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: [1 mark for right choice and 1 mark for justification] [5×2=10]
  - (i) The 5 S's concepts in Quality Management are:
    - (A) SEIRI, SETOIN, SEISO, SEIKETSU, SHITSKUE
    - (B) SEIRI, SEITON, SEISO, SEIKETSU, SHITSUKE
    - (C) SEIRI, SETOIN, SEISO, SEIKESTU, SHITSUKE
    - (D) SIERI, SETOIN, SEISO, SEIKETSU, SHITSUKE.
  - (ii) The rate of change in the demand due to the change in the income is called:
    - (A) income elasticity of demand
    - (B) cross elasticity of demand
    - (C) price elasticity of demand
    - (D) None of the above.
  - (iii) Which of the following are 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 risk which arises primarily due to deviation from planned normal functioning of system, procedures, technology, human failure, omission or commission of errors, is called:
    - (A) Currency Risk
    - (B) Industry Risk
    - (C) Operational Risk
    - (D) Callability Risk
  - (v) Which of the following is not the perspective of Balanced Score Card?
    - (A) Customer perspective
    - (B) Financial perspective
    - (C) Political perspective
    - (D) Learning and growth perspective
- (a) (i) "Financial performance analysis can be classified into different categories on the basis of material used and modus operandi" Write about the various types of financial performance analysis in this context. [6]
  - (ii) Write a short note on Operative Customer Relationship Management. [4]
  - (b) What is Total Quality Management (TQM)? What are the steps to be taken in the implementation of TQM? [2+8]

$$\mathbf{c(x)} = \mathbf{x} \left( \frac{\mathbf{x}^2}{10} + 200 \right)$$

3. (a) A firm assumes a cost function

of units. Its revenue function is given by  $R(X) = \left(\frac{2200-3x}{2}\right)x$ . Find i) If the firm decides to produce 10,000 units per month, the firms cost and Marginal cost. ii) If the firm

decides to produce Marginal cost of 320, the total cost of the firm. iii) The marginal revenue function. iv) If a decision is taken to produce 10,000 units each month, the total revenue and marginal revenue of the firm. v) If the firm produces with a marginal revenue of 1040, the firm's monthly revenue. [10]

- (b) There are various causes for corporate distress. Write down those causes to analyse corporate distress. [10]
- 3. (a) What is Risk Mapping? State the benefits of Risk Mapping. [10]
  - (b) (i) What do you understand by Strategic-level information systems, Tactical-level information systems and Operational-level information systems? [6]
    - (ii) "Control is maintained through the use of control charts." State the Control chart for Attributes and Control chart for Variables. [4]

## Section - B

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

- 5. Multiple choice questions: 10] [1 mark for right choice and 1 mark for working] [5x2=10]
  - (i) 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%.
  - (ii) Kalinga 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.
  - (iii) Xetra Ltd. has `200 crores worth of common equity on its balance sheet comprising of 50 lakhs shares. The company's Market Value Added (MVA) is `48 crores. What is company's stock price?
    - (A)`460
    - (B) `476
    - (C) `496
    - (D) `528.
  - (iv) Alfa Ltd. acquires Beta Ltd. by exchange of shares. EPS of Alfa Ltd. is ` 50 and that of Beta Ltd. is of `40 Number of shares of Alfa Ltd. are 80,000 and of Beta Ltd. are of 50,000. What number of shares Alfa Ltd. requires to issue to Beta Ltd., in order to ensure that EPS of Alfa Ltd. would remain same after merger? (Assume that earnings of the merged company would be equal to the aggregate of the earnings of the companies before merger).
  - (v) The operating and cost data of Samriddhi Ltd. are: Sales `20,00,000 Variable Costs `14,00,000 and Fixed Costs `4,00,000 (including 15% interest on `10,00,000). Its operating leverage is:
    - (A) 1.71
    - (B) 2.71
    - (C) 3.71

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(D) 4.71.

- 6. (a) Sparta manufacturing is financed by debt and equity to the extent of 3:7, with total debts of `10.82 million. The company's debt is valued at 8%. The beta of the company's equity is known to be 1.5. The company generates a free cash flow `2 million with the known growth projection of 5% to perpetuity. If it is known that the market risk premium is 6% and the risk free rate is 5%, what is the value of each equity share for the 1 million shareholders of the company? Assume that the company is in the 40% tax bracket.
  - (b) Kolkata Ltd. and Bombay Ltd. have agreed that Kolkata Ltd. will take over the business of Mumbai Ltd. with effect from 31<sup>st</sup> 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 shareholders 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.

- 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). 8+12

7. (A) Damodar Ltd. is considering takeover of Narmada Ltd. & Bhagirathi Ltd. The financial data for the three companies are as follows:

Particulars	Damodar Ltd.	Narmada Ltd.	Bhagirathi Ltd.
Equity share capital of `10 each	450	180	90
(crores)			
Earnings (` crores)	90	18	18
Market price of each share (`)	60	37	46

Calculate:

(a) Price earnings ratio

- (b) Earnings per share of Damodar Ltd. after the acquisition of Narmada Ltd. separately. Will you recommend the merger of either / both of the companies? Justify your answer.
- (B) You are given following information about Sandeep Ltd.
  - (i) Beta for the year 2015-161.05
  - (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, 2016

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 values Added of Sandeep Ltd. as on 31st March 2016. 10+10

8. (A) Negotiation is going on for transfer of A. Ltd. on the basis of balance Sheet and additional information as given below:

Liabilities	Amount(`)	Asset	Amount(`)					
Share Capital (@ `10 fully paid up	10,00,000	Goodwill	1,00,000					
share)								
Reserve & Surplus	4,00,000	Land & Bldg.	3,00,000					
Sundry Creditors	3,00,000	Plant & Machinery	8,00,000					
		Investment	1,00,000					
		Stock	2,00,000					
		Debtors	1,50,000					
		Cash & Bank	50,000					
Total	17,00,000	Total	17,00,000					

Balance	Sheet	of	Δ	Itd	as	on	31	03	201	6
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Profit before tax for 2015 –16 amount to `6,00,000 including `10,000 as interest on investment. However, an additional amount of `50,000 per annum shall be required to be spent for smooth running of the business. Market value of the Land & Building and Plant & Machinery are estimated at `9,00,000 and `10,00,000 respectively. In order to match the above figures further depreciation to the extent of `40,000 should be taken into consideration. Income tax rate may be taken at 30%. Return on capital @ 20% before tax may be considered as normal for this business for the present stage.

For the purpose of determining the rate of return profit for this year after the aforesaid adjustments may be taken as expected average profit. Similarly, average trading capital employed is also to be considered on the basis of position in this year. It has been agreed that a three years purchase of super profit shall be taken as the value of goodwill for the purpose of the deal. You are requested to calculate the value of goodwill for the company.

(B) A company has a capital base of `3 crores and has earned profits of `33 lakhs. Return on Investment of the particular industry to which the company belongs is 12.5%. If the services of a particular executive are acquired by the company, it is expected that the profits will increase by `7.5 lakhs over and above the target profit. Determine the amount of maximum bid price for that particular executive and the maximum salary that could be offered to him.

Particulars	``
Capital Base	3,00,00,000
Actual Profit	33,00,000
Target Profit (` 3 crores × 12.5%)	37,50,000