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) Which of the following condition is not correct in order to obtain the equilibrium position of an industry under perfect competition?
(a) The industry gets an equilibrium position where MC=MR
(b) All firms in the industry get both normal & abnormal profits
(c) Number of the firms is constant
(d) At equilibrium point the MC, AC, MR and AR are equal.

(ii) According to model developed by Altman in 1968, which of the following is not the selected ratio for corporate distress prediction?
(a) Working Capital to Total Assets
(b) Retained Earnings to Total Assets
(c) Sales to Total Assets
(d) Book value of Equity/ Total Liabilities.

(iii) The Average Cost of a firm is given by the function Average Cost = $x^3 + 12x^2 - 11x$, the marginal cost will be:
(a) $4x^3 + 36x^2 - 22x$
(b) $x^4 + 12x^3 - 11x^2$
(c) $x^2 + 24x - 11$
(d) None of the above.

(iv) 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

(v) Which one of the following is NOT true about On-Line Analytical Processing (OLAP)?
(a) OLAP functionality includes trend analysis over sequential time periods.
(b) It provides slicing subsets for on-screen viewing.
(c) It is a category of hardware technology.
(d) It helps the end user to drill-down to deeper levels of consolidation data.

2.(a) What is Customer Relationship Management (CRM)? State the objectives of Customer Relationship Management Application and also state the advantages of it. **[2+4+4=10]**

(b) "Balanced Score Card (BSC) can be used to improve strategic performance in several ways." — State the areas where BSC can be used to improve performance of an organisation. Write down the steps in developing Balanced Score Card. Discuss the information to be required for performance measurement under Balance Score Card.

[3+3+4=10]

3.(a)

$\text{Cost} = 300x - 10x^2 + \frac{1}{3}x^3$, calculate

(i) Output at which Marginal Cost is minimum
(ii) Output at which Average Cost is minimum
(iii) Output at which Marginal Cost = Average Cost. **[3+3+4=10]**

(b) Balance Sheet (extract) of Q Ltd. as on 31 March 2019:

Liabilities	₹ in Crores	Assets	₹ in Crores
Equity Shares	20.80	Fixed Assets	105.60
Long-term Liabilities	104.00	Current Assets	57.60
Current Liabilities	78.40	Profit & Loss A/c	40.00
	203.20		203.20

Additional Information:

(i) Depreciation written off ₹ 8 crores.

(ii) Preliminary Expenses written off ₹ 1.60 crores.

(iii) Net Loss ₹ 25.60 crores.

Ascertain the stage of sickness and comment on this. **[10]**

4.(a) "Enterprise Risk Management (ERM) is a comprehensive and integrated approach to addressing corporate risk." — In this context describe Enterprise Risk Management with its characteristics thereof. Also, state the needs for Implementation of ERM. **[7+3=10]**

(b) Discuss the potential impact of Computers and MIS on different levels of management.

[10]

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 justification]

(i) If equity share capital of ₹ 10 each is ₹ 450 crores, total earnings is ₹ 90 crores and market price of each share is ₹ 60, then price earnings ratio will be:
(a) 7.5
(b) 30
(c) 0.033
(d) None of the above.

(ii) If value of A Ltd. is 50, B Ltd. is 20 and on merger their combined value is 90 and A Ltd. receives premium on merger 12, the synergy for merger is (all amounts are in ₹ Lakhs):
(a) 20
(b) 8
(c) 32

(d) 38

(iii) A theory that explains why the total value from the combination resulted from a merger is greater than the sum of the value of the component companies operating independently is known as ____________ theory.
(a) hubris
(b) agency
(c) operating
(d) synergy

(iv) If cost of debt is 8%, cost of equity is 13.9%, tax rate is 40% and capital structure is debt = 40% and equity = 60%, then weighted average cost of capital will be:
(a) 11.54%
(b) 6.924%
(c) 10.26%
(d) 8.204%

(v) Estimated fair value of an asset is based on the ___________ value of operating cash flows.
(a) current
(b) discounted
(c) future
(d) none of these

6.(a) From the following information determine the Possible Value of Brand as per Potential Earning Model –

(₹ Lakhs)

	Particulars	CASE A	CASE B
(i)	Profit Before Tax (PBT)	--	15.00
(ii)	Income Tax	--	3.00
(iii)	Profit After Tax (PAT)	2,700	--
(iv)	Tangible Fixed Assets	10,000	20.00
(v)	Identifiable Intangible other than Brand	1,500	10.00
(vi)	Weighted Average Cost of Capital	15%	
(vii)	Expected Normal Return on Tangible Assets Weighted Average Cost (15%) + Normal Spread 5%	20%	6.00
(viii)	Appropriate Capitalization Factor for Intangibles	25%	25%

[10]

(b)(i) Write short note on Specialised Investment Enterprises. **[5]**

(ii) X Ltd. has the following portfolio of investment on 31st March 2019:

Current investment	Cost	Market Value
Shares of A Ltd.	250	265
Units of UTI	160	160
Shares of C Ltd.	125	100
	535	525
Long term investment		
Shares of Y Ltd. (subsidiary)	200	210
Shares of Z Ltd.	150	130

Shares of W Ltd. (subsidiary)	80	10
	430	350

Compute the value of investment for balance sheet purpose assuming that the fall in value of investment Z Ltd. is temporary and that of W Ltd. is permanent. **[5]**

7.(a) Acquiring company is considering the acquisition of Target Company in a stock- for-stock transaction in which target Company would receive ₹90 for each share of its common stock. The Acquiring company does not expect any change in its price/ earnings ratio multiple after the merger and chooses to value the target company conservatively by assuming no earnings growth due to synergy.

The following additional information is available:

Particulars	Acquiring	Target
Earnings	₹ 2,50,000	₹ 72,500
Number of shares	1,10,000	20,000
Market Price per Share	₹ 50	₹ 60

Calculate:

(i) The purchase price premium
(ii) The exchange ratio
(iii) The number of new shares issued by the acquiring company.
(iv) Post-merger EPS of the combined firms
(v) Pre-merger EPS of the Acquiring company
(vi) Pre-merger P/E ratio
(vii) Post-merger share price
(viii) Post-merger equity ownership distribution.
(ix) Also, Comment on your results. **[(1×8)+2=10]**

(b) Kolkata Ltd. and Bombay Ltd. have agreed that Kolkata Ltd. will take over the business of Mumbai Ltd. with effect from 31st December, 2019. 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 shareholders of Mumbai Ltd.

The following projections have been agreed upon by the management of both the companies:

Year	2020	2021	2022	2023	2024
Benefit ₹ (in lakhs)	50	75	90	100	105

The benefit is estimated to grow at the rate of 2% from 2024 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.

- Calculate the cash that holder of each share of Mumbai Ltd. will receive

- Calculate the total purchase consideration.

(Discounting Rate 20%: 1 year-0.833, 2 year-0.694, 3 year-0.579, 4 year-0.482, 6 year-0.335). **[10]**

8.(a) The following information is given for three companies that are identical except for their capital structure:

	Orange	Red	Blue
Total Invested Capital	1,00,000	1,00,000	1,00,000
Debt/Assets Ratio	0.8	0.5	0.2
Shares Outstanding	6,100	8,300	10,000
Pre Tax Cost of Debt	16%	13%	15%
Cost of Equity	26%	22%	20%
Operating Income (EBIT)	25,000	25,000	25,000
Net Income	8,970	12,350	14,950

The tax is uniform 35% in all cases.

(i) Compute the weighted average cost of capital for each company.

(ii) Compute the Economic Value Added (EVA) for each company.

(iii) Based on the EVA, which company would be considered for best investment? Give reasons.

(iv) If the industry P/E ratio is 11 times, estimate the price for the share of each company.

(v) Calculate the estimated market capitalization for each of the Companies. **[10]**

(b) Q Ltd. wants to acquire R Ltd. and has offered a swap ratio of 1 : 2 (0.5 shares for every one share of R Ltd.).

Following information is provided:

Particulars	Q Ltd.	R Ltd.
Profit after tax (₹)	18,00,000	3,60,000
Equity shares outstanding (Nos.)	6,00,000	1,80,000
EPS (₹)	3	2
P/E Ratio	10 times	7 times
Market price per share (₹)	30	14

Required:

(i) The number of equity shares to be issued by Q Ltd., for acquisition of R Ltd.

(ii) What is the EPS of Q Ltd., after the acquisition?

(iii) Determine the equivalent earnings per share of R Ltd.

(iv) What is the expected market price per share of Q Ltd., after the acquisition, assuming its P/E multiple remains unchanged?

(v) Determine the market value of the merged firm. **[2x5=10]**