

Paper 20 - Strategic Performance Management & Business Valuation

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Full Marks: 100

Time allowed: 3 hours

The figures in the margin on the right side indicate full marks.
Working notes should form part of the answer.

Section - A

Answer Question No. 1 which is compulsory and any two from the rest of this section

1. Multiple choice questions:

[5×2=10]

[1 mark for right choice and 1 mark for justification]

(i) The components of the Stewart Cycle or PDCA are:

- (A) Plan-Do-Check-Act
- (B) Plan-Define-Check-Act
- (C) Plan-Do-Control-Act
- (D) Program-Do-Check-Act

(ii) The risk which is concerned with the general economic climate (such as growth rate of income, characteristics of the labour force, level of foreign debt outstanding etc.) within the country, is termed as:

- (A) Country Risk
- (B) Political Risk
- (C) Economic Risk
- (D) Social Risk

(iii) Which of the following is not the element/ parameter of NCAER model of corporate distress prediction?

- (A) Net worth position
- (B) Outstanding liability position
- (C) Net working capital position
- (D) Cash profit position

(iv) The Average Cost of a firm is given by the function Average Cost = $x^3 + 12x^2 - 11x$, its marginal cost will be:

- (A) $4x^3 + 36x^2 - 22x$
- (B) $x^4 + 12x^3 - 11x^2$
- (C) $x^3 + 12x^2 - 11x$
- (D) None of the above

(v) The type of benchmarking, which is concerned with the development of core competencies that will help sustained competitive advantage, is called:

- (A) Global Benchmarking
- (B) Strategic Benchmarking
- (C) Internal Benchmarking
- (D) Competitive Benchmarking

2.(a) What do you understand by Financial Performance Analysis? State the areas/ perspectives of it to measure the financial health. Also state the significance of the Financial Performance Analysis. **[3+3+4]**

(b) "The Balanced Score Card (BSC) translates an organization's mission and strategy into a comprehensive set of performance measures that provides the framework for implementing its strategy." — State the steps in developing Balanced Score Card (BSC) in this context. Mention the information required for Performance Measurement under BSC and also states any three benefits of BSC. **[3+4+3]**

3.(a) The total cost (C) and the total revenue (R) of a firm are given $C(x) = x^3 + 60x^2 + 8x$; $R(x) = 3x^3 - 3x^2 + 656x$, x being output, determine the output for which the firm gets maximum profit. Also obtain the maximum profit. **[7+3]**

(b) From the information given below relating to Unfortunate Ltd., calculate Altman's Z-score and comment:

$$\left(\frac{\text{Working capital}}{\text{Total assets}} \right) = 0.45$$

$$\left(\frac{\text{Retained earnings}}{\text{Total assets}} \right) = 0.25$$

$$\left(\frac{\text{Earnings before interest \& taxes}}{\text{Total assets}} \right) = 0.30$$

$$\left(\frac{\text{Market value of equity}}{\text{Book value of total debt}} \right) = 2.50$$

$$\left(\frac{\text{Sales}}{\text{Total assets}} \right) = 3 \text{ times}$$

[10]

4.(a) "To be effective, any Enterprise Risk Management (ERM) implementations should be integrated with strategy-setting". Do you agree? Give your views bringing out the basic elements of ERM and the reasons why ERM is implemented. **[1+4+5]**

(b) Write short note on:

(i) MOLAP

(ii) ROLAP

[5+5]

Section - B

Answer Question No. 5 which is compulsory and any two from the rest of this section

5. Multiple choice questions:

[5×2=10]

[1 mark for right choice and 1 mark for working]

(i) The following details are given for a company:

Sales - ₹ 1,00,000; Costs - ₹75,000; Depreciation - ₹20,000; Tax - 35%; Change in Net Working Capital - ₹1,000; Change in Capital Spending - ₹ 10,000

Then the Free Cash Flow to Firm (FCFF) will be:

(A) ₹3,250

(B) ₹6,750

(C) ₹10250

(D) ₹12,250

(ii) Burnpur Cements Ltd. earned free cash flow to Equity Shareholders during the Financial Year ending 2016 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. The value of firm as per Constant Growth Valuation Model will be:

(A) ₹45,00,000

(B) ₹1,45,000

(C) ₹1,50,000

(D) ₹1,65,000

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- (iii) A Ltd. is considering the acquisition of B Ltd. with stock. Relevant financial information is given below.

Particulars	A Ltd.	B Ltd.
Present earnings	₹7.5 lakhs	₹2.5 lakhs
Equity (No. of shares)	4.0 lakhs	2.0 lakhs
EPS	₹1.875	₹1.25
P/E ratio	10	5

The market capitalization of A Ltd. will be:

- (A) ₹12.5 Lakhs
 (B) ₹18.75 Lakhs
 (C) ₹75 Lakhs
 (D) ₹82 Lakhs
- (iv) The risk-free rate = 5.5% The market price of risk = 7% The company's beta = 1.2, then Cost of equity will be?
 (A) 12.5%
 (B) 13.6%
 (C) 13.7%
 (D) 13.9%
- (v) The Capital Structure of M/s XYZ Ltd., on 31st March, 2016 was as follows:

	₹
Equity Capital (18,000 Shares of ₹100 each)	18,00,000
12% Preference Capital 5,000 Shares of ₹100 each	5,00,000
12% Secured Debentures	5,00,000
Reserves	5,00,000
Profit earned before Interest and Taxes during the year	7,20,000
Tax Rate	40%

Calculate the Interest and Fixed Dividend Coverage:

- (A) 3.8 Times
 (B) 6.5 Times
 (C) 7.6 Times
 (D) 13 Times
- 6.(a) Calculate the value of the intangible assets of X Ltd. considering the excess returns earned by it, from the following information for the y. e. 31.03.2015. [6]
- (i) Average PBT ₹ 6,300 Lakhs
 (ii) Average year end tangible assets ₹ 35,000 Lakhs
 (iii) Cost of equity of the company is 15%
 (iv) Return on Assets (ROA) industry average is 12%
 (v) Tax rate is 30%
- (b) ABC Ltd has FCFF of ₹170 Crores and FCFE of ₹130 Crores. ABC Ltd's WACC is 13% and its cost of equity is 15%. FCFF is expected to grow forever at 7% and FCFE is expected to grow forever at 7.5%. ABC Ltd has debt outstanding at ₹1500 Crores. Find the value of ABC Ltd using FCFF approach and FCFE approach. [6]
- (c) 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
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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%		

[8]

7.(a) R Ltd. is intending to acquire S Ltd. (by merger) and the following information is available in respect of both the companies—

Particulars	R Ltd.	S Ltd.
Total current earnings	₹ 2,50,000	₹ 90,000
Number of outstanding shares	50,000	30,000
Market price per share	₹ 21	₹ 14

You are required to calculate—

- (i) Present EPS of both the companies,
- (ii) If the proposed merger takes place what would be the new EPS for R Ltd. (assuming that merger takes place by exchange of equity shares and the exchange ratio is based on the current market price)
- (iii) What should be the exchange ratio if S Ltd., wants to ensure the same earnings to members as before the merger took place?

[12]

(b) Kolkata Ltd and Mumbai Ltd have agreed that Kolkata Ltd will take over the business of Mumbai Ltd with effect from 31st December 2013. It is agreed that:

- (i) 10,00,000 shareholders of Mumbai Ltd will receive Shares of Kolkata Ltd. The Swap ratio is determined on the basis of 26 week average market prices of Shares of both the Companies. Average Prices have been worked out at ₹50 and ₹25 for the shares of Kolkata Ltd and Mumbai Ltd respectively.
- (ii) In addition to (i) above, the shareholders of Mumbai Ltd will be paid in cash based on the projected synergy that will arise on the absorption of the business of Mumbai Ltd by Kolkata Ltd. 50% of the projected benefits will be paid to the share holders of Mumbai Ltd.

The following projections have been agreed upon by the management of both the Companies.

Year	2014	2015	2016	2017	2018
Benefit (in ₹ Lakhs)	50	75	90	100	105

The benefit is estimated to grow at the rate of 2% from 2018 onwards. It has been further agreed that a discount rate of 20% should be used to calculate the cash that the holders of each share of Mumbai Ltd will receive.

- (i) Calculate the cash that holder of each share of Mumbai Ltd will receive.
- (ii) Calculate the total purchase consideration.
(Discounting Rate 20%: 1 year-0.833, 2 year – 0.694, 3 year – 0.579, 4 year – 0.482, 5 year -0.402, 6 year - 0.335)

[4+4]

8.(a) The Shareholders of A Co. have voted in favor of a buyout offer from B Co. Information about each firm is given here below. Moreover, A Co.'s shareholders will receive one share of B Co. Stock for every three shares they hold in A Co.

Particulars (amount in Rupees)	B Co.	A Co.
Present earnings	6.75 lakhs	3.00 lakhs

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EPS	3.97	5.00
Number of Share	1.70 lakhs	0.60 lakhs
P/E ratio	20	5

(i) What will the EPS of B. Co. be after the merger? What will the PE ratio be if the NPV of the acquisition is zero?

(ii) What must B Co. feel is the value of the synergy between these two firms?

Explain how your answer can be reconciled with the decision to go ahead with the takeover. **[5+5]**

(b) Following is the information collected for a company, provided to you:

BALANCE SHEET OF XYZ LTD AS AT 31st MARCH

	(₹ in Crores)
Particular	2016
EQUITY AND LIABILITIES:	
SHAREHOLDER'S FUNDS	
Share capital	36.37
Reserves and Surplus	2,225.66
	2,262.03
NON-CURRENT LIABILITIES	
Long-term Borrowings	6,322.76
Deferred tax liabilities (Net)	39.39
Other long-term liabilities	7.09
Long-term provisions	355.03
	6,724.27
CURRENT LIABILITIES	
Trade payables	1,797.88
Other current liabilities	12.24
Short-term provisions	19.00
	1,829.11
TOTAL	10,815.41
ASSETS	
NON-CURRENT ASSETS	
FIXED ASSETS:	
Tangible assets	4,535.68
Capital work-in-progress	898.83
Intangible assets	550.00
	5,984.51
Non-current investments	1,664.30
Long-term loans and advances	891.97
Other non-current assets	3.03
	2,559.30
CURRENT ASSETS	
Current investments	142.50
Inventories	1,389.92
Trade receivables	585.77
Cash and bank balances	38.41
Short-term loans and advances	115.00
	2,271.60
TOTAL	10,815.41

STATEMENT OF PROFIT AND LOSS OF XYZ LTD. FOR THE YEAR ENDING ON 31st MARCH

	(₹ in Crores)
Particulars	2016

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Revenue from operations	295.00
Less: Excise Duty	26.39
	268.61
Other Operating Income	0.30
Other Income	0.13
TOTAL Revenue	269.04
EXPENSES	
Raw materials consumed	132.79
Power & Fuel Cost	21.37
Changes in inventories of finished goods, work-in-progress, and stock-in-trade	(1.63)
Employee benefits expense	5.97
Depreciation and amortization expense	20.77
Interest cost	32.19
Other expenses	34.23
	245.69
PROFIT/(LOSS) BEFORE TAX AND EXTRA-ORDINARY ITEMS	23.35
Less: Extra-Ordinary items	0.64
PROFIT/(LOSS) BEFORE TAX	22.71
Tax Expenses	
Tax paid @ 32.50%	7.38
Deferred Tax	1.37
	8.75
PROFIT/(LOSS) AFTER TAX	13.96

If the Weighted Average Cost of Capital (WACC) is 15% then you are required to calculate EVA for the year 2015-16. **[10]**