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) If EPS (Earnings per Share) of a firm is negative, then one should take the absolute value of it (that is positive value of EPS) while calculating P/E Ratio.
(ii) The higher the Z-Score, there is a greater possibility of bankruptcy.
(iii) If there are no fixed costs, the operating leverage value will be 1.
(iv) Return on Capital employed indicates the liquidity of a firm.
(v) Exchange ratio of equity shares of merging firms is determined by their market price alone.
(vi) According to basic valuation model, the value of a financial asset is present value of its expected future cash flows.
(vii) The value of a firm's equity is equal to value of the firm less the value of non- equity claims.
(viii) Systematic risk of a portfolio is diversifiable.

1.(b) Particulars about River Ltd. are provided below:

	31-03-2016	31-03-2017
Revenue (₹ lakhs)	4,800	6,200
Assets (₹ lakhs)	2,000	2,400
Equity Multiplier (EM)	1.33	1.2
Return on Equity (ROE) %	26.67	25

Comment on changes in profit margin, asset efficiency, leverage, return on assets and return on equity of River Ltd. **[6]**

1.(c) Sun Ltd. Has announced issue of warrants on 1:1 basis for its equity shareholders. The warrants are convertible at an exercise price of 12. Warrants are detachable and trading at ₹7. What is the minimum price of the warrant and the warrant premium if the current price of the stock is ₹16**?** **[6]**

2.(a) The following figures have been extracted from the records of a company:

Year	2015-16	2016-17
Sales (₹)	1,50,000	2,70,000
Cost of Goods Sold (₹)	1,00,000	1,80,000
Units Sold	10,000	15,000

Account for changes in profit due to changes in sales quantity, cost price and selling price. **[8]**

(b) The following abridged financial information is given to you:
Balance Sheet of Mountain Ltd. (₹ Crores)

Liabilities	31.03.2016	31.03.2017
Equity Share Capital	24	24
Long Term Liabilities	110	110
Current Liabilities	70	86
Total	204	220

Assets	31.03.2016	31.03.2017
Fixed Assets	120	108
Current Assets	61	57
Profit and Loss	20	55
Preliminary Expenses	3	—
Total	204	220

Additional Information	31.03.2016	31.03.2017
Depreciation Written Off	14	12
Preliminary Expenditure Written off	2	3
Net profit/(Loss)	16	(35)

Ascertain from above the stages of sickness of Mountain Ltd. on 31.03.2016 and on 31.03.2017. **[4+4=8]**

3.(a) The following Financial Statement is summarized from the books of Neel Ltd as on 31st Mar-2016

Equity and Liabilities	Amount (₹)	Assets	Amount (₹)
Paid-up Share Capital	15,00,000	Fixed Assets	16,50,000
Reserves and Surplus	6,00,000	Stock-in-Trade	9,10,000
Debentures (Long-term)	5,00,000	Book-Debts	12,40,000
Bank Overdraft	12,00,000	Investments-Short term	1,60,000
Sundry Creditors	2,00,000	Cash	40,000
	40,00,000		40,00,000

Annual Sales ₹ 74,40,000. Gross Profit ₹ 7,44,000;

You are required to calculate the following ratios for the year and comment on the financial position as revealed by these ratios.

(i) Debt-Equity Ratio
(ii) Current Ratio
(iii) Proprietary Ratio
(iv) Gross Profit Ratio
(v) Debtors Turnover Ratio
(vi) Stock Turnover Ratio

Bank Overdraft is payable on Demand **[12]**

(b) Financial statements of Moonlight Ltd. reveals the following information:

(I)	PBT (Profit before Tax)	₹ 1,000 lakhs
(II)	Inventory overvalued by	₹ 100 lakhs
(III)	Revenue expenses capitalised	₹ 6 lakhs
(IV)	Increase in depreciation due to capitalization	₹ 0.60 lakhs
(V)	Tax Rate	30%

Calculate PAT (Profit after Tax) after reworking and adjusting the financial manipulation undertaken by the company. **[4]**

4.(a) The Balance Sheet of Ignu Ltd on 31.03.2016 and 31.03.2017 are presented

(Amount in Lakhs)

Equities and Liabilities	31.03.16	31.03.17	Assets	31.03.16	31.03.17
Share Capital	300	300	Freehold Property	225	240
Reserves	225	240	Plant & Machinery (Net after Dep)	135	165
6% Debentures	75	75	Unquoted Shares-Investments	150	150
Mortgage Loan	27	14.25	Quoted Shares – Investments (Market Value ₹ 120 Lakhs in 2015-16 and 150 Lakhs in 2016-17)	112.5	112.5

Creditors	45	45	Stock	52.5	75
Proposed Dividend (Subjected to TDS)	22.5	23.25	Debtors	45	75
Provision for Tax	21	37.5	Bank	10.5	0
Secured Overdraft (By a floating charge on assets)	15	82.5			
	730.5	817.5		730.5	817.5

The following additional information for the year 2016-17 is relevant:
Credit Sales: ₹ 675 Lakhs
Credit Purchases: ₹ 520 Lakhs
Overhead: ₹ 85.75 Lakhs
Depreciation on Plant and Machinery: ₹ 17.5 Lakhs
Dividend for 2015-16 was paid in full.
Amount paid towards taxation for the year 2015-16 is ₹ 21.5 Lakhs.

In view of Credit Squeeze, the company has been asked by the Bank to reduce the overdraft substantially, within six months if possible by 50%.

You are required to prepare a cash flow statement and briefly comment on the financial position of the company on the basis of information of cash flow statement and suggested remedial measures to overcome the financial crises. **[10]**

(b) On 1st January 2016, Star Ltd. issued 12,000 of 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. The prevailing market interest rate for similar debt without conversion option at the date of issue was 6%. At what value should the equity element of the hybrid financial instrument be recognized in the financial statements of Star Ltd. at the date of issue? Given, at 6% rate of discounting, present value of ₹ 1 to be received at the end of 5 years = 0.747258 and present value of 5 years annuity of ₹ 1= 4.212364. **[6]**

5.(a) From the following extracts of financial data pertaining to HS Ltd., an IT company, you are required to calculate the value of the brand of the company:

Year ended on 31st march	2016	2015	2014
EBIT ₹ lakhs	750	525	280
Non-branded income ₹ lakhs	60	45	15
Inflation (%)	8	15	11
Remuneration of capital	6% of Average Capital Employed		
Average capital employed ₹ lakhs	1,450		
Corporate tax rate	30%		
Capitalization factor	15%		

[6]

(b) The following information is available of a concern. Calculate Economic Value Added (EVA).

12% Debt ₹2,000 crores

Equity capital ₹ 500 crores

Reserves and Surplus ₹ 7,500 crores

Risk-free rate 9%

Beta factor 1.05

Market rate of return 19%

Equity (market) risk premium 10%

Operating profit after tax ₹ 2,100 crores

Tax rate = 30% **[4]**

(c) What is Valuation Multiple? Give examples of any four multiples. **[6]**

6.(a) The bidding company B Ltd. is contemplating a merger with the target company, T Ltd. so as to form the merged B Ltd. under two distinct situations X and Y. You are provided with the following information about the proposed merger:

Company	BLtd.	TLtd.
EAT (₹ lakh)	40	12.5
No. of Equity Shares (in lakh)	5	2
P/E ratio	12.5	20

Situation X:
There is no synergy in earnings, but P/E of merged B Ltd. will stand at 15. Merger is based on market value of shares.

Situation Y:

Post merger P/E stands at that of stand-alone B Ltd., but earnings of the merged entity rises by 20% over the aggregate earnings of B Ltd. and T Ltd. Swap ratio is 1.3 for every share of T Ltd.

Find for both the situations X and Y:

(i) Post merger EPS. **[3]**

(ii) Post merger market value per share. **[3]**

(iii) Synergy due to merger. **[2]**

(iv) Gain/loss for merger to shareholders of B Ltd. and T Ltd. (a) in value of share holdings and (b) in earnings available to them. **[4+4=8]**

7.(a) Discounted Cash Flow method is not appropriate for valuation of real estate? **[5]**

(b) Amrutha Cements Ltd. earned free cash flow to Equity Shareholders during the Financial Year ending 2015 at ₹ 4.5 lakhs and its cost of equity is 13% with a projected earnings growth rate of 10%. The market value of debt is ₹ 50 lakhs. What will be the value of firm as per Constant Growth Valuation Model? **[5]**

(c) Calculate Economic value added (EVA) with the help of the following information of Moon Ltd.:

Financial leverage: 1.4 times;
Equity capital ₹170 lakhs;
Reserve and surplus ₹130 lakhs;
10% debentures ₹400 lakhs;
Cost of equity: 15%
Income tax: 30% **[6]**

8. Write a short note on any four of the following: [4×4=16]

(a) Quality of Earnings
(b) Off- Balance Sheet Financing
(c) EBIT- EPS Indifference Point
(d) Human Resource Accounting

(e) Hostile Takeover Bids