FINAL EXAMINATION

June 2019

P–20(SPBV)
Syllabus 2016

Strategic Performance Management and Business Valuation

Time Allowed: 3 Hours

Full Marks: 100

The figures in the margin on the right side indicate full marks.
This paper has been divided into two Sections, viz, Section A and Section B.

SECTION-A
Strategic Performance Management
(50 Marks)

Answer Question No.1 *which is compulsory and* any two *from the rest of this Section.*

1. Choose the correct option from amongst the four alternatives given: 2×5=10

(i) 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

(ii) If the average cost function of a firm is given by $AC = x^2 - 4x + 7$, in terms of output x, what will be its marginal cost?

(A) $2x^3 - 4x^2 + 7x$

(B) $3x^2 - 8x + 7$

(C) $x^3 - 8x^2 + 7x$

(D) None of the above

(iii) Which one of the following strategies is not for managing risk?

(A) Risk-Avoidance Strategy

(B) Risk-Transferring Strategy

(C) Risk-Measurement Strategy

(D) Risk-Acceptance Strategy

(iv) For a monopolist firm, the profit will be maximum when

(A) $AR = AC$

(B) $AR > AC$

(C) $MR = MC$

(D) $MR > MC$

(v) Which one of the following is NOT true about On-Line Analytical Processing (OLAP)?

(A) OLAP functionality includes trend analysis over sequential time periods.

(B) It provides slicing subsets for on-screen viewing.

(C) It is a category of hardware technology.

(D) It helps the end user to drill-down to deeper levels of consolidation data.

2. (a) 'Performance management and performance appraisal are sometimes used synonymously but they are different'. Do you agree this statement? Support your answer by highlighting bases of difference, if any, between them. 10

(b) Write down and elaborate the components of Performance Management. 10

3. (a) The total cost function of a firm, $C = \frac{x^3}{3} - 5x^2 + 28x + 10$ where C is total cost and 'x' is the output. A GST @ ₹ 2/- per unit of output is imposed and the producer adds it to his cost. If the demand function is given by $D = 2530 - 5x$, where ₹ D is the price per unit of output.

Find the profit maximizing output and the price at the level. Also obtain maximum profit. 8+2=10

(b) (i) What do you understand by corporate distress? List down important factors causing corporate distress. 4

(ii) The following financial information has been taken from the Annual Report 2019 of Stress Limited.

Balance Sheet of Stress Limited as at March 31,	**2019**
ASSETS:	(₹ in crores)
Non-Current Assets	
Property, Plant and Equipment	1,654.11
Intangible Assets	375.15
Other Non-Current Assets	388.18
	2,417.44

Current Assets	
Inventories	128.56
Financial Assets excluding Cash and Cash Equivalent	85.36
Cash and Cash Equivalent	6.85
Other Current Assets	568.93
Total Current Assets	**789.70**
Total Assets	**3,207.14**
EQUITY AND LIABILITIES:	
Equity	
Equity Share Capital	362.75
Other Equity	(568.94)
Net Worth	**(206.19)**
Non-Current Liability	
Financial Liabilities	1,203.00
Provisions	112.63
Other Non-Current Liabilities	46.59
Total Non-Current Liabilities	**1,362.22**
Current Liabilities	
Financial Liabilities	1,721.65
Provisions	95.25
Other Current Liabilities	234.21
Total Current Liabilities	**2,051.11**
Total Equity and Liabilities	**3,207.14**

Additional Information:

- Depreciation written off — ₹ 28 crores.
- Preliminary Expenses written off — ₹ 11.60 crores.
- Net Loss during the FY 2018-19 — ₹ 58.70 crores.

Using the NCAER Model for Corporate Distress Prediction, you are required to ascertain the stage of sickness. 6

4. (a) Compare and contrast between Basel I and Basel II norm. 10

(b) Define MIS and state the objectives of MIS. 10

Section-B

Business Valuation

(50 marks)

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

5. Choose the correct option from amongst the four alternatives given, with justification/workings. 1 mark will be for the correct choice and 1 mark will be for the justification/workings. 2×5=10

(i) A bond of a company is trading at a premium at present. It is expected that in future its price will __________ with the passage of time keeping other factors constant.

(A) decrease

(B) increase

(C) not change

(D) All three above are possible

(ii) Which of the following is a financial liability for a company?

(A) X Ltd. has issued 10 crores of ₹ 10 each equity shares.

(B) X Ltd. has issued 10 crores of ₹ 10 each cumulative redeemable preference shares.

(C) X Ltd. has issued 10 crores of ₹ 10 each non-cumulative compulsorily convertible preference shares.

(D) Both (B) and (C)

(iii) A Company based on up-to-date financial statements has determined that the current Free Cash Flows to Equity (FCFE) per share is ₹ 1·00. It has outstanding number of shares 100 crores with a face value of ₹ 10 each. Its interest expenses are ₹ 30 crores and tax rate is 30%. Given this information, The Free Cash Flow to the Firm (FCFF) will be

(A) ₹ 109 crores

(B) ₹ 112 crores

(C) ₹ 121 crores

(D) ₹ 130 crores

(iv) Estimated fair value of an asset is based on the __________ value of operating cash flows.

(A) current

(B) future

(C) discounted

(D) None of the above

(v) SBT Ltd. has an issued and paid up Capital of 100000 shares of ₹ 100 each. The company declared a dividend of ₹ 25 lakh during the last five years and expects to maintain the same of level of dividends in the future. If the average dividend yield for the listed companies in the same line of business is 16%, then value per share of SBT Ltd. is

(A) ₹ 150·50

(B) ₹ 156·25

(C) ₹ 160·50

(D) Insufficient information

6. (a) Vipul Ventures Limited has entered the phase of maturity in its life cycle and its cash flows (before interest and taxes) are expected to remain constant at the current level of ₹ 550.25 lakh. Presently it is an all equity finance firm.

The cost of equity for Vedika Limited, which resembles Vipul Ventures in terms of its risk-return characteristics, is 15.75 per cent. You are expected to find out the value of Vipul Ventures. The tax rate applicable to Vipul Ventures is 38.5% including surcharges and all Cess, if any.

What will be impact on firms's cost of equity, weighted average cost of capital and its valuation if the firm decides to alter its capital structure to have a 25% debt ratio? The cost of debt for firms with the risk profile similar to Vipul Venture is 10.25 per cent. 10

(b) Hajela Private Limited are negotiating to sell their business to a Public Limited Company. The following is summarized extract from the balance sheet as at 31 March, 2019 of the Hajela Private Limited:

		₹
Capital, 1000 shares of ₹ 1000 each		10,00,000
Reserve		2,00,000
		12,00,000
Fixed assets at depreciated cost		6,40,000
Current assets	₹ 7,20,000	
Less: Current liabilities	₹ 1,60,000	5,60,000
		12,00,000

The profits of Hajela Private Limited for the five years it has been in existence after eliminating any extraneous or non-recurring debits and credit are ₹ 1,90,000; ₹ 2,30,000; ₹ 2,15,000; ₹ 3,40,000 and ₹ 3,75,000 respectively. A return of 20 per cent per annum on the capital employed is considered to be reasonable in this particular business and it is expected that future requirements as to capital will not vary materially from the capital employed as at 31st, March.

Ignoring any extraneous factors that may affect the position, suggest the amount that should reasonably be paid to the private company for the goodwill therefore to be acquired by the purchasing company, giving details of how you work out this amount by assuming three years of purchase for valuing the goodwill but capital employed be considered for this purpose. 10

7. (a) Two firm X and Y operating in the cement industry. Both the firms are planning for a merger. Firm X is worth ₹ 200 lakh and Y is worth ₹ 50 lakh. On merging, the two would allow cost savings with a present value of ₹ 25 lakh. Assume that Y is bought by X for a cash of ₹ 65 lakh.

Estimate:

(i) The value of the combined firm

(ii) The cost of the merger for firm X

(iii) The NPV to Y's shareholders

(iv) The NPV to X's shareholders 10

(b) Deepika Ltd. is a highly successful company and wishes to expand by acquiring other firms. Its expected high growth in earnings and dividends is reflected in its price-earning (P/E) ratio of 17. The Board of Directors of Deepika Ltd. has been advised that if it were to takeover firm with a lower P/E ratio than its own, using a share-for-share exchange, it could increase its reported earnings per share. Alia Ltd. has been suggested as a possible target for takeover, which has a P/E ratio of 10 and 10,00,000 shares in issue with a share price of ₹ 15 each. Deepika Ltd. has 50,00,000 shares in issue with a share price of ₹ 12 each.

Calculate the change in earnings per share of Deepika Ltd., if it acquire Alia Ltd. shares for ₹ 15 per share, assume that the price of Deepika Ltd. shares remains constant. 10

8. (a) The following information is given for three companies that are identical except for their capital structure:

	Orange	**Red**	**Blue**
Total Invested Capital	1,00,000	1,00,000	1,00,000
Debt/Assets Ratio	0·8	0·5	0·2
Shares Outstanding	6,100	8,300	10,000
Pre Tax Cost of Debt	16%	13%	15%
Cost of Equity	26%	22%	20%
Operating Income (EBIT)	25,000	25,000	25,000
Net Income	**8,970**	**12,350**	**14,950**

The tax is uniform 35% in all cases.

(i) Compute the weighted average cost of capital for each company.

(ii) Compute the Economic Value Added (EVA) for each company.

(iii) Based on the EVA, which company would be considered for best investment? Give reasons.

(iv) If the industry P/E ratio is 11 times, estimate the price for the share of each company.

(v) Calculate the estimated market capitalization for each of the Companies. 10

(b) Rachna Limited is considering a takeover of Mona Limited. The particulars of two companies are given below:

Particulars	**Rachna Limited**	**Mona Limited**
Earnings after tax (₹)	20,00,000	10,00,000
Equity shares (Number)	10,00,000	10,00,000
Earnings per share	2	1
Price earnings ratio (times)	10	5

You are required to give following:

(i) What is the market value of each company before merger?

(ii) Assuming that the management of Rachna Limited estimates that the shareholders of Mona Limited will accept an offer of one share of Rachna Limited for four shares of Mona Limited. What is the market value of the post-merger effect on Rachna Limited? Are the shareholders of Rachna Limited better or worse off than they were before the merger?

(iii) Due to synergic effects, the management of Rachna Limited estimates that the earnings will increase by 25%. What will be the market price per share? 10