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 risk which deals with the portion of security's total variability of returns that derives from the possibility that the issue may be called or redeemed before maturity, is called:
(a) Default Risk
(b) Operational Risk
(c) Industry Risk
(d) Callability Risk

(ii) What is the cost when output is 5 units for the given function $C = \frac{3}{5}x + \frac{15}{4}$:
(a) 6.75
(b) 12.25
(c) 8.40
(d) None of the above.

(iii) 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.

(iv) Which of the following is a part of Internal Quality Costs for quality management?
(a) Prevention Costs
(b) Appraisal Costs
(c) Failure Costs
(d) All of the above.

(v) In the context of Statistical Quality Control, the control chart which measures the proportion defective, is:
(a) C Charts
(b) R charts
(c) P Charts
(d) X bar charts.

2.(a)(i) Write the approaches for measurement of Productivity and Efficiency in Performance Management. **[6]**

(ii) Customer Relationship Management (CRM) is often thought of as a business strategy. State the areas where it enables businesses to improve. **[4]**

(b) What is MRP I? State any three objectives of it. Also, state the data requirements for the operation of a MRP system. **[2+3+5=10]**

3.(a) A manufacturer can sell 'x' items per month, at price P = 300 – 2x. Manufacturer's cost of production ₹ Y of 'x' items is given by Y = 2x + 1000. Find no. of items to be produced to yield maximum profit per month. **[10]**

(b) Using Altman's Multiple Discriminant Function, calculate Z-score of S & Co. Ltd., where the five accounting ratios are as follows and comment about its financial position:
Working Capital to Total Assets=0.250
Retained Earnings to Total Assets = 50%
EBIT to Total Assets = 19%
Book Value of Equity to Book Value of Total Debt= 1.65
Sales to Total Assets = 3 times. **[10]**

4.(a) What is Risk? Economic risk is concerned with the general economic climate within the country. Write the factors which reflect the economic climate of a country. **[3+7=10]**

(b) "MIS comprises of three elements viz., management, information and system." — describe how these three elements are correlated to each other. **[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 a company has a P/E ratio of 12 and a Market to Book Value Ratio 2.10, then its Return on Equity will be
(a) 14.10%
(b) 17.50%
(c) 25.20%
(d) None of the above.

(ii) Assume that in a stock market the CAPM is working. A company has presently beta of 0.84 and its going to finance its new project through debt. This would increase its debt/equity ratio to 1.56 from the existing 1.26. Due to increased debt/equity ratio, the company's beta would:
(a) increase
(b) decrease
(c) remain unchanged
(d) nothing can be concluded.

(iii) Duration of a bond will __________ when the yield-to-maturity on the bond increases.
(a) Decrease
(b) Increase
(c) not change
(d) all three above are possible

(iv) An investment is risk free when actual returns are always __________ the expected returns.
(a) Equal to
(b) Less than
(c) More than
(d) Depends upon circumstances.

(v) Economic margin framework is not only a performance metric but also encompasses on value drives, like:
(a) Profitability
(b) growth
(c) cost of capital
(d) All of the above

6.(a)(i) True Value Ltd. (TVL) is planning to raise funds through issue of common stock for the first time. However, the management of the company is not sure about the value of the company and, therefore, they attempted to study similar companies in the same line which are comparable to True value in most of the aspects.

From the following information, you are required to compute the value of TVL using the comparable firms approach.

(₹ in crores)

Company	True value Ltd. (₹)	Jewel-value Ltd. (₹)	Real value Ltd. (₹)	Unique value Ltd. (₹)
Sales	250	190	210	270
Profit after tax	40	30	44	50
Book value	100	96	110	128
Market value		230	290	440

TVL feels that 50% weightage should be given to earnings in the valuation process; sales and book value may be given equal weightages. **[8]**

(ii) From the following details, calculate Free Cash Flow to Firm (FCFF) for a company:
Sales - ₹ 10,00,000; Costs - ₹ 7,50,000; Depreciation - ₹ 2,00,000; Tax - 35%; Change in Net Working Capital - ₹ 10,000; Change in Capital Spending - ₹ 1,00,000. **[2]**

(b) Following are the information of two companies for the year ended 31st March, 2016:

Particulars	Company A	Company B
Equity Shares of ₹ 10 each	8,00,000	10,00,000
10% Pref. Shares of ₹ 10 each	6,00,000	4,00,000
Profit after tax	3,00,000	3,00,000

Assume the Market expectation is 18% and 80% of the Profits are distributed.

(i) What is the rate you would pay to the Equity Shares of each Company?

(1) If you are buying a small lot.

(2) If you are buying controlling interest shares.

(ii) If you plan to Invest only in preference shares which company's preference shares would you prefer?

(iii) Would your rates be different for buying small lot, if the company 'A' retains 30% and company 'B' 10% of the profits? **[5+2+3=10]**

7.(a) Kolkata Ltd. and Bombay Ltd. have agreed that Kolkata Ltd. will take over the business of Mumbai Ltd. with effect from 31st December, 2018. 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	2019	2020	2021	2022	2023
Benefit ₹ (in lakhs)	50	75	90	100	105

The benefit is estimated to grow at the rate of 2% from 2023 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). **[7+3=10]**

(b) The following information is provided in relation to the acquiring firm M Ltd. and the target firm P Ltd.

Particulars	M Ltd.	P Ltd.
Earnings after tax (₹)	200 lakhs	40 lakhs
Number of shares outstanding	20 lakhs	10 lakhs
P /E Ratio	10	5

Required:
(i) What is the swap ratio in terms of current market price?
(ii) What is the EPS of M Ltd. after acquisition?
(iii) What is the expected market price per share of M Ltd. after acquisition assuming that P / E ratio of M Ltd. remains unchanged?
(iv) Determine the market value of the merged firm. **[10]**

8.(a) You are given following information about Sandeep Ltd.:
(i) Beta for the year 2018-19 is 1.05
(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, 2019

	₹
Equity	29,160
Reserve & Surplus	43,740

Shareholder's Fund	72,900
Loan Funds	8,100
Total Funds (Long term)	81,000

(v) Profit after tax ₹ 20,394 .16 lakhs

(vi) Interest deducted from profit ₹487.00 lakhs

(vii) Effective tax rate (i.e. Provision for Tax/PBT x 100) 24.45%.

Calculate Economic Value Added of Sandeep Ltd. as on 31st March 2019. **[10]**

(b) M Ltd. wants to acquire L Ltd. and has offered a swap ratio of 1:2 (0.5 shares of M Ltd. for every one share of L Ltd.). Following informations are provided:

	M Ltd.	L 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 M Ltd. for acquisition of L Ltd.

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

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

(iv) Determine the market value of the merged firm. **[10]**