Paper 20 – Financial Analysis & Business Valuation

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

Question No. 1 which is compulsory and carries 20 marks and answer any five questions from Question No. 2 to Question No. 8

1.(a) State whether the following statements are true or false: **[1×8=8]**

- **(i)** Market saturation of the product is an external factor responsible for corporate distress.
- **(ii)** If the NPV of a project is positive, the Profitability Index will be less than one and then the project should be rejected.
- **(iii)** Off-Balance Sheet financing is used to finance a company without showing debt on the face of the Balance Sheet.
- **(iv)** Horizontal financial statement analysis is useful in inter-firm comparison.
- **(v)** A brand is nothing but a glorified product name; hence it has no value.
- **(vi)** Higher Debt/Equity ratio implies higher valuation of a company.
- **(vii)** Tobin's Q compares the market value of a company with the book value of its assets.
- **(viii)** Economic Value Added represents the difference between profit and the cost of capital.

(b) The operating and cost data of ABC Ltd., are:
Sales ₹ 20,00,000
Variable Costs ₹ 14,00,000
Fixed Costs (including 15% interest on ₹ 10,00,000) ₹ 4,00,000
You are required to calculate — (i) Operating Leverage (ii) Financial Leverage and (iii) Combined Leverage. **[6]**

(c) Calculate the following:
(i) Beta of a security is 0.5; Expected rate of return on portfolio is 15% p.a.; Risk free rate of return is 6% p.a. Calculate the expected rate of return of the security.
(ii) If another security has an expected rate of return of 18% p.a.; what would be its Beta? **[3+3]**

2.(a) Vedika Ltd. finds on 31st December, 2016 that it is short of funds with which to implement its branch expansion programme. On 1st January, 2016, it had a bank balance of ₹ 1,80,000 in its current account. From the following information, prepare a statement for the Board of Directors to show how the overdraft of ₹ 68,750 at 31st December, 2016 have arisen:

Figures as per Balance Sheet
(as on 31st December)

	(₹) 2015	(₹) 2016
Fixed Assets	7,50,000	11,20,000
Stock and stores	1,90,000	3,00,000
Debtors	3,80,000	3,65,000
Bank Balance/(Overdraft)	1,80,000	(68,750)
Trade Creditors	2,70,000	3,50,000
Share Capital (in shares of ₹ 10 each)	2,50,000	3,00,000
Bills Receivable	87,500	95,000

The profit for the year ended 31st December, 2016 before charging depreciation and taxation amounted to ₹ 2,40,000. The 5,000 shares were issued on 1st January, 2016 at a premium of ₹ 5 per share. ₹ 1,37,500 was paid in March 2016 by way of income tax including tax on distribution of dividend. Dividend was paid as follows: for 2015 (final) on the capital on 31-12-2015 @ 10% less tax 25% and for 2016 (interim) 5% on capital on 31st March, 2016 free of tax. **[10]**

(b) What are the internal factors responsible for corporate distress? **[4]**

(c) A firm's current assets and current liabilities are ₹ 16,000 and ₹ 10,000 respectively. How much can it borrow on a short term basis to purchase inventories without reducing the Current Ratio below 1.25? **[2]**

3.(a) The following financial statements have been extracted from the Annual Report 2016-17 of METCALF TEXTILES Ltd. a largest Textile Company, having a strong presence in over 80 countries in the world.

The company wants to keep its shareholders happy by giving them a fair rate of return. The company is using return on equity (ROE) as one of the metrics of performance evaluation for determining the return for shareholders. Due to intense competition, in recent years, its ROE is under pressure and to maintain the level of ROE, the company is to change its business Model-in that, it is varying its, margin, assets utilization and leverage.

You are required to:

(i) carryout the DuPont Analysis considering the financial parameters given below and show how the return on equity (ROE) of the company (Metcalf Textiles Ltd.) is changing due to change in its Margins, Assets utilization and Leverage over the period of four years.

(ii) Give your comments on the trend of the said parameters.

Statement of Profit & Loss for year ended 31st March, (Amount in ₹ crore)

	2014	2015	2016	2017
Total revenue	7998	8992	9976	11804
Profit before tax	1855	1612	1990	2817
Profit after tax	1514	1345	1574	2110
Dividend	225	315	225	225
Tax on dividend	37	51	36	38
Retained earnings	1252	979	1313	1847

Balance Sheet as at 31st March, (Amount in ₹ crore)

		2014	2015	2016	2017
Equity and Liabilities					
1.	Shareholders' fund a. Share capital b. Reserves and Surplus	 225 8055	 225 9034	 225 10347	 225 12194
2.	Non-current liabilities: Loan Funds	 7	 617	 17	 1352
3.	Current liabilities Deferred Tax	251	296	324	392
		8538	10172	10913	14163
Assets					
1.	Non - Current assets: Fixed Assets	 3774	 4369	 4685	 5276
2.	Non - Current investments Investments	 371	 799	 1449	 3642
3.	Current assets	4393	5004	4779	5245

		8538	10172	10913	14163

[8+2]

(b) The following information has been extracted from the records of Siteraze Ltd. as on 31st March, 2017: (Amount in ₹ lakhs)

Equity share capital (of ₹10 each)	800
Sales (net)	4,000
Market value of Equity Share (₹ 8 each)	640
Working Capital	(400)
Total Assets	2,800
Retained Earnings	200
EBIT	472
Book Value of Total Debt	1,800

You are required to calculate the Z- Score of Siteraze Ltd. using Altman's (1968) Model and comment on it. **[6]**

4.(a) The following data relate to some important items of a company disclosing its developments during the last five years:

Particulars	2011 (₹)	2016 (₹)
Working capital	9,34,120	15,30,040
Plant and Machinery	3,99,140	9,67,080
Long-term borrowings	2,80,000	5,60,000
Net Tangible assets	11,23,200	19,95,040

You are required to evaluate the changes in financial position (soundness/weakness) of the company by following the trend percentage. **[8]**

(b) Ms. Nisha is an avid investor in fixed income securities. Her portfolio of Bond does not have bonds from AAA rated companies. She is considering purchase of an AAA rated Bond. Two such bonds of AAA rated companies, Bond-A and Bond-B are available in the market that have following features:

	Bond-A	Bond-B
Face value (₹)	100	100
Coupon rate per annum	15%	12%
Periodicity of coupon	Semi-annual	Semi-annual
Time remaining for maturity	3 years	4 years
Current Market Price (₹)	110	120

Her expectation of return from the investment in AAA rated bonds is 10% p.a. which is slightly above the yields in the government securities. Ms. Nisha is indifferent to the investment horizon of 3 or 4 years.

Required: Which of the Bonds should she (Ms. Nisha) buy and why?

[Given: PVIFA (5%, 6 periods) = present value of annuity of ₹ 1 received for 6 periods discounted at the rate of 5% per period = 5.0757, PVF (5%, 6 periods) = present value of ₹ 1 received at the end of 6 periods discounted at the rate of 5% per period = 0.7462.

PVIFA (5%, 8 periods) = present value of annuity of ₹ 1 received for 8 periods discounted at the rate of 5% per period = 6.4632, PVF (5%, 8 periods) = present value of ₹ 1 received at the end of 8 periods discounted at the rate of 5% per period = 0.6768.] **[8]**

5.(a) M Ltd. has been following a dividend payout of only 20% so that the funds needed for the growth of the firm targeted at 10% is retained. The expectation of return is 12%.

(i) At what rate the market is discounting the current and future earnings of M Ltd.?
(ii) If the current level of earnings is ₹ 10 per share, at what price the shares of the firm are being traded? **[4+4]**

(b) What are the myths of valuation? **[8]**

6. A Limited and B Limited are in negotiations in which A Limited has expressed the desire to acquire B Limited and it is decided that A Limited will acquire B Limited. For this purpose, the following information has been extracted from the books of both the companies for F.Y. 2016-17.

(₹ in lakhs)

Particulars	A Limited	B Limited
Statement of Profit and Loss		
Revenue from Operations	1,200	630
Less:		
Cost of materials consumed, net of expenses capitalized	634	280
Other Operation Expenses	62	32
Interest	10	5
Depreciation and Amortization	64	75
Operating Profit	430	238
Net Non-Operating Income	42	27
Profit Before Tax	472	265
Tax	160	90
Profit After Tax	312	175
Balance Sheet:		
Share Capital (Face value of Shares of both the Companies ₹10)	300	200
Reserves and surplus	3,210	1,356
Non-Current Liabilities	440	104
Current Liabilities	1,235	750
Total Liabilities	5,185	2,410
Net Fixed Assets	2,985	1,850
Non-Current Investments & Other Non- Current Assets	575	355
Current Assets	1,625	205
Total Assets	5,185	2,410
Additional Information:		
Promoters holding in the Company	40%	30%
Free Float Market Capitalization (Assuming that promoters shares are not available for trading in the market)	₹3,150	₹1,400

In a joint meeting of the directors of both companies, the following decisions are taken:

(i) The swap ratio will be decided by considering the following parameters with the weights as given below:
  (a) Book Value 25%
  (b) Market Price 40%
  (c) EPS 25%
  (d) Net Profit Ratio 10%

(ii) All assets and liabilities will be taken over by A Limited at book values.

(iii) The combined profit will increase by 10% due to synergy gains arising because of higher scale of operations.

(iv) It is expected that the market will look this decision of A Limited as 'a value creator' decision and consequently, it is expected that A Limited's P/E Ratio will increase by 10% from its existing level after the acquisition of B Limited.

You are required to compute assuming that the acquisition will be completed as per the terms given.

1. The Swap Ratio
2. Book Value per share of A Limited after acquisition
3. Earnings per share of A Limited after acquisition
4. Market Price of A Limited's share after acquisition. **[7+3+3+3]**

7.(a) Hall Corporation paid ₹ 600 million for the outstanding share of Triple C Corporation. At the acquisition date, Triple C reported the following Condensed Balance Sheet.

Triple C Corporation — Condensed Balance Sheet

	Book Value (₹ in millions)
Current Assets	80
Plant and equipment, net	760
Goodwill	30
Liabilities	400
Shareholders' equity	470

The fair value of the plant and equipment was ₹ 120 million more than its recorded book value. The fair values of all other identifiable assets and liabilities were equal to their recorded book values. Calculate the amount of Goodwill that Hall Corporation should report on its Consolidated Balance Sheet. The Goodwill reported on Triple C Corporation's Balance Sheet is an unidentifiable asset and is thus ignored in the calculation of Hall Corporation's Goodwill. **[8]**

(b) Dayal Ltd. furnishes the following information relating to the previous three years, and requests you to compute the value of the brand of the company:

(₹ in lakhs)

Particulars	2014	2015	2016
Profit before interest and tax	75.00	85.25	150.00
Loss in Sale of Assets	3.00	—	18.00
Non-operating income	12.00	7.25	8.00

Inflation was 9% for 2015 and 15% for 2016. If the capitalization factor considering internal and external value drivers to the brand is 14, determine the brand value. Assume an all inclusive future tax rate of 35%. **[8]**

8. Write Short Notes on any four out of the following: **[4×4]**

(i) Financial Analysis
(ii) Financial Leverage
(iii) Off Balance Sheet
(iv) Shareholder Value Analysis
(v) Valuing Synergy.