FINAL EXAMINATION

December 2023

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.
Whenever necessary, the Candidate may make suitable assumptions and clearly state them in the answers.
Working notes should form part of the relevant answers.
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. (a) **Choose the correct option from amongst the four alternatives given: Provide justification/workings:** 2×5=10

(i) Performance management is the process of identifying, measuring, managing, and developing the performance of the __________ in an organization.

(A) Financial resources

(B) Production resources

(C) Human resources

(D) All of the above

(ii) Location, Production, Distribution, and Inventory are the major decision areas in __________.

(A) Productivity management

(B) Customer Relationship Management

(C) Supply Chain Management

(D) Balance Score Card

(iii) Physical risks arising out of Social, Political, Economic, and Legal Environments are often identified __________.

(A) Through the performance of lead indicators.

(B) Through the performance of lagging indicators.

(C) Through the performance of lead and lag indicators.

(D) Through the performance of the government.

(iv) If the demand curve is parallel to Y-axis, then it is __________.

(A) Relatively Elastic Demand

(B) Relatively Inelastic Demand

(C) Perfectly Elastic Demand

(D) Perfectly Inelastic Demand

(v) A firm's total revenue is equal to __________.

(A) Total quantity produced times marginal cost

(B) Total quantity sold times the market price

(C) Marginal revenue times the total quantity produced

(D) Market price divided by the total quantity produced

2. (a) **Differentiate** between analytical customer relationship management and operative customer relationship management. **Discuss** the basic advantages of customer relationship management. 10

(b) Supply Chains need to be designed for and operated in uncertain environments, thus creating enormous risks to the organisations. **Discuss** the factors contributing to these risks. 10

3. (a) The total cost function of a firm $C = (x^3 / 3) - 5x^2 + 28x + 10$, where C is the total cost and 'x' is the output. A tax of @ ₹ 2 per unit of output is imposed and the producer adds it to his cost. If the demand function is given by $P = 2530 - 5x$, where ₹ 'P' is the price per unit of output, **find** the profit-maximizing output and the price at the level. 10

(b) Using Altman's Multiple Discriminant Function, **calculate** Z-score of S & Co. Ltd., where the five accounting ratios are as follows and comment about its financial position: 10

Working Capital to Total Assets = 0.25

Retained Earnings to Total Assets = 50%

EBIT to Total Assets = 19%

Book Value of Equity to Book Value of Total Debt = 1.65

Sales to Total Assets = 3 times. Also **interpret** the result.

4. (a) "Financial performance analysis can be classified into different categories on the basis of material used and modus operandi" — **Write about** the various types of financial performance analysis in this context. 10

   (b) OLAP systems have been traditionally categorised using the following taxonomies:

   - MOLAP
   - ROLAP and
   - HOLAP

   Briefly **explain** these taxonomies and compare the benefits derived from these systems. 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 the expected rate of return on a stock exceeds the required rate __________.

   (A) the stock is experiencing super-normal growth.

   (B) the stock should be sold

   (C) the company is not probably trying to maximize price per share

   (D) the stock is a good buy

   (ii) A theory that explains why the total value from the combination resulting from a merger is greater than the sum of the value of the component companies operating independently is known as __________ theory.

   (A) Hubris

   (B) Agency

   (C) Operating

   (D) Synergy

(iii) A Company's share is trading presently at ₹ 55 giving an annual return of 12.76%. Its beta is 0.98. If the risk free rate prevailing at present is 7.75% and the market rate of return is 16.25%, then the share is – (Assume that in a stock market is efficient and CAPM works)

(A) Properly valued
(B) Undervalued
(C) Overvalued
(D) Nothing can be said as the information is not complete

(iv) If issue of share capital ₹ 1,34,400, Cash paid to employees and suppliers ₹ 2,00,000, Long-term borrowings ₹ 1,00,000 and Dividend paid ₹ 1,15,200, then Cash flows from financing activities will be equal to ________.

(A) ₹ 1,19,200
(B) ₹ 2,19,200
(C) ₹ 19,200
(D) None of the above

(v) 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

6. (a) Rainy Coats Limited has the following portfolio of different investment assets as on March 31, 2023.

(₹ *in lakhs*)

Current Investment	**Book Value**	**Market Value, if available**
Shares of A Ltd.	₹ 500.00	₹ 550.00
6,000 Bonds of ABC Limited – Coupon Rate 9%, par value ₹ 1,000 and Maturity 1 year	₹ 63.00	—
Shares of C Ltd.	₹ 250.00	₹ 225.00
Non-Current Investments		
Shares of Y Ltd.(subsidiary)	₹ 250.00	₹ 275.00
Shares of Z Ltd.	₹ 450.00	₹ 440.00
Shares of W Ltd. (subsidiary)	₹ 650.00	₹ 620.00
10,000 Bonds of MNP Limited – Coupon Rate 10%, par value ₹ 1,000 and Maturity 10 years (Bonds Held-till-Maturity)	₹ 110.00	—

The Company has to value these investments for Balance Sheet purposes; therefore, you are requested to **compute** the value of the investments for the balance sheet.

Additional Information:

- The fall in the value of investment Z Ltd. is temporary.
- The fall in the value W Ltd. is permanent.
- The bonds of ABC Limited are trading to give a yield of 9.25% 10

(b) The following data is given to you regarding a company having a share in branded portion as well as the unbranded portion;

Branded Revenue	₹ 500 per unit
Unbranded Revenue	₹ 120 per unit
Branded Cost	₹ 350 per unit
Unbranded Cost	₹ 100 per unit
Research & Development	₹ 20 per unit
Branded Products	1 lakh unit
Unbranded Products	40,000 units
The tax rate is 39.55%: The capitalization Factor is 18%	

Calculate the Brand Value. 10

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

Particulars	Sun Limited	Moon Limited
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) Consider two firms that operate independently and have the following characteristics:

	(₹ in Lakhs)	
	Raj Ltd.	**Preet Ltd.**
Revenue	6000	3000
COGS	3500	1800
EBIT	2500	1200
Expected Growth Rate	5%	7%
Cost of Capital	8%	9%

Both firms are in steady state with capital spending offset by depreciation. At present, a typical shop orders 400 copies of the magazine a week. Both firms have an effective tax rate of 40% and are financed only by equity.

Consider the following two scenarios:

Scenario I: Assume that combining the two firms will create economies of scale that will reduce the COGS to 50% of revenues.

Scenario II: Assume that as a consequence of the merger, the combined firm is expected to increase its future growth to 7% while COGS will be 60%.

It is given that Scenario I and II are mutually exclusive.

You are required to **compute** the value of Synergy in Scenario I & II above. 10

8. (a) (i) Chanchal Ltd. has earned a net profit of ₹ 15,00,000 after tax at 30%. The interest cost charged by financial institutions was ₹ 10,00,000. The invested capital is ₹ 95,00,000 of which 55% is debts. The company maintains a weighted average cost of capital of 13%. You are required to.

(1) **Compute** the operating income.

(2) **Compute** the Economic Value Added. 5

(ii) The following information with respect of three companies are given.

	Mona Ltd.	Sona Ltd.	Hona Ltd.
Weighted average cost of capital	13.52	15.225	17.95
Economic Value Added (₹)	2,730	1,025	– 1,700
Operating Income	25,000	25,000	25,000

Which company would be considered for best investment based on Economic Value added? Give reasons. 5

(b) (i) **Discuss** the relationship between economic value added and market value added. 2

(ii) You are the Director of Ram & Company. One of the projects you are considering is the acquisition of Shyam & Company. Shyam, the owner of Shyam & Company, is willing to consider selling his company to Ram & Company if he is offered an all-cash purchase price of ₹ 50 Lakh. The project estimates that the purchase of Shyam & Company will generate the following profit after-tax cash flow:

Year	Cash Flow (in ₹)
1	10,00,000
2	15,00,000
3	20,00,000
4	25,00,000
5	30,00,000

If you decide to go ahead with this acquisition, it will be funded with Ram's standard mix of debt and equity at the firm's weighted average (after-tax) cost of capital of 9 percent. Ram's tax rate is 30 percent. **Should** you recommend acquiring Shyam & Company to your CEO? 8

PVF@ 9 percent is :

Year	1	2	3	4	5
PVF	0.917	0.842	0.772	0.708	0.650