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 is not the perspective of Balanced Score Card?

(A) Customer perspective
(B) Financial perspective
(C) Political perspective
(D) Learning and growth perspective

(ii) The program which encompasses the planning and management of all activities involved in sourcing, procurement, conversion and logistics management activities, is called:

(A) Supply Chain Management
(B) Customer Relationship Management
(C) Total Quality Management
(D) None of the above.

(iii) If Cost Function is $C = \frac{3}{5}x + \frac{15}{4}$, the cost when output is 5 units will be:

(A) 6.80
(B) 6.75
(C) 6.20
(D) 6.25

(iv) Which of the following is a cause for corporate distress?

(A) Fraud by Management
(B) Working Capital Problems
(C) Mismanagement
(D) All of the above.

(v) As per Altman's model, if the value of z-score of a firm is more than 2.99, it will be:

(A) Non-failed or non-distressed firm
(B) Failed or distressed firm
(C) Mixture of failed and non-failed elements
(D) None of the above

2.(a) Discuss the concept of Performance Management and also discuss about the Components of Performance Management? **[10]**

(b) Describe the Objectives of Supply Chain Management? There are five basic components of Supply Chain Management. — Write about those components. **[10]**

3.(a) 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. **[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) "Risk Management Process refers to the process of measuring or assessing risk and then developing strategies to manage risk." Discuss the steps, which are taken to minimize the risk. **[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 working]

(i) X Ltd. has ₹100 crores worth of common equity on its balance sheet comprising of 50 lakhs shares. The company's Market Value Added (MVA) is ₹24 crores. What is company's stock price?
(A) ₹230
(B) ₹238
(C) ₹248
(D) ₹264

(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) 8
(B) 20
(C) 32
(D) 38

(iii) X Ltd's share beta factor is 1.40. The risk free rate of interest on government securities is 9%. The expected rate of return on the company equity shares is 16%. The cost of equity capital based on CAPM is-
(A) 15.8%
(B) 16%
(C) 18.8%
(D) 9%

(iv) If a company has a P/E ratio of 20 and a ROE (Return on Equity) of 15% then the Market to Book Value Ratio is-
(A) 3 times
(B) 3%
(C) Cannot be calculated from the given information
(D) None of the above

(v) X intends to acquire Y (by merger) based on market price of the shares. The following information is available of the two companies.

P R

No. of Equity shares	10,00,000	6,00,000
Earning after tax	50,00,000	18,00,000
Market value per share	₹ 30	₹ 25

New EPS of R after merger?

(A) ₹ 4.00
(B) ₹ 4.05
(C) ₹ 4.60
(D) ₹ 4.53

6. (a) Consider two companies - X Company Limited and Y Company Limited. Both have announced their annual results for 2015-2016 on May 5, 2016 and as per the reported results both are having Profit After Tax (PAT) of ₹ 5,700 Lakhs and 120 Lakhs equity shares outstanding (face value of each share is ₹10). Both the companies having same networth of ₹ 28,500 Lakhs.

X Company Limited has growth plans in future and accordingly, it has decided to have a low payout of 40% as dividend. It is believed that its earnings will increase by present rate of growth every year in perpetuity. Assume that the company is having the required rate of return on equity of 15% a year.

Y Company Limited has growth plans in future but not very ambitious and due to that, it is going to have a dividend payout of 60%. It is believed that its earnings will increase by the present rate of growth every year in perpetuity. Assume that the company is having the required rate of return on equity of 13% a year.

Assume that both the companies are identical in all other aspects. Calculate P/E Ratio assuming that Constant Growth Model works. Also explain why a particular company is having higher P/E Ratio. **[10]**

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

Balance sheet of A Ltd. as on 31st March, 2016

Liabilities	Amount (₹)	Assets	Amount (₹)
Share capital (₹10 fully paid up share)	10,00,000	Goodwill	1,00,000
		Land & Building	3,00,000
Reserve & surplus	4,00,000	Plant & machinery	8,00,000
Sundry Creditors	3,00,000	Investment	1,00,000
		Stock	2,00,000
		Debtors	1,50,000
		Cash & Bank	50,000
Total	17,00,000	Total	17,00,000

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. **[10]**

7.(a) Two firms R and K Corporation operate independently and have the following financial statements:

Particulars	R	K
Revenues	8,00,000	4,00,000
Cost of Goods Sold (COGS)	6,00,000	2,40,000
EBIT	2,00,000	1,60,000
Expected growth rate	6%	8%
Cost of capital	10%	12%

Both firms are in steady state, with capital spending offset by depreciation. No working capital is required, and both firms face a tax rate of 40%. Combining the two firms will create economies of scale in the form of shared distribution and advertising cost, which will reduce the cost of goods sold from 70% of revenues to 65% of revenues. Assume that the firm has no debt capital.

Estimate

(i) The value of the two firms before the merger
(ii) The value of the combined firm with synergy effect **[5+5]**

(b) The following information is provided related to the acquiring firm Mark Limited and the target firm Mask Limited:

	Mark Ltd.	Mask Ltd.
Profit after tax (PAT)	₹ 2,000 Lakhs	₹ 400 Lakhs
Number of Shares outstanding	200 Lakhs	100 Lakhs
P/E ratio	10	5

You are required to calculate -

(i) What is the swap ratio based on current market price? **[2]**
(ii) What is the EPS of Mark Ltd after acquisition? **[2]**
(iii) What is the expected market price per share of Mark Limited after acquisition, assuming P/E ratio of Mark Limited remains unchanged? **[2]**
(iv) Determine the market value of the merged firm. **[2]**
(v) Calculate gain/loss for shareholder of the two independent companies after acquisition. **[2]**

8.(a) Give below is the Balance sheet of Laxmi Ltd. as on 31-03-2016:

Liabilities	₹ (In lakh)	Assets	₹ (In lakh)
Share Capital (Share of ₹ 10)	100	Land & Buildings	40
Reserves & Surplus	40	Plant & Machinery	80
Creditors	30	Investments	10
		Stock	20
		Debtors	15
		Cash at Bank	05
	170		170

You are required to work out the value of the company's shares on the basis of Net Assets method and Profit—earning capacity (capitalization) method and arrive at the fair price of the shares, by considering the following information:

(i) Profit for the current year ₹ 64 lakhs includes ₹ 4 lakhs extraordinary income and ₹ 1 lakh income from investments of Surplus funds, such Surplus funds are unlikely to recur.

(ii) In subsequent years, additional advertisement expenses of ₹ 5 lakh are expected to be incurred each year.

(iii) Market Value of Land and Buildings & Plant and Machinery has been ascertained at ₹ 96 lakhs and ₹ 100 lakhs respectively. This will entail additional depreciation of ₹ 6 lakh each year.

(iv) Effective income tax rate is 30% including all other charges.

(v) The Capitalization rate applicable to similar business is 16%. **[10]**

(b) From the following details, compute according to Lev and Schwartz (1971) model the total value of human resources for employee groups - skilled and un-skilled.

		Skilled	Un-skilled
(i)	Annual average earning of an employee till age of retirement	₹ 1,00,000	₹ 60,000
(ii)	Age of retirement	65 years	62 years
(iii)	Discount rate	20%	20%
(iv)	No. of employees in the group	25	20
(v)	Average age	62 years	60 years

It is assumed that employees will leave the organization only on retirement. **[6]**

(c) The following information is available of a concern. Calculate Economic Value Added (EVA).

12% Debt ₹2,000 crores

Equity capital ₹ 500 crores

Reserves and Surplus ₹ 7,500 crores

Risk-free rate 9%

Beta factor 1.05

Market rate of return 19%

Equity (market) risk premium 10%

Operating profit after tax ₹ 2,100 crores

Tax rate = 30% **[4]**