FINAL EXAMINATION

December 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 : 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) ______ is the uncertainty of the purchasing power of the monies to be received, in the future?

(A) Market risk

(B) Physical risk

(C) Purchasing power risk

(D) Interest rate risk

(ii) Unsystematic risk relates to

(A) Market risk

(B) Inherent risk

(C) Beta

(D) Interest rate risk

Please Turn Over

(iii) In which discipline supply chain concept was originated?

(A) Production

(B) Operation

(C) Marketing

(D) Logistics

(iv) Under perfect competition and at the point of equilibrium of firm

(A) MC curve must be falling

(B) MC curve must be rising

(C) MR curve must be falling

(D) None of the above

(v) Financial risk arises out of _______

(A) Increased competition

(B) Conduct of business and investment

(C) The nature of financial transaction

(D) Both (B) and (C)

2. (a) (i) What is Benchmarking?

(ii) Briefly describe any two types of benchmarking.

(iii) Identify difficulties in implementation of benchmarking. 3+4+3=10

(b) (i) What are the characteristics of Enterprise Resource Planning (ERP)?

(ii) What are the reasons for the failure of ERP? 4+6=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 is ₹ $(X^2 + 10X + 12)$. How many items should he sell to make the maximum profit? Also determine the maximum profit. 8

(b) Using Altman's Model (1968) of Corporate Distress Prediction, calculate the Z-score of S & Co. Ltd., whose five accounting ratios are given as below and comment on its financial position.

The five variables are:

(i) Working Capital to Total Assets = 25%

(ii) Retained Earnings to Total Assets = 30%

(iii) EBIT to Total Assets = 15%

(iv) Market Value of Equity Shares to Book Value of Total Debt =150%

(v) Sales to Total Assets = 2 times. 12

4. (a) Briefly explain the term "Enterprise Risk Management" (ERM). What are the basic needs for implementation of ERM? 4+6=10

(b) What is Risk Mapping? Briefly explain. State the benefits of Risk Mapping. 5+5=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) 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

(ii) Assume that in a stock market the CAPM is working. A company has presently beta of 0·84 and its going to finance its new project through debt. This would increase its debt/equity ratio to 1·56 from the existing 1·26. Due to increased debt/equity ratio, the company's beta would

(A) increase

(B) decrease

(C) remain unchanged

(D) nothing can be concluded

(iii) Identify which of the following is not a financial liability?

(A) X Ltd. has 1 lakh ₹ 10 ordinary shares issued.

(B) X Ltd. has 1 lakh 8% ₹ 10 redeemable preference shares issued.

(C) X Ltd. has ₹ 2,00,000 of 6% bond issued.

(D) Both (A) and (B)

(iv) 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%

(v) A firm current assets and current liabilities are ₹ 1,600 and ₹ 1,000 respectively. How much can it borrow on a short-term basis without reducing the current ratio below 1·25?

(A) ₹ 1,000

(B) ₹ 1,200

(C) ₹ 1,400

(D) ₹ 1,600

6. (a) Alpha India Ltd., is trying to buy Beta India Ltd., Beta India Ltd., is a small bio-technology firm that develops products that are licensed to major pharmaceutical firms. The development costs are expected to generate negative cash flows of ₹ 10 lakhs during the first year of the forecast period. Licensing fee is expected to generate positive cash flows of ₹ 5 lakhs, ₹ 10 lakhs, ₹ 15 lakhs and ₹ 20 lakhs during 2-5 years respectively. Due to the emergence of competitive products, cash flows are expected to grow annually at a modest 5% after the fifth year. The discount rate for the first five years is estimated to be 15% and then drop to 8% beyond the fifth year. Calculate the value of the firm.

Given: The discount rate @ 15% will be:

Year	1	2	3	4	5
Discount Rate	0·869	0·756	0·6575	0·572	0·497

10

(b) Z Ltd., has an issued and paid-up capital of 50,000 shares of ₹ 100 each. The company declared a dividend of ₹ 12·50 lakhs during the last five years and expects to maintain the same level of dividends in the future. The control and ownership of the company is lying in the few hands of Directors and their family members. The average dividend yield for the listed companies in the same line of business is 18%.
Calculate the value of 3000 shares in the company. 10

7. (a) A Ltd., is considering the acquisition of B Ltd., with stock. Relevant financial information is given below:

Particulars	A Ltd.	B Ltd.
Present earnings (₹)	7·5 Lakhs	2·5 Lakhs
Equity (no. of shares)	4·0 lakhs	2·0 Lakhs
EPS (₹)	1·875	1·25
P/E ratio	10	5

Answer the following questions:

(i) What is the market price of each company?

(ii) What is the market Capitalization of each company?

(iii) If the P/E of A Ltd., changes to 7·5, what is the market price of A Ltd.?

(iv) Does market value of A Ltd., change?

(v) What would be the exchange ratio based on Market Price? (Take the revised price of A Ltd.) 2×5=10

(b) The shareholders of A Co. Ltd., have voted in favour of a buyout offer from B Co. Ltd. Information about each firm is given here below. Moreover, A Co. Ltd.'s shareholders will receive one share of B Co. Ltd. Stock for every three shares they hold in A Co. Ltd.

Particulars	B Co. Ltd.	A Co. Ltd.
Present earnings (in ₹)	6·75	3·00
EPS (in ₹)	3·97	5·00
Number of share (Lakhs)	1·70	0·60
P/E ratio	20	5

(i) What will the EPS of B Co. Ltd., will be after the merger? What will the PE ratio if the NPV of the acquisition is zero?

(ii) What must B Co. Ltd. feel would be the value of the synergy between these firms? 10

8. (a) A company has a capital base of ₹ 1 crore and has a earned profits to the tune of ₹ 11,00,000. The Return on Investment (ROI) of the particular industry to which the company belongs is 12·5%. If acquired by a company, it is expected that the profits will increase by ₹ 2,50,000 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. 10

(b) Q Ltd. wants to acquire R Ltd. and has offered a swap ratio of 1 : 2 (0·5 shares for every one share of R Ltd.).

Following information is provided:

Particulars	Q Ltd.	R Ltd.
Profit after tax (₹)	18,00,000	3,60,000
Equity shares outstanding (Nos.)	6,00,000	1,80,000
EPS (₹)	3	2
P/E Ratio	10 times	7 times
Market price per share (₹)	30	14

Required:

(i) The number of equity shares to be issued by Q Ltd., for acquisition of R Ltd.

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

(iii) Determine the equivalent earnings per share of R Ltd.

(iv) What is the expected market price per share of Q Ltd., after the acquisition, assuming its P/E multiple remains unchanged?

(v) Determine the market value of the merged firm. 2×5=10