FINAL EXAMINATION

June 2018

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) An Index number is a statistical measure of _______ in a variable arranged in the form of a series and using a base for making comparison.

(a) productivity

(b) inputs

(c) efficiency

(d) fluctuations

(ii) Benchmarking focuses on

(a) Production

(b) Profit

(c) Best Practices

(d) Best performance

Please Turn Over

(iii) Project risk does not include

(a) Institutional risk

(b) Turbulence

(c) Completion risk

(d) Uncertainty

(iv) Physical risk arising out of Social, Political, Economic and Legal Environments are often identified through

(a) the performance of lead indicators

(b) the performance of lag indicators

(c) the performance of lead and lag indicators

(d) None of the above

(v) Which out of the following financial ratios is not in the Altman Model: Z-Score?

(a) Market Value to Book Value of equity shares

(b) Working Capital to Total Assets

(c) Retained Earnings to Total Assets

(d) EBIT to Total Assets

2. (a) (i) What is Operative Customer Relationship Management?

(ii) Discuss the impact of CRM initiative on an organization, in terms of enhanced risk that it may face.

(iii) Describe the issues to be considered for analysing customer profitability. 3+3+4=10

(b) The following financial data for two years has been extracted from the Annual Report 2016-17 of one of the world's largest generic pharmaceutical companies having a strong presence in over 170 countries. Though the company's mission is — 'To be a leading global healthcare company which uses technology and innovation to meet everyday needs of all patients', yet it also wants to keep its shareholders happy by giving them a fair rate of return. For gauging return for shareholders, the company is using Return on Equity (ROE) as one of the metrics of performance evaluation. Because of intense competition, in recent years, its ROE is under pressure and to maintain the level of ROE, the company is changing its business model — in that, it is varying its margins, assets utilization and leverage.

You are required to use suitable DU PONT Analysis using the financial data given below and show how the ROE of the company is changing due to its margins, assets utilization and leverage over a period of two years. You are also required to give your comment on the change on these parameters. 10

(₹ In Lakh)

Statement of Profit and Loss	**2016**	**2017**
Relevant financial data		
Total Revenue	7,125·80	8,431·55
Profit before Tax	1,421·46	2,011·86
Profit after Tax	1,123·96	1,507·11
Dividend	160·58	160·58
Tax on Dividend	26·05	27·29
Retained Earnings	937·32	1,319·24

(₹ In Lakh)

Balance Sheet	2016	2017
ASSETS:		
Fixed Assets	3,346·11	3,768·63
Investments (Current and Non-Current)	1,035·15	2,601·82
Other Net Assets (Current and Non-Current)	3,413·67	3,746·08
Total	**7,794·93**	**10,116·53**
EQUITY AND LIABILITIES:		
Share Capital	160·58	160·58
Reserves and Surplus	7,389·70	8,708·94
Net Worth	7,550·28	8,869·52
Loan Funds (Current and Non-Current)	12·20	965·81
Other Current Liabilities	232·45	281·20
Total	**7,794·93**	**10,116·53**

3. (a) A firm has a demand function: $p = 12 - x^2$ and the total cost function: $C = -(4/3)x^3 + 4x^2 + 10$ where p = Price per unit (₹ '000) and x = Quantity demanded/produced (units in thousands). On the basis of the information given, answer the following:

(i) Show that the firm is a monopolist firm.

(ii) Determine the quantity the firm should produce to maximize profit. Also, determine the amount of profit. 4+8=12

(b) Distinguish between the following: 4×2=8

(i) Risk avoidance and Risk diversification

(ii) Interest Rate Risk and Market Risk

4. (a) Explain RBI guideline on implementation of Basel III Capital Regulation in India. 8

(b) (i) List the main causes of corporate distress. 4

(ii) Define the following: 2×4=8

(a) Financial Distress

(b) Enterprise Risk Management

(c) Risk Retention

(d) Value at Risk

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 12 and a Market to Book Value Ratio 2·10, then its Return on Equity will be

(a) 14·10%

(b) 17·50%

(c) 25·20%

(d) None of the above

(ii) A firm has PAT of ₹ 33·6 lakh with extraordinary income of ₹ 6 lakh. Cost of capital is 20% and the applicable tax rate is 40%. The value of the firm is

(a) ₹ 250 lakh

(b) ₹ 150 lakh

(c) ₹ 180 lakh

(d) ₹ 168 lakh

(iii) Firms that intend to buy only a small percentage of the outstanding stock can buy them in the market, in a process called

(a) Repurchase tender offer

(b) Open market purchase

(c) Privately negotiated repurchase

(d) None of the above

(iv) ________ is a measure of value of which tells whether a company is able to generate returns that exceed the costs of capital employed.

(a) Cost of capital
(b) Economic Value Added
(c) Market value added
(d) Financial profit

(v) If the divestiture value is greater than the present value of the expected cash flows, the value of the divesting firm will

(a) increase on the divestiture.
(b) decrease on the divestiture.
(c) remains same on the divestiture.
(d) None of the above

6. (a) There is a privately held company XYZ Pvt. Ltd. that is operating into the retail space, and is now scouting for angel investors. The details pertinent to valuing XYZ Pvt. Ltd. are as follows:

The company has achieved break even this year and has an EBITDA of ₹ 90 crore. The beta based on the industry in which it operates is 1·8, and the average debt to equity ratio is hovering at 40:60. The rate of return provided by liquid bonds is 5%. The EV is to be taken at a multiple of 5 on EBITDA. The accountant has informed that the EBITDA of ₹ 90 crore includes an extraordinary gain of ₹ 10 crore for the year, and a potential write off of preliminary sales promotion costs of ₹ 20 crore are still pending. The internal assessment of rate of market return for the industry is 11%. The FCFs for the next 3 years are as follows:

(₹ In Crore)

	Y1	Y2	Y3
Future cash flows	100	120	150

The cost of debt will be 12%. Assume a tax regime of 30%.

What is the potential value to be placed on XYZ Pvt. Ltd.? 12

(b) (i) G. Ltd. has announced issue of warrants on 1:1 basis for its equity shareholders. The current price of the stock ₹ 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 the warrant? What is the warrant premium?

(ii) Now had the current price been ₹ 16·375, what is the minimum price and warrant premium? (Consider warrants are tradable at ₹ 9·75) 4+4=8

7. (a) Vodafone Ltd. is considering a merger with Idea Ltd. The data below are in the hands of both Board of Directors. The issue at hand is how many shares of Vodafone Ltd. should be exchanged for Idea Ltd. Both boards are considering three possibilities 20000, 25000 and 30000 shares. You are required to construct a table demonstrating the potential impact of each scheme on each set of shareholders. 10

		Vodafone Ltd.	Idea Ltd.	Combined Post merger Firm 'A'
1	Current earnings per year (₹)	2,00,000	1,00,000	3,50,000
2	Shares outstanding	50000	10000	?
3	Earnings per share (₹) (1÷2)	4	10	?
4	Price per share (₹)	40	100	?
5	Price-earnings ratio [4÷3]	10	10	10
6	Value of firm (₹)	20,00,000	10,00,000	35,00,000
7	Expected annual growth rate in earnings in foreseeable future	0	0	0

(b) A company has issued a 12% debentures with a maturity of 5 years having face value of ₹ 1,000 and it is listed on the stock exchange. After 2 years of the issue of bonds, the yields in the market have increased to 15%. Someone suggested to the CFO of the company to buy the debentures from the market as they are trading below par.

(i) Do you think that the CFO should accept the suggestion of the person?

(ii) If yes, then determine the fair value of the debentures at which the company should buy the debentures from the stock market. 2+8=10

Discount factors:

Year →	1	2	3
Discounting Factor (12%)	0·8929	0·7972	0·7118
Discounting Factor (15%)	0·8696	0·7561	0·6575

8. (a) PS limited furnishes the following information relating to the previous three years and requests you to compute the value of the brand of the company: 12

(₹ In Lakh)

Particulars	2015	2016	2017
Profit before interest and tax	75·00	85·25	150·00
Loss on sale of assets	3·00	nil	18·00
Non-operating income	12·00	7·25	8·00

Inflation was 9% for 2016 and 15% for 2017. If the capitalization factor considering internal and external value driver to the brand is 14, determine the brand value. Assume an all inclusive future tax rate of 35%.

(b) Pure Drugs Limited is in the Pharmaceutical Industry and has a business strategy of growing inorganically. It is contemplating to acquire Solid Drugs Limited which has a strong hold in cardiac segment. Pure Drugs Limited has 30 crore shares outstanding which are trading on an average price of ₹ 300 while Solid Drugs Limited has outstanding shares 20 crore and are selling at an average price of ₹ 200 per share. The EPS are of ₹ 12 and ₹ 6 for Pure Drugs Limited and Solid Drugs Limited respectively. Recently, the management of both the companies had a meeting wherein number of alternative proposals was considered for exchange of shares. They are —

(i) Exchange Ratio should be in proportion to the relative EPS of two companies.

(ii) Exchange Ratio should be in proportion to the relative share prices of two companies.

(iii) Exchange Ratio should be 3 shares of Pure Drugs Limited for every 5 shares of Solid Drugs Limited.

You are required to estimate EPS and Market Price under the three options, assuming the P/E of Pure Drugs Limited after merger will remain unchanged. Assume that there will not be any synergy gains due the said merger. 4+4=8