)	225 (225)
Dividend	91 (260)	91 (260)	70 (200)
Retained profit	307 (473)	250 (385)	155 (238)
Fixed assets	1,655 (338)	991 (202)	914 (187)
Investments	177 (385)	165(358)	165 (358)
Indebtedness	1,097 (213)	885 (172)	760 (148)
Share capital	917 (321)	603(211)	603 (211)
Reserves	806 (413)	795(408)	615 (315)
Net worth	1,723 (358)	1,399 (291)	1,218 (253)

(ii) Significant ratios

Particulars	Year 10	Year 9	Year 8
(1) Measurement of investment:			
Percentage return on investment	32.7	39.5	32.9
Percentage return on equity	29.9*	25.9	19.7
Dividend cover ratio	4.67*	3.99	3.48
(2) Measurement of performance:			
Percentage of profit before tax to sales	7.7	9.3	6.7
Percentage of profit after tax to sales	3.8	3.9	2.8
Assets turnover ratio	3.6	3.8	4.1
(3) Measurement of financial status:			
Percentage of term loan to tangible net worth	41.1	14.2	19.4
Current ratio	1.25	1.25	1.15
(4) General:			
Dividend per equity share (₹)	1.60	1.60	1.20
Earnings per equity share (₹)	7.48*	6.39	4.17
(*Excluding bonus shares issued on March 31st,			
year 10)			

(iii) Statement of changes in financial position

Funds obtained from:	Year 10	Year 9
Profit after tax	415.21	341.17
Depreciation	225.09	125.94
Long-term loans	466.30	
Sale of investments		0.44
	1,106.60	467.55
Funds used for:		
Repayment of long-term loans		23.05
Plant expenditure	889.16	202.47
Increase in investment	11.97	0.85
Dividends	90.96	161.04
Increase in working capital	114.51	80.14
	1,106.60	467.55
Changes in Working Capital Increase/(Decrease):		
Cash and Bank Balances	274.23	12.08
Inventories	55.63	236.08
Sundry Debtors	(66.91)	292.47
Loans and Advances	163.20	(0.20)
	426.15	540.43
Creditors and other Liabilities	616.80	244.10
Short-term Borrowings	(254.30)	197.31
Provision for Taxation	(50.86)	18.88
	311.64	460.29
Increase in Working Capital	114.51	80.14

Read the above financial statements and answer the following questions —

- (a) Point out the areas where the company is not performing well in support of short-term liquidity position and return on investment.
- (b) State whether the lending institutions be interested to grant credit based on the company's performance? Also mention the areas where care must be taken in order to attract the lending institutions.
- (c) Write about the company's financing position in relation to the long-term investment.
- (d) Analyse the company's financial statement from an investor's perspective in the basis of earnings and dividend.

[4+5+4+2]

Question 3.

(a) Compute the Liquid Ratio from the following information for the year ended 31st March 2013 and also interpret the result:

Particulars	₹
Land and Building	55,000
Plant and Machinery	40,000
Stock	30,000
Debtors	42,000
Bills receivable	25,000
Prepaid Expense	5,000
Cash at bank	15,000
Cash in hand	10,000
Creditors	25,000

Outstanding Salary	5,000
Bank Overdraft	3,000
Bills payable	4,000
Proposed Dividend	6,000
Long – Term Liabilities	46,000
Provision for Bad debts	2,000

- (b) Manisha Ltd. started business in 2012 and uses the FIFO inventory method. During 2012 it purchased 45,000 units of inventory at ₹ 10 each and sold 40,000 units for ₹ 20 each. In 2013 it purchased another 60,000 units at ₹11 each and sold 55,000 units for ₹22 each. What will be its 2013 ending inventory balance?
- (c) Give the features of a Corporate Bond Issue.

[6+2+2]

Question 4.

- (a) What is Off-Balance-Sheet Financing? Write down the impacts of Off-balance items in the context of Derivative Instruments.
- (b) Rambow Corporation purchased a 8% bond, at par, for ₹ 10,00,000 at the beginning of the year. Interest rates have recently increased and the market value of the bond declined by ₹ 30,000. Determine the bond's effect on Rambow's financial statements under each classification of securities.
- (c) How can Financial Statement be defined?

[6+3+1]

Question 5.

(a) Following figures have been extracted from the records of Agni Ltd.:

Year	2012	2013
Sales (₹)	2,60,000	3,60,000
Cost of Goods Sold (₹)	2,00,000	3,30,000
Gross Profit (₹)	60,000	30,000

It is learnt that cost price for the year 2013 has increased by 10% over the year 2012. Account for changes in gross profit in the year 2013.

(b) Firm X and Firm Y manufacture the same product and their cost sheets are given below: (₹/unit)

	Firm X	Firm Y
Units manufactured and sold	30,000	30,000
Direct material	10	10
Direct labour	5	5
Variable overheads	<u>5</u>	<u>5</u>
	20	20
Contribution	<u>10</u>	<u>10</u>
Selling price	30	<u>10</u> 30

The fixed overheads of Firm X and Firm Y are ₹ 1,50,000 and ₹ 2,25,000 respectively. You are required to calculate the operating leverage for both the firms and comment on them.

[6+4]

Section B – Business Valuation (Full Marks: 50)

Answer Question no.6 and 7 and any two from the rest in this section.

Following are the financial statement for A Ltd. and B Ltd. for the current financial year. 6. Both the firm operate in the same industry:

Balance Sheet		(₹)
Particulars	A Ltd.	B. Ltd.
Total Current assets	14,00,000	10,00,000
Total Fixed assets (net)	10,00,000	5,00,000
	24,00,000	15,00,000
Equity capital (of ₹ 100 each)	10,00,000	8,00,000
Retained earnings	2,00,000	
14% Long-term debt	5,00,000	3,00,000
Total Current liabilities	7,00,000	4,00,000
	24,00,000	15,00,000

Income-Statements		(₹)
Particulars	A Ltd.	B. Ltd.
Net sales	34,50,000	17,00,000
Cost of goods sold	27,60,000	13,60,000
Gross profit	6,90,000	3,40,000
Operating expenses	2,00,000	1,00,000
Interest	70,000	42,000
Earnings before taxes	4,20,000	1,98,000
Taxes (50%)	2,10,000	99,000
Earnings after taxes (EAT)	2,10,000	99,000

Additional Information

	A Ltd.	B Ltd.
Number of equity shares	1,00,000	80,000
Dividend payment ratio (D/P)	40%	60%

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Assume that the two firms are in the process of negotiating a merger through an exchange of equity shares. You have been asked to assist in establishing equitable exchange terms, and are required to -

- (i) Decompose the share prices of both the companies into EPS and P/E components, and also segregate their EPS figures into return on equity (ROE) and book value/intrinsic value per share (BVPS) components.
- (ii) Estimate future EPS growth rates for each firm.
- (iii) Based on expected operating synergies, A Ltd. estimates that the intrinsic value of B's equity share would be ₹ 20 per share on its acquisition. You are required to develop a range of justifiable equity share exchange ratios that can be offered by A Ltd. to B Ltd's shareholders. Based on your analysis in parts (i) and (ii) would you expect the negotiated terms to be closer to the upper, or the lower exchange ratio limits? Why?
- (iv) Calculate the post-merger EPS based on an exchange ratio of 0.4:1 being offered by A Ltd. indicate the immediate EPS accretion or dilution, if any that will occur for each group of shareholders.
- (v) Based on a 0.4:1 exchange ratio, and assuming that A's pre-merger P/E ratio will continue after the merger, estimates the post-merger market price. Show the resulting accretion or dilution in pre-merger market prices. [15]

The Balance Sheet of Sizzler Coat Ltd as at 31st March is given below-

Liabilities	₹	₹	Assets	₹	₹
Share Capital:			Fixed Assets:		
5,000 Equity Shares of ₹100		5,00,000	Land & Buildings at Cost		3,20,000
3,000 12% Preference Shares of ₹100		3,00,000	Plant & Machinery	9,40,000	
			(-) Acc. Depreciation	4,80,000	4,60,000
Reserves & Surplus:					
General Reserve		3,00,000	Investments:		
Profit & Loss A/c			6% Govt. Securities – at Cost		1,60,000
- Opening Balance (beginning)	1,20,000		Current Assets:		
Current Year Profit	4,80,000		Book Debts		3,80,000
	6,00,000		Stock in Trade		4,50,000
Provision for Tax	(2,40,000)	3,60,000	Cash and Bank Balances		80,000
			Preliminary Expenses		60,000
Current Liabilities & provisions:					

Trade Creditors	2,10,000		
Provision for Taxation	2,40,000		
	19,10,000		19,10,000

The face value of the Government Securities is ₹2,00,000. The current Year profit reported in the Balance Sheet includes income from such Government Securities. Stock in Trade reported in Balance Sheet is taken at 90% of Market value.

The shares of the Company are not quoted on the Stock Exchange. A provision exists in the Articles of Association of the Company that in cases where any existing shareholder desires to transfer his holdings to another person, it should be done at a fair market value to be fixed by the Statutory Auditor of the Company. One of the shareholders desiring to transfer his holdings to X, an outsider, refers the matter of determination of the fair market value of shares to you, as the Statutory Auditor.

Indicate how you will proceed to determine such a value, based on the following additional information:

- (i) The Company's prospects in the near future appear good.
- (ii) Land value is understated by ₹4,00,000. Buildings have suffered a further depreciation of ₹2,00,000.
- (iii) Market Value of Plant and Machinery is ₹5,40,000.
- (iv) Companies doing similar business as that of Sizzler Coat Ltd show a market return of 12% on Capital Employed.
- (v) Profits over the prior 3 years period have been increasing at the rate of ₹50,000 per
- (vi) It has always been the Company's practice to value stock at market prices. [15]
- 8. (a) "Jaggi & Lau suggested that a proper valuation of human resource is not possible unless the contribution of individuals as a group is taken into consideration." Comment.
 - (b) You are given following information about Sandeep Ltd.:

(i) Beta for the year 2012 – 13

(ii) Risk free Rate

12%

- (iii) Long Range Market rate (based on BSE Sensex) 15.14%%
- (iv) Extracts from the liabilities side of balance sheet as at 31st March, 2013

	₹
Equity	29,160
Reserves and surplus	43,740
Shareholder's fund	72,900
Loan funds	<u>8,100</u>
Total funds (long – term)	81,000

(v) Profit after tax

₹20,394.16 lakhs

(vi) Interest deducted from profit

₹487.00 lakhs

(viii) Effective tax rate (i.e. (Provision for Tax/PBT) x 100)

Calculate Economic value Added of Sandeep Ltd. as on 31st March 2013.

[6+4]

- 9. During the financial year 2012-2013, ITC Ltd. had the following transactions:
 - (i) On 1st April 2012, ITC Ltd. purchased new asset of Fine Ltd. for ₹7,20,000. The fair value of Fine Ltd.'s identifiable net assets was ₹ 3,44,000. ITC Ltd. is of the view that due to popularity of Fine Ltd.'s products, the life of resulting goodwill is unlimited.

- (ii) On May 2012, ITC Ltd., purchased a franchise to operate boating service from the State Government for ₹1,20,000 and at an annual fee of 1% of boating revenues. The franchise expires after 5 years. Boating revenues were ₹ 40,000 during financial year 2012-2013. ITC Ltd. projects future revenue of ₹80,000 in 2013-2014 and ₹1,20,000 per annum for 3 years thereafter.
- (iii) On 5th July 2012, ITC Ltd. was granted a patent that had been applied for by Fine Ltd. During 2012-13, ITC Ltd. incurred legal costs of ₹1,02,000 to register the patent and an additional ₹ 1,70,000 to successfully prosecute a patent infringement suit against a competitor. ITC Ltd. expects the patents economic life to be 10 years. ITC Ltd. follows an accounting policy to amortize all intangibles on straight line basis over the maximum period permitted by accounting standard taking a full year amortization in the year of acquisition.

Prepare:

- (a) A schedule showing the intangible section in ITC Ltd. balance sheet at 31st March
- (b) A schedule showing the related expenses that would appear in the Statement of Profit and Loss of ITC Ltd. for 2012-2013. [3+7]
- 10. (a) While evaluating a capital project, a company is considering an option to buy a business from a third party at the cost of ₹ 50 crores. It is expected that in next one year, the value of such business will increase to ₹ 60 crores with probability 70% or decline to ₹ 45 crores with probability of 30%. The company may enter into an agreement with a party to sell the said business at ₹48 crores after one year if the company so desires. Assuming that this real option is like a European Call, with the strike price of the underlying real asset is ₹ 48 crores and the risk free interest rate is 9% p.a. Determine the value of this real option.

(b) Coca - Coal's Balance sheet for December 2013 is modified and summarized below (in millions of dollars):

	\$		\$
Cash and Near cash	1,648	Accounts Payable	3,141
Marketable Securities	159	Short- term Borrowings	4,462
Accounts receivable	1,666	Other Short – term Liabilities	1,037
Other current Assets	2,017	Current Liabilities	8,640
Current Assets	5,490	Long-term Liabilities	687
Long-term Investments	1,863	Other Long-term Liabilities	1,415
Depreciable Fixed Assets	5,486	Non-current Liabilities	2,102
Non-depreciable Fixed Assets	199	Share Capital (Paid-in)	3,060
Accumulated Depreciation	2,016	Retained Earnings	5,343
Net Fixed Assets	5,532	Shareholders Equity	8,403
Other Assets	8,123	Total Liabilities & Equity	19,145
Total Assets	19,145		

Coca-Cola's most valuable asset is its brand name. Where in the balance sheet do you see its value? Is there any way to adjust the balance sheet to reflect the value of this asset?

[5+5]