FINAL EXAMINATION **SET - 1**

MODEL QUESTION PAPER **TERM – JUNE 2025**

PAPER – 20A **SYLLABUS 2022**

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.

SECTION – A (Compulsory)

1. Choose the correct option: **[15 x 2 = 30]**

(a) (i) Where is the headquarters of the Basel committee on banking supervision (BCBS)?

(A) New York, USA
(B) Geneva, Switzerland
(C) London, UK
(D) Basel, Switzerland

(ii) What are the first signs of financial distress in a company?

(A) Declining employee morale
(B) Increased production costs
(C) Loss of customers impacting cash flows
(D) Decreasing customer

(iii) Six Sigma is a business-driven, multi-dimensional structured approach to:

(A) Reducing process variability
(B) Lowering Defects
(C) Improving Processes
(D) All of the above

(iv) A firm's marginal revenue is defined as:

(A) The ratio of total revenue to total quantity produced
(B) The additional output produced by lowering price
(C) The additional revenue received due to technical innovation
(D) The additional revenue received when selling one more unit of output.

(v) The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

(A) Investment Value
(B) Fair Value
(C) Fair market value
(D) Equitable Value

(vi) Which of the following acts gave birth to the Asset Reconstruction Company?

(A) Banking regulation act 1949
(B) SEBI Act 1992
(C) Companies Act 2013
(D) SARFAESI Act 2002

(vii) What is the IVS for Scope of Work?
(A) IVS 100
(B) IVS 101
(C) IVS 200
(D) IVS 400

(viii) No securitisation company or reconstruction company which has been granted a certificate of registration, shall carry on, any business other than that of securitisation or asset reconstruction without prior approval of the ____________.
(A) Reserve Bank of India
(B) Central Government of India
(C) SARFAESI
(D) SEBI

(ix) 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

(x) If purchase consideration is more than net assets of the transferor company, then difference will be shown as:
(A) Goodwill account
(B) Capital reserve account
(C) General reserve account
(D) None of the above

(b) Read the following scenario and answer the following questions:
Supreme Toy Manufacturing Co. is a medium-sized manufacturing firm specializing in industrial equipment. It has been operating for 20 years and has built a strong reputation within its niche, serving clients across the automotive, construction, and aerospace industries. The company has two manufacturing plants: Plant A, which focuses on automotive components, and Plant B, which focuses on construction and aerospace components.
Despite consistent growth for a decade, Supreme Toy Manufacturing Co. has faced economic challenges in recent years due to rising raw material costs, increased labor expenses, and disruptions in the supply chain. The firm is under pressure to improve efficiency to maintain its competitive edge.
Company Overview
Revenue from Operations: 50 million (2023)
Net Income: 3 million (2023)
Average Assets: 25 million (2023)
Employee Count: 200 (100 at each plant)

Gross Profit Margin: 20% (2023), a drop from 25% (2022)
Operating Margin: 10% (2023), a decrease from 15% (2022)
Return on Investment (ROI): 12% (2023), down from 18% (2022)
Production Lines: Plant A has 3 production lines (automotive components), and Plant B has 2 production lines (construction and aerospace components)
Downtime: Average of 10% across all production lines, with peaks of 15% during maintenance periods
Labor Costs: 20 million (2023), a 10% increase from 2022
Raw Material Costs: 15 million (2023), up by 15% from 2022 due to global supply chain disruptions
Answer the following questions based on the above scenario.

Choose the correct answer from the given four alternatives:

(xi) Given the data about raw material costs, overheads, and labour costs, which strategy would likely have the most significant impact on Supreme's operating margin?
(A) Reduce overheads through energy saving measures
(B) Increasing output per labor hour
(C) Lowering raw material costs by finding alternative suppliers
(D) Implementing price adjustments to align with industry standards.

(xii) If Supreme Manufacturing Co. were to invest in new machinery to improve productivity, which of the following would be the most likely outcome?
(A) Decrease in downtime and increase in output per machine hour
(B) Increase in energy consumption and decrease in output per labor hour
(C) Increase in raw material waste and decrease in production costs
(D) Increase in operating margin with no change in net income

(xiii) Given Supreme Manufacturing Co's average downtime rate of 10% and its peaks of 15%, which strategy would be most effective in addressing productivity issues?
(A) Implementing predictive maintenance to reduce downtime
(B) Increasing labor hours to offset production delays
(C) Reducing the number of production lines to focus on core products
(D) Outsourcing part of the production to reduce labor costs

(xiv) Considering the trends in gross margin and operating margin, which of the following is the most plausible reasons for the company's declining profitability?
(A) Poor Customer relationship and shift in the loyal customer base
(B) Workers' unrest and poor productivity
(C) Strained relations with the supplices
(D) High maintenance cost due to outdated machinery

(xv) If equity multiplier is 2.5, ROE of Supreme Manufacturing Co. for 2023 is:
(A) 30%
(B) 3%
(C) 0.3%
(D) 300%

SECTION – B

(Answer any five questions out of seven questions given. Each question carries 14 Marks.)

[5x14=70]

2. (a) Explain three fundamental aspects of CRM to facilitate building relationship with customer. Describe the impact of CRM initiative on an organization, in terms of enhanced risk that it may face. [7]

(b) Describe the Principles of Lean Manufacturing and the 5 S's of Lean. [7]

3. (a) A producer has the possibility of discriminating between two markets; market A and market B for a product where the demands, respectively, are

$Q_1 = 21- 0.1P_1$ ------ (D)

$Q_2 = 50 - 0.4 P_2$ ------ (E)

Total cost = 2000+10Q where $Q = Q_1 + Q_2$.

- Calculate the price that will producer charge in order to maximize profits
  - (a) with discrimination between markets and
  - (b) without discrimination?
- Compare the profit differential between discrimination and non-discrimination. [7]

(b) Explain the interrelated components of an Enterprise Risk Management framework Advocated by Committee of Sponsoring Organization's (COSO). [7]

4. (a) Mrs. EuCheu is an investor who has decided to invest her money in the business of either Retailer A and Retailer B. She researches their financial numbers and finds that the ROE for the both the Retailers are same at 45%. Thus she decides to look further and finds the following data; Retailer A's profit margin is 30%, asset turnover is 0.50, and equity multiplier is 3. Retailer B's Profit Margin of 15%; Asset Turnover is 3; and Equity Multiplier is 1.

She is confused as both the company's profitability is same when measured in terms of ROE. Critically assess the situation and advice Mrs. Euchen. [7]

(b) Fairy Tale Co. Ltd. has applied for a loan at Maharashtra Credit Bank. Sri Arun Pilgaonkar, the credit analyst of the bank is apprehensive of manipulations in operations as he fears that earnings manipulation is the most distinctive aspect of financial distress. He desires to calculate the Beneish M Score as this according to him is the best model to predict the degree of earnings manipulation.

For this purpose, he furnishes the eight indices as stipulated by the said model:

Index	Score
DSRI	0.500
GMI	1.210
AQI	0.810
SGI	1.250

DEPI	0.904
SGAI	0.730
LVGI	0.400
TATA	0.005

Required:
Calculate Beneish M-score of the company and advise Sri Pilgaonkar whether the company is susceptible to earnings manipulation.
[Note: Restrict your calculations up to three decimal places] [7]

5. (a) Smart Ltd. is deciding whether to pay out ₹4,00,000 in excess cash in the form of an extra dividend or go in for a share repurchase. Current earnings are ₹2 per share and the stock sells for ₹20. The market value balance sheet currently is as follows:

Balance sheet

Liabilities	Amount (INR)	Assets	Amount (INR)
Equity	1700	Assets rather than cash	1900
Debt	600	Cash	400
	2300		2300

Calculate:
a. The two alternatives in terms of the effect on the price per share of the stock, the EPS and the P/E ratio.
b. Which alternative is a better decision for the company? Why? [7]

(b) The following information is given for three companies that are identical except for their capital structure:

	Orange	Red	Blue
Total Invested Capital	1,00,000	1,00,000	1,00,000
Debt/Assets Ratio	0.8	0.5	0.2
Shares Outstanding	6,100	8,300	10,000
Pre Tax Cost of Debt	16%	13%	15%
Cost of Equity	26%	22%	20%
Operating Income (EBIT)	25,000	25,000	25,000
Net Income	8,970	12,350	14,950

The tax is uniform 35% in all cases.
Calculate:
(i) Calculate the weighted average cost of capital for each company.
(ii) Calculate the Economic Value Added (EVA) for each company.
(iii) Calculate which company would be considered for best investment, Based on the EVA? Give reasons.
(iv) Calculate the price for the share of each company, If the industry P/E ratio is 11 times.
(v) Calculate the estimated market capitalization for each of the Companies. [7]

6. (a) Carwin Tracom Ltd. furnishes the following particulars about their investment in shares of Rose Commodities Ltd. for the year 2024-25:

Balance of shares held on 1st April 2024	2,62,000	(10,000 shares of ₹10 each)
Purchased 2,000 shares on 1st July 2024	60000	
Sold 500 shares on 1st August 2024 @ ₹35 per share cum dividend	17500	
Carwin Tracom Ltd. declared final dividend for 2023-24 on 1st September 2024. Received 1:5 bonus shares on 1st February, 2025.	20%	

Brokerage for each transaction is 2%. Calculate the cost of shares held by Carwin Tracom Ltd. as on 31st March 2025. [7]

(b) Calculate the Economic Value added from the following data:

Particulars	(₹ in lakhs) Year: 2024
Average Debt	50
Average Equity	2766
Cost of Debt %	7.72
Cost of Equity %	16.70
Weighted average cost of capital (%)	16.54
Profit after tax before exceptional items	1541
Interest after taxes	5

[7]

7. (a) ABC Ltd. run and managed by an efficient team that insists on reinvesting 60% of its earnings in projects that provide an ROE (return of equity) of 10%, despite the fact that the firm's capitalization rate (K) is 15%. The firm's current year's earning is ₹10 per share.
Calculate at what price the stock of ABC Ltd. Sell. Advise, what will be the present value of growth opportunities. Suggest why such a firm would be a takeover target. [7]

(b) Tarun Ltd. is considering the takeover of Arun Ltd. and Barun Ltd. The financial data for the three companies are as follows:

	Tarun Ltd.	Arun Ltd.	Barun Ltd.
Equity Share Capital of ₹ 10 each (₹ million)	450	180	90
Earnings (₹ millions)	90	18	18
Market Price of each share (₹)	60	37	46

(i) Critically assess the situation and advice, will you recommend the merger of either/both of the companies?
(ii) Evaluate independently and justify your answer. [7]

8. (a) Illustrate a common size statement and also interprets the result, from the following Income Statement for the year ended 31st March:

	2024	2025
Net Sales	10,50,000	13,50,000
Less : - Cost of goods sold	5,70,000	6,45,000
Gross Profit	4,80,000	7,05,000
Less :- Other operating expenses	1,50,000	2,16,000
Operating profit	3,30,000	4,89,000
Less :- Interest on long term debt	60,000	51,000
Profit before tax	2,70,000	4,38,000

[7]

(b) Vikas Ltd. wishes to acquire Nikas Ltd., a small company with good growth prospects. The relevant information for both companies is as follows:

Company	Equity shares Outstanding	Share price (₹)	EAT (₹)	EPS (₹)
Vikas Ltd.	10,00,000	25	20,00,000	2
Nikas Ltd.	1,00,000	10	2,00,000	2

Vikas Ltd. is considering three different acquisition plans viz.,

(i) Pay 12.5 per share for each share of Nikas Ltd.

(ii) Exchange 25 cash and one share of Vikas Ltd for every four shares of Nikas Ltd.

(iii) Exchange one share for every two shares of Nikas Ltd.

(a) Calculate the Vikas's Earning per share (EPS) under each of the three plans.

(b) Calculate the share prices of Vikas Ltd. under each of the three plans, if its current price earnings ratio remains unchanged?

(c) Evaluate a strategy for Vikas Ltd. to take over Nikas Ltd. so that postmerger Vikas Ltd. gets the best market valuation. [7]