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 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

(ii) 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.

(iii) Which of the following is not a part of Customer Relationship Management (CRM) application?
(A) Analytical CRM
(B) Operative CRM
(C) Quantitative CRM
(D) Collaborative CRM.

(iv) As per Basel III regulation, which of the following ratio is proposed to measure liquidity standard?
(A) Net stable funding ratio
(B) Acid test ratio
(C) Current ratio
(D) Net asset ratio.

(v) An organization buys its rival's products and tears down to find out the features, performances etc., to compare with its products, is called:
(A) Competitive Benchmarking
(B) Product Benchmarking
(C) Strategic Benchmarking
(D) Process Benchmarking.

2.(a) What is Supply Chain Management? Write about the different types of Customer Relationship Management. **[4+6=10]**

(b) What do you mean by Total Quality Management (TQM)? State the steps which need to be taken in the implementation of TQM? **[2+8=10]**

3.(a) A manufacturer can sell "X" items ($X \geq 0$) at a price of ($330 - X$) each; the cost of producing 'X' items are ₹ ($X^2 + 10X + 12$). How many items should he sell to make the maximum profit? Also determine the maximum profit. **[7+3=10]**

(b) The symptoms of corporate failure are interrelated — Mention the symptoms and describe how these are interrelated. State the purposes of the five selected ratio of Altman's Z-score model. **[2+5+3=10]**

4.(a) Write short note on: **[3+3+4=10]**

(i) Economic risk
(ii) Financial risk
(iii) Risk pooling.

(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) In the context of an acquisition of a firm, which one of the following concepts of value is least relevant?
(A) Market Value
(B) Opportunity Cost
(C) Synergy Value
(D) Value Gap

(ii) Given the growth rate in the dividends is expected to be 8%. The Beta of the Stock is 1.60 and return on the market index is 13%. The required rate of return would be:
(A) 14%
(B) 16%
(C) 18%
(D) 20%.

(iii) 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.

(iv) 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 if the current price of the stock is ₹16?
(A) ₹ 6
(B) ₹ 4
(C) ₹ 10
(D) ₹ 12.

(v) Which of the following is not a discounted cash flow technique for valuation of common stock?
(A) Present value of Dividends

(B) Price-cash flow ratios
(C) Present value of Free Cash Flow
(D) Present value of Operating Cash Flow.

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) The following financial share data pertaining to Techno Ltd., an IT company is made available to you: (Amount in ₹ crores)

Year ended March 31st	2023	2022	2021
EBIT (₹)	696.03	325.65	155.86
Non-branded Income (₹)	53.43	35.23	3.46
Inflation compound factor @ 8%	1.000	1.087	1.181
Remuneration of Capital	5% of average capital employed		
Average capital Employed (₹)	1112.00		
Corporate Tax Rate	35%		
Capitalization Factor	16%		

You are required to calculate the Brand Value for Techno Ltd. **[10]**

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.

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.

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

Also, Comment on your results. **[10]**

(b) Reliable Industries Ltd. (RIL) is considering a takeover of Sunflower Industries Ltd. (SIL). The particulars of 2 companies are given below:

Particulars	RIL	SIL
Earnings After Tax (₹)	20,00,000	10,00,000
Equity shares (No.)	10,00,000	10,00,000
EPS (₹)	2	1
P/E ratio (times)	10	5

Required:

i. What is the market value of each company before merger?
ii. Assuming that the management of RIL estimates that the shareholders of SIL will accept an offer of one share of RIL for four shares of SIL. If there are no synergic effects, what is the market value of the post-merger RIL? What is the new price for share? Are the shareholders of RIL better or worse off than they were before the merger?
iii. Due to synergic effects, the management of RIL estimates that the earnings will increase by 20%. What is the new post-merger EPS and price per share? Will the shareholders be better off or worse off than before the merger? **[3+4+3=10]**

8.(a) You are given following information about Sandeep Ltd.:

(i) Beta for the year 2022-23 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, 2023

	₹
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 2023. **[10]**

(b) Tridev Ltd. is in the business of making sports equipment. The Company operates from Thailand. To globalise its operations, Tridev Ltd. has identified Try Toys Ltd., an Indian Company, as a potential takeover candidate. After due diligence of Try Toys Ltd, the following information is available:

(A) Cash Flow Forecasts (₹ in Crores)

Year	10	9	8	7	6	5	4	3	2	1
Try Toys Ltd.	24	21	15	16	15	12	10	8	6	3
Tridev Ltd.	108	70	55	60	52	44	32	30	20	16

(B) The Net Worth of Try Toys Ltd (in Lakh ₹) after considering certain adjustments suggested by the due diligence team are as under —

Tangible	750	
Inventories	145	
Receivables	75	970
Less- Creditors	165	
Bank Loans	250	(415)
Represented by Equity Shares @ ₹ 1000 each		555

Talks for the takeover have crystallized on the following –

(i) Tridev Ltd. will not be able to use Machinery worth ₹75 Lakhs which will be disposed of by them subsequent to take over. The expected realization will be ₹50 Lakhs.

(ii) The inventories and receivables are agreed for takeover at values of ₹100 and ₹50 Lakhs respectively, which is the price they will realize on disposal.

(iii) The liabilities of Try Toys Ltd will be discharged in full on takeover along with an employee settlement of ₹90 Lakhs for the employees who are not interested in continuing under the new management.

(iv) Tridev Ltd will invest a sum of ₹150 Lakhs for upgrading the Plant of Try Toys Ltd. on takeover. A further sum of ₹50 Lakhs will also be incurred in the second year to revamp the machine shop floor of Try Toys Ltd.

(v) The anticipated cash flow (in ₹ Crore) post takeover are as follows-

Year	1	2	3	4	5	6	7	8	9	10
Cash Flows	18	24	36	44	60	80	96	100	140	200

You are required to advise the management the maximum price which they can pay per share of Try Toys Ltd., if a discount factor of 15% is considered appropriate. **[10]**