FINAL EXAMINATION

June 2017

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 (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, with justification/workings. 1 mark will be for the correct choice and 1 mark will be for the justification/workings. 2×5=10

(i) Risk Management Strategies are

(a) Avoid Risk, Reduce Risk, Retain Risk, Combine Risk

(b) Transfer Risk, Share Risk and Hedge Risk

(c) Both (a) and (b)

(d) None of the above

(ii) The necessary condition for equilibrium position of a firm is

(a) MC > MR

(b) MC > Price

(c) MC = MR

(d) MC = AC

(iii) The Cost function of a firm is given by $C = x^3 - 4x^2 + 7x$. Find at what level of output the average cost is minimum and what would be the minimum average cost.

(a) 2, 3

(b) 4, 5

(c) 1, 4

(d) None of the above

Please Turn Over

(iv) Which one of the following is not a measure related to Balanced Score Card?

(a) Financial

(b) Customer Satisfaction

(c) Internal Processes

(d) Gap Analysis

(v) Performance will be a product of

(a) Efficiency and Utilization

(b) Utilization and Productivity

(c) Efficiency and Productivity

(d) Efficiency, Utilization and Productivity

2. (a) What do you mean by 'Customer Relationship Management' (CRM)? List the advantages and benefits of 'Customer Relationship Management'. 4+6=10

(b) What is 'Bench Marking'? Describe briefly the different types of 'Bench Marking'. 2+8=10

3. (a) The Cost Function of a particular firm is $C = \left(\frac{1}{3}\right)x^3 - 5x^2 + 75x + 10$.

(i) Find at which level the Marginal Cost attains its minimum.

(ii) What is the marginal cost at this level? 4+4=8

(b) Following is the extract of a Balance Sheet of a company as on 31st March, 2017:

Liabilities	₹	*Assets*	₹
Equity Share Capital (₹ 100)	4,00,000	Fixed Assets	10,00,000
Reserves & Surplus	2,25,000	Trade Investment	2,00,000
12% Debentures	3,00,000	Stock	1,25,000
10% Bank Loan	2,00,000	Debtors	75,000
Current Liabilities	3,00,000	Preliminary Expenses	25,000
	14,25,000		14,25,000

Additional Information:

(i) Net Sales for 2016-17 were ₹ 20,00,000

(ii) Price-Earnings Ratio is ₹ 10

(iii) Dividend Pay-out Ratio is 50%

(iv) Dividend per Share in 2016-17 is ₹ 20

(v) Corporate Tax Rate is 50%

Using Altman's Model of Corporate Distress Prediction, calculate the Z-Score of the company and interpret the result. 12

4. (a) What is the essence of ERM? What is the actual need for implementing ERM? 5+5=10

(b) What is 'OLAP'? Write a brief note on 'OLAP'. 5+5=10

Section - B (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) It is assumed that M. Ltd., would realize ₹ 40 million from the liquidation of its assets. It pays ₹ 20 millions to its creditors and Preference Shareholders in full and final settlement of their claims. If the number of Equity Shares of M. Ltd. is 2 million, the Liquidation per Share would be:

(a) ₹ 1 per Share

(b) ₹ 10 per Share

(c) ₹ 12 per Share

(d) ₹ 15 per Share

(ii) Assume that the following details are given for a company:

Sales– ₹ 1,00,000; Costs– ₹ 75,000; Depreciation– ₹ 20,000; Tax– 35%;

Change in Net Working Capital– ₹ 1,000; Change in Capital Spending– ₹ 10,000.

The Free Cash Flow to Firm (FCFF) for the given data would be:

(a) ₹ 10,000

(b) ₹ 12,250

(c) ₹ 13,500

(d) ₹ 15,000

(iii) Shyam Ltd. has announced issue of warrants on 1 : 1 basis for its equity share holders. The Exchange ratio is 1·00. The current market price of the stock is ₹ 10 and warrants are convertible at an exercise price of ₹ 11·71 per share. Warrants are detachable and are trading at ₹ 3. What is the minimum price of this warrant?

(a) ₹ 3.00
(b) Zero
(c) ₹ 1·71
(d) ₹ 2·00

(iv) Given: The growth rate in the dividends is expected to be 8%. The Beta of the stock is 1·60 and the return on the market index is 13%.

The required rate of return would be:

(a) 14%
(b) 16%
(c) 18%
(d) 20%

(v) Given: The risk-free rate is 5·5%; the market price of risk = 7% and the company's Beta = 1·2.

The Cost of Equity would be

(a) 11%
(b) 13·9%
(c) 15·2%
(d) 16·3%

6. (a) P Ltd. is considering buying the business of Q Ltd., the final accounts of which for the last 3 years ended 31st December is.

(Figures in ₹)

Particulars	2014	2015	2016
Sales	2,00,000	1,90,000	2,24,000
Material Consumed	1,00,000	95,000	1,12,000
Business Expenses	80,000	80,000	82,000
Depreciation	12,000	13,000	14,000
Net Profit	8,000	2,000	16,000

Balance Sheet as at 31st December

(Figures in ₹)

Particulars	2013	2014	2015	2016
Fixed Asset (at cost)	1,00,000	1,20,000	1,40,000	1,80,000
Less: Depreciation	70,000	82,000	95,000	1,09,000
	30,000	38,000	45,000	71,000
Stock-in-trade	16,000	17,000	18,500	21,000
Sundry Debtors	21,000	24,000	26,000	28,000
Cash in hand and Bank	32,000	11,000	28,000	13,200
Prepaid Expenses	1,000	500	2,000	1,000
Total Assets	1,00,000	90,500	1,19,500	1,34,200
Equity Capital	50,000	50,000	70,000	70,000
Share Premium	-	-	5000	5,000
General Reserve	16,000	24,000	26,000	42,000
Debentures	20,000	-	-	-
Sundry Creditors	11,000	13,000	14,000	14,000
Accrued Expenses	3,000	3,500	4,500	3,200
Total Liabilities	1,00,000	90,500	1,19,000	1,34,200

P Ltd. wishes the offer to be based upon trading cash flows rather than book profits. Trading Cash Flow means Cash received from Debtors less Cash Paid to Creditors and for Business Expenses excluding Depreciation, together with an allowance for average annual expenditure on Fixed Assets of ₹ 15,000 per year.

The actual expenditure on Fixed Assets is to be ignored, as is any cash receipt or payment out on the issue or redemption of Shares or Debentures. P Ltd. wishes the Trading Cash Flow to be calculated for each of the years 2014, 2015 and 2016 and for these to be combined using weights of 25% for 2014, 35% for 2015 and 40% for 2016 to give an Average Annual Trading Cash Flow. P Ltd. considers that the Average Annual Cash Flow should show a return of 10% on its investment.

You are required to calculate:

(i) Trading Cash Flow for each of the years 2014, 2015 and 2016

(ii) Weighted Average Annual Trading Cash Flow and

(iii) Value of the business 12

(b) Following is the Profit & Loss Account and Balance Sheet for M/s. X Ltd.

(₹ in Lakh)

	2015	2016
Turnover	652	760
Pre-tax accounting profit	134	168
Taxation	46	58
Profit after tax	88	110
Dividends	30	36
Retained earnings	58	74

Balance Sheet extracts are as follows:

(₹ in Lakh)

	2015	2016
Fixed Assets	240	312
Net Current Assets	260	320
Total	500	632
Equity Shareholders Funds	390	472
Medium and Long-term Bank Loan	110	160

The Company's performance in regard to turnover had increased by 17% along with increase in pre-tax profit by 25% but shareholders are not satisfied by the Company's preference in the last 2 years. You are required to calculate the economic value added, as suggested by M/s. Trump & Co., USA, so that reasons of non-satisfaction can be evaluated.

You are also given:

Particulars	2015	2016
Pre-tax Cost of Debt	9%	10%
Cost of Equity	15%	17%
Tax rate	35%	35%
Interest Expenses	₹ 8	₹ 12

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7. (a) The following information is provided related to the acquiring firm, Sun Ltd. and the target firm Moon Ltd.

Particulars	Sun Ltd.	Moon Ltd.
Profits after Tax	₹ 2,000 Lakh	₹ 4,000 Lakh
Number of Shares outstanding	200 Lakh	1,000 Lakh
P/E Ratio (times)	10	5

Required:

(i) What is the swap ratio based on the current market prices?

(ii) What is the EPS of Sun Ltd., after the acquisition? 10

(b) X Ltd. is considering a takeover of Y Ltd. The particulars of the two companies are given below:

Particulars	X Ltd.	Y Ltd.
Earnings after Tax (EAT) in ₹	20,00,000	10,00,000
Equity Shares (Nos.)	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 X Ltd. estimates that the shareholders of Y Ltd. will accept an offer of one share of X Ltd. for four shares of Y Ltd. If there are no synergic effects, what is the market value of the Post-merger X Ltd.? Are the shareholders of X Ltd. better off than they were before the merger?

(iii) Due to synergic effects, the management of X Ltd. estimates that the earnings will increase by 20%. What is the new Post-merger EPS and the Price per Share? Will the shareholders be better-off or worse-off? 10

8. (a) 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

10

(b) R Ltd. is intending to acquire S Ltd. (by merger) and the following information are available in respect of both the companies:

Particulars	R Ltd.	S Ltd.
Total Current Earnings (₹)	2,50,000	90,000
No. of Outstanding Shares	50,000	30,000
Market Price per Share (₹)	21	14

(i) What is the present EPS of both the companies?

(ii) If the proposed merger takes place, what would be the new earnings per share for R Ltd. (assuming the merger takes place by exchange of Equity Shares and the Exchange Ratio is based on the Current Market Price)? Assume no synergy impact. 10