# 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)** The Law of Demand states that "demand varies inversely with price, not necessarily proportionately". Which of the following is not the exception of it?
(a) Giffen Paradox
(b) Complementary goods
(c) Speculative Business
(d) Prestigious goods.

**(ii)** As per Basel III regulation, which of the following ratio is proposed to measure liquidity standard?
(a) Net stable funding ratio
(b) Acid test ratio
(c) Current ratio
(d) Net asset ratio.

**(iii)** Customer Relationship Management is about:
(a) Acquiring the right customer
(b) Instituting the best processes
(c) Motivating employees
(d) All of the above.

**(iv)** In case of du-pont analysis, which one of the following is not considered while calculating return on equity?
(a) Profit Margin
(b) Asset Turnover
(c) Debt margin
(d) Equity Multiplier.

**(v)** An organization buys its rival's products and tears down to find out the features, performances etc., to compare with its products, is called:
(a) Competitive Benchmarking
(b) Product Benchmarking
(c) Strategic Benchmarking
(d) Process Benchmarking.

**2.(a)** What is Supply Chain Management? Describe how a supply chain management is developed to introduce a new product in the market. **[4+6=10]**

**(b)** What types of informations required for performance measurement under Balanced Scorecard (BSC)? Write down any six benefits of the Balanced Scorecard. **[4+6=10]**

**3.(a)** A radio manufacturer produces 'x' sets per week at total cost of ₹ $x^2 + 78x + 2500$. He is a monopolist and the demand function for his product is $x = \frac{(600-P)}{8}$, when the price is 'p' per set. Show that maximum net revenue is obtained when 29 sets are produced per week and what is the monopoly price? **[8+2=10]**

**(b)** The symptoms of corporate failure are interrelated — Mention the symptoms and describe how these are interrelated. State the purposes of the five selected ratio of Altman's Z-score model. **[1+6+3=10]**

**4.(a)** What is Risk Management? State the objectives of it. State how risk is reduced through diversification in the context of enterprise risk management. Write the benefits of diversification for reduction of risk. **[2+3+3+2=10]**

**(b)(i)** Financial analysis involves the use of financial statements. What are those basic financial statements to analyse financial data of a firm? **[6]**

**(ii)** Write short note on — OLAP Server. **[4]**

**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 justification]**

**(i)** If an all equity firm has Cash from Operating Activities amounting to ₹60 lakhs, Depreciation ₹30 lakhs, increase in non-cash working capital ₹25 lakhs and Capital expenditure ₹20 lakhs, its Free Cash Flows to Equity amounts to (in ₹lakhs)
(a) 90
(b) 45
(c) 40
(d) 65

**(ii)** Which of the following is not a discounted cash flow technique for valuation of common stock?
(a) Present value of Dividends
(b) Price-cash flow ratios
(c) Present value of Free Cash Flow
(d) Present value of Operating Cash Flow.

**(iii)** Which of the following type of demerger involves the division of parent company into two or more separate companies where parent company ceases to exist after the demerger?
(a) Split ups
(b) Spinoff
(c) Equity carve out
(d) Divestitures

**(iv)** If Cost of debt = 8%, Cost of equity = 13.9%, Tax rate = 40% and Capital structure = Debt: 40% and Equity: 60%, then Weighted average cost of capital is —
(a) 11.54%
(b) 6.92%
(c) 8.205%
(d) 10.26%.

**(v)** 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

**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)** The following financial share data pertaining to Techno Ltd. an IT company is made available to you: (Amount in ₹ crores)

| Year ended March 31st | 2019 | 2018 | 2017 |
|---|---|---|---|
| EBIT (₹) | 696.03 | 325.65 | 155.86 |
| Non-branded Income (₹) | 53.43 | 35.23 | 3.46 |
| Inflation compound factor @ 8% | 1.000 | 1.087 | 1.181 |
| Remuneration of Capital | 5% of average capital employed | | |
| Average capital Employed (₹) | 1112.00 | | |
| Corporate Tax Rate | 35% | | |
| Capitalization Factor | 16% | | |

You are required to calculate the Brand Value for Techno Ltd. **[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+2+2+2+2=10]**

**(b)** Vodafone Ltd. is considering a merger with Idea Ltd. The data below are in the hands of both Boards 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 20,000, 25,000 and 30,000 shares. You are required to construct a table demonstrating the potential impact of each scheme on each set of shareholders.

| | | Vodafone Ltd. | Idea Ltd. | Combined Post merger |
|---|---|---|---|---|
| 1 | Current earnings per year (₹) | 2,00,000 | 1,00,000 | 3,50,000 |
| 2 | Shares outstanding | 50,000 | 10,000 | ? |
| 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 |

**[10]**

**8.(a)** A company has a capital base of ₹ 3 crore 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 |

**[8]**

**(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+3+2+2+3=12]**