

## 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: Strategic Performance Management

PART – I

Answer Question Number 1 which is compulsory

1. Multiple choice questions: [5×2=10]  
[1 mark for right choice and 1 mark for justification]
- (i) \_\_\_\_\_ 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) If, output is 5 units for the given function  $C = (3x/5) + (15/4)$ , then what would be the cost?
- (a) 6.75
  - (b) 12.25
  - (c) 8.40
  - (d) None of the above.
- (iii) In order to obtain the equilibrium position of an industry under perfect competition. Which of the following condition is not correct?
- (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) Internal Quality Costs for quality management includes \_\_\_\_\_.  
(a) Prevention Costs  
(b) Appraisal Costs  
(c) Failure Costs  
(d) All of the above.
- (v) Under 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.

PART – II

Answer any Two questions from question numbers 2 to 4. Each question carries 20 marks

[2x20= 40]

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

- (ii) How Customer Relationship Management (CRM) is used as a strategy in different areas for its improvement? [4]

- (b) Define MRPI and its any three objectives. What are the data requirements for the operation of a MRP system?. [2+3+5=10]

- 3.(a) Cost of production of 'x' items is ₹ Y given by  $Y = 2x + 1000$ . If, the manufacturer can sell 'x' items per months at price  $P = 300 - 2x$ , then calculate the no of items to be produced to yield maximum profit per month. [10]

- (b) Calculate Z-score of S & Co. Ltd., where the five accounting ratios are as follows and comment about its financial position (Using Altman's Multiple Discriminant Function).

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) Define Risk. What are the Economic actors that are concerned with the economic climate of country? [3+7=10]

- (b) How the three elements of MIS are correlated to each other ? [10]

Section – B: Business Valuation

PART – I

Answer Question Number 5 which is compulsory

5. Multiple choice questions: [5x2=10]

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

- (i) Find out the return on Equity when the company has a market to book value ratio of 2.10 and P/E ratio is of 12.

- (a) 14.10%  
(b) 17.50%  
(c) 25.20%  
(d) None of the above.

- (ii) 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 be\_\_\_\_\_.

- (a) increase  
(b) decrease  
(c) remain unchanged  
(d) nothing can be concluded.

- (iii) Yield to maturity on the bond increases, when during of a bond \_\_\_\_\_.  
 (a) Decrease  
 (b) Increase  
 (c) not change  
 (d) all three above are possible
- (iv) If, the investment is risk free the actual returns are always \_\_\_\_\_ than expected returns.  
 (a) Equal to  
 (b) Less than  
 (c) More than  
 (d) Depends upon circumstances.
- (v) What are the value drivers based on which economic margin framework encompasses on?  
 (a) Profitability  
 (b) growth  
 (c) cost of capital  
 (d) All of the above

PART – II

Answer any Two questions from question numbers 6 to 8. Each question carries 20 marks.  
 [2x20= 40]

- 6.(a)(i) TV Ltd. is planning to raise funds through issue of common stock for the first time. As, 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 TV in most of the aspects.

You are required to compute the value of TV Ltd. using the comparable firms approach from the information given below.

(₹ in crores)

Company	TV Ltd. (₹)	JV Ltd. (₹)	RV Ltd. (₹)	UV 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, 2022:

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) How much you would pay to the Equity Shares of each Company for each share?  
 (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) K Ltd. and B Ltd. have agreed that K Ltd. will take over the business of M Ltd. with effect from 31st December, 2021. It is agreed that:

- (i) 10,00,000 shareholders of M Ltd. will receive shares of K Ltd. The Exchange 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 K Ltd. and M Ltd. respectively.
- (ii) In addition to (i) above, the shareholders of M Ltd. will be paid in cash based on the projected synergy that will arise on the absorption of the business of M Ltd. by K Ltd. 50% of the projected benefits will be paid to the shareholders of M Ltd.

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

Year	2022	2023	2024	2025	2026
Benefit ₹ (in lakhs)	50	75	90	100	105

The benefit is estimated to grow at the rate of 2% from 2026 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 M Ltd. will receive.

- How much cash that each shareholder of M Ltd. will receive for each share?
- Find out the total purchase consideration.

(Discounting Rate 20%: 1 year-0.833, 2 year-0.694, 3 year-0.579, 4 year-0.482, 6 years-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 exchange ratio in terms of current market price?
- (ii) What is the EPS of M Ltd. post acquisition?
- (iii) What is the expected market price per share of M Ltd. post acquisition assuming that P / E ratio of M Ltd. remains unchanged?
- (iv) Determine the market value of the merged firm. [10]

8.(a) From the given information of A Ltd. Calculate Economic Value Added of A Ltd. as on 31.03.2022

- (i) Beta for the year 2021-22 is 1.05
- (ii) Risk free rate 12%
- (iii) Long Range Market Rate (based on BSE Sensex) 15.14%
- (iv) Interest deducted from profit ₹487.00 lakhs
- (v) Effective tax rate (i.e. Provision for Tax/PBT x 100) 24.45%.
- (vi) Profit after tax ₹ 20,394 .16 lakhs

- (vii) 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

[10]

- (b) M Ltd. wants to acquire L Ltd. and has offered a Exchange ratio of 1:2 (0.5 shares of M Ltd. for every one share of L Ltd.). Following information's 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:

- The number of equity shares to be issued by M Ltd. for acquiring L Ltd.
- What is the EPS of M Ltd. post acquisition?
- Determine the market price per share of M Ltd. Post acquisition considering the same P/E ratio.
- Calculate the market value of the merged firm.

[10]