

Mock Test Paper - Series II: August, 2024

Date of Paper: 23rd August, 2024

Time of Paper: 2 P.M. to 5 P.M.

INTERMEDIATE GROUP – II

PAPER – 6A : FINANCIAL MANAGEMENT & STRATEGIC MANAGEMENT

PAPER 6A: FINANCIAL MANAGEMENT

Time Allowed – 3 Hours (Total time for 6A and 6B) Maximum Marks – 50

1. *The question paper comprises two parts, Part I and Part II.*
2. *Part I comprises Case Scenario based Multiple Choice Questions (MCQs)*
3. *Part II comprises questions which require descriptive type answers.*
4. *Working note should form part of the answer. Wherever necessary, suitable assumptions may be made by the candidates and disclosed by way of note. However, in answers to Questions in Division A, working notes are not required.*

PART I – Case Scenario based MCQs (15 Marks)

Write the most appropriate answer to each of the following multiple choice questions by choosing one of the four options given. All questions are compulsory.

Mathangi Ltd. is a News broadcasting channel having its broadcasting Centre in Chennai. There are total 200 employees in the organisation including top management. As a part of employee benefit expenses, the company serves tea to its employees, which is outsourced from a third-party. The company offers tea three times a day to each of its employees. The third-party charges ₹ 10 for each cup of tea. The company works for 200 days in a year.

Looking at the substantial amount of expenditure on tea, the finance department has proposed to the management an installation of a master tea vending machine from Nirmal Ltd which will cost ₹ 5,00,000 with a useful life of five years. Upon purchasing the machine, the company will have to incur annual maintenance which will require a payment of ₹ 25,000 every year. The machine would require electricity consumption of 500 units p.m. and current incremental cost of electricity for the company is ₹ 24 per unit. Apart from these running costs, the company will have to incur ₹ 8,00,000 for consumables like milk, tea powder, paper cup, sugar etc. The company is in the 25% tax bracket. Straight line method of depreciation is allowed for the purpose of taxation.

Nirmal Ltd sells 100 master tea vending machines. Variable cost is ₹ 4,50,000 per machine and fixed operating cost is ₹ 25,00,000. Capital Structure of Mathangi Ltd and Nirmal Ltd consists of the following –

| Particulars | Mathangi Ltd. | Nirmal Ltd. |
|---|---------------|-------------|
| Equity Share Capital (Face value ₹ 10 each) | 40,00,000 | 40,00,000 |
| Reserves & Surplus | 25,00,000 | 50,00,000 |
| 12% Preference Share Capital | 12,00,000 | Nil |
| 15% Debentures | 20,00,000 | 40,00,000 |

Risk free rate of return = 5%, Market return = 10%, Beta of the Mathangi Ltd. = 1.9
You are required to answer the following five questions based on the above details:

- If sales of Nirmal Ltd are up by 10%, impact on its EBIT is
 - 30%
 - 60%
 - 5%
 - 20%
- Combined leverage of Nirmal Ltd is
 - 1.63
 - 2.63
 - 1.315
 - 2
- Discount rate that can be applied for making investment decisions of Mathangi Ltd is
 - 12%
 - 13.52%
 - 15%
 - 20%
- Incremental cash flow after tax per annum attributable to Mathangi Ltd due to investment in the machine is
 - ₹ 2,39,438
 - ₹ 1,98,250
 - ₹ 98,250
 - ₹ 1,31,000
- Net present value of investment in the machine by Mathangi Ltd is
 - ₹ 6,88,522
 - ₹ 1,88,522
 - ₹ 9,91,250
 - ₹ 4,91,250

(5 x 2 = 10 Marks)

6. Total Assets & Current liabilities of the Vitrag Limited are 50 lakhs & 10 lakhs respectively. ROCE is 15%, measure of business operating risk is at 3.5 & P/V ratio is 70%. Calculate Sales.
- (a) 21 lakhs
 (b) 30 lakhs
 (c) 37.50 lakhs
 (d) 40 lakhs **(2 Marks)**
7. A company has issued bonds with a face value of ₹ 100,000 at an annual coupon rate of 8%. The bonds are currently trading at 95% of their face value. What is the approximate cost of debt for the company before taxes.
- (a) 9.00%
 (b) 7.65%
 (c) 8.00%
 (d) 8.42% **(2 Marks)**
8. A company is considering changing its capital structure by increasing its debt ratio from 40% to 55%. What is the likely impact on the company's cost of equity, assuming all other factors remain constant?
- (a) Cost of equity will be unaffected by debt ratio
 (b) Cost of equity will remain unchanged
 (c) Cost of equity will decrease
 (d) Cost of equity will increase **(1 Mark)**

PART II – Descriptive Questions (35 Marks)

Question No. 1 is compulsory.

*Attempt any **two** questions out of the remaining **three** questions.*

1. (a) X Ltd is willing to raise funds for its New Project which requires an investment of ₹ 84 Lakhs. The Company has two options:
- Option I: To issue Equity Shares (₹ 10 each) only
 Option II: To avail Term Loan at an interest rate of 12%. But in this case, as insisted by the Financing Agencies, the Company will have to maintain a Debt–Equity proportion of 2:1.
- The Corporate Tax Rate is 30%. FIND out the point of indifference for the project. **(5 Marks)**
- (b) Mr. Anand is thinking of buying a Share at ₹ 500 whose Face Value per share is ₹ 100. He is expecting a bonus at the ratio 1 : 5 at the end of the fourth year. Annual expected dividend is 20% and the same rate is expected to be maintained on the expanded capital base. He intends to sell the Shares at the end of seventh year at an expected price of ₹ 900

each. Incidental Expenses for purchase and sale of Shares are estimated to be 5% of the Market Price. Assuming a Discount rate of 12% per annum, COMPUTE the Net Present Value from the acquisition of the shares. **(5 Marks)**

- (c) Paarath Limited had recently repurchased 20,000 equity shares at a premium of 10% to its prevailing market price. The book value per share (after repurchasing) is ₹ 193.20.

Other Details of the company are as follows:

Earnings of the company (before buyback) = ₹ 18,00,000

Current MPS is ₹ 270 with a P/E Ratio of 18.

CALCULATE the Book Value per share of the company before the re-purchase. **(5 Marks)**

2. (a) Sukrut Limited has annual credit sales of ₹ 75,00,000/-. Actual credit terms are 30 days, but its management of receivables has been poor, and the average collection period is about 60 days. Bad debt is 1 per cent of total sales.

A factor has offered to take over the task of debt administration and credit checking, at an annual fee of 1.5 per cent of credit sales.

Sukrut Limited estimates that it would save ₹ 45,000 per year in administration costs as a result. Due to the efficiency of the factor, the average collection period would come back to the original credit offered of 30 days and bad debts would come to 0.5% on recourse basis.

The factor would pay net advance of 80 percent to the company at an annual interest rate of 12 per cent after withholding a reserve of 10%. Sukrut Limited is currently financing its receivables from an overdraft costing 10 per cent per year and will continue to finance the balance fund needed (which is not financed by factor) through the overdraft facility

If occurrence of credit sales is throughout the year, COMPUTE whether the factor's services should be accepted or rejected. Assume 360 days in a year. **(7 Marks)**

- (b) Determining the amount to be invested in current assets as working capital is a crucial policy decision for any entity. What FACTORS should a company consider when deciding the level of investment in working capital? **(3 Marks)**

3. (a) Calculate the WACC using the following data by using Market Value weights:

| Particulars | ₹ |
|--|-----------|
| Equity Shares (₹ 10 per equity share) | 15,00,000 |
| Reserves & Surplus | 5,00,000 |
| Preference Shares (₹ 100 per preference share) | 7,50,000 |
| Debentures (₹ 100 per debenture) | 5,50,000 |

The market prices of these securities are:

Debentures - ₹ 105 per debenture,
 Preference shares - ₹115 per preference share
 Equity shares - ₹ 27 per equity share

Additional information:

- (1) ₹ 100 FV per debenture redeemable at premium of 10%, 10% coupon rate, 4% floatation costs, 10-year maturity.
- (2) ₹ 100 FV per preference share redeemable at par, 12% coupon rate, 2% floatation cost and 10-year maturity.
- (3) Equity shares have ₹ 4.5 floatation cost and market price of 27 per share.

The last dividend paid by the company was ₹ 2 which is expected to grow at an annual growth rate of 9%. The firm has the practice of paying all earnings as a dividend.

The corporate tax rate is 25%. To calculate the overall cost of debt & preference shares, take the average of their respective costs using YTM & approximation method. **(6 Marks)**

- (b) EPL Ltd. has furnished the following information relating to the year ended 31st March 2023 and 31st March, 2024:

| | 31 st March, 2023 | 31 st March, 2024 |
|---------------------|------------------------------|------------------------------|
| Share Capital | 50,00,000 | 50,00,000 |
| Reserve and Surplus | 20,00,000 | 25,00,000 |
| Long term loan | 30,00,000 | 30,00,000 |

- Net profit ratio: 8%
- Gross profit ratio: 20%
- Long-term loan has been used to finance 40% of the fixed assets.
- Stock turnover with respect to cost of goods sold is 4.
- Debtors represent 90 days sales.
- The company holds cash equivalent to 1½ months cost of goods sold.
- Ignore taxation and assume 360 days in a year.

You are required to PREPARE Balance Sheet as on 31st March 2024 in following format:

| Liabilities | (₹) | Assets | (₹) |
|---------------------|-----|----------------|-----|
| Share Capital | - | Fixed Assets | - |
| Reserve and Surplus | - | Sundry Debtors | - |
| Long-term loan | - | Closing Stock | - |
| Sundry Creditors | - | Cash in hand | - |

(4 Marks)

4. (a) The agency problem is one of the key concepts in corporate governance and financial management. On the light of this statement, EXPLAIN agency problem, consequences of agency problem and how to overcome the issue. **(4 Marks)**
- (b) Operating leases and financial leases are traditionally the most important types of leases in financial management. However, in recent years, other types of leases have also gained significance due to their unique benefits and applications. IDENTIFY AND EXPLAIN at least four other types of leases that have become increasingly important in modern business practices. **(4 Marks)**
- (c) EXPLAIN the Relationship between EBIT-EPS-MPS **(2 Marks)**

OR

- (c) EXPLAIN Financial Leverage as a 'Double edged Sword' **(2 Marks)**

PAPER 6B: STRATEGIC MANAGEMENT

1. *The question paper comprises two parts, Part I and Part II.*
2. *Part I comprises case scenario based multiple choice questions (MCQs)*
3. *Part II comprises questions which require descriptive type answers.*

PART I – Case scenario based MCQs (15 Marks)

Question 1. (Compulsory)

1. (A) Sneha Rao, founder and CEO of DEF Technologies, is renowned for her technological insight and visionary leadership style. She cultivates a culture of collaboration, continuous learning, and innovative problem-solving, encouraging her employees to think outside the box and embrace new challenges. Her exceptional ability to foresee technological trends and navigate complex market dynamics has propelled DEF Technologies to impressive growth over the past decade.

Sneha started DEF Technologies in 2010 as a small software development firm. With a vision to transform DEF Technologies into a leading tech company, she initially focused on developing custom software solutions for local businesses. However, intense competition and limited market demand led to financial difficulties. Undeterred, Sneha pivoted the business towards developing cloud-based solutions, leveraging the growing trend of digital transformation. This strategic shift, along with aggressive marketing, helped DEF Technologies capture a significant market share and become a leader in cloud services, setting new industry standards.

In 2015, Sneha's brother, Raj, joined the company, and together they crafted an ambitious expansion strategy. DEF Technologies entered the global market, partnering with international tech firms to launch a new line of AI-driven cybersecurity solutions. This venture was highly successful, establishing DEF Technologies as a global brand and a key player in the cybersecurity industry.

Raj then led the company's diversification into the healthcare sector with a new brand, MedTech Solutions. Recognizing the potential for technology to revolutionize healthcare, Sneha and Raj focused on developing affordable telemedicine platforms and AI-driven diagnostic tools. Their approach disrupted the market, providing high-quality healthcare solutions at lower costs and gaining widespread trust from healthcare providers and patients alike. MedTech Solutions experienced rapid growth, especially during the COVID-19 pandemic, as demand for remote healthcare services surged.

At the beginning of 2023, DEF Technologies launched another new business, GreenTech Innovations, to address environmental challenges through technology. DEF Technologies continues to explore new opportunities and ventures to stay at the forefront of the tech industry.

Based on the above Case Scenario, answer the Multiple-Choice Questions.

- (i) Sneha Rao's vision to transform DEF Technologies into a leading tech company illustrates which type of strategic intent?
- (a) Goal
 - (b) Mission
 - (c) Vision
 - (d) Objective **(2 Marks)**
- (ii) Sneha's leadership style, which promotes collaboration, continuous learning, and innovative problem-solving, can best be described as:
- (a) Transactional leadership
 - (b) Transformational leadership
 - (c) Autocratic leadership
 - (d) Laissez-faire leadership **(2 Marks)**
- (iii) When DEF Technologies expanded into the global market with AI-driven cybersecurity solutions, which of Porter's Five Forces was most likely mitigated by forming partnerships with international tech firms?
- (a) Threat of Substitute Products or Services
 - (b) Bargaining Power of Suppliers
 - (c) Threat of New Entrants
 - (d) Intense Rivalry Among Existing Competitors **(2 Marks)**
- (iv) By entering the global market and launching AI-driven cybersecurity solutions, DEF Technologies pursued which expansion strategy from Ansoff's Product-Market Growth Matrix?
- (a) Diversification
 - (b) Market Penetration
 - (c) Product Development
 - (d) Market Development **(2 Marks)**
- (v) MedTech Solutions' focus on developing affordable telemedicine platforms and AI-driven diagnostic tools reflects which of the following competitive strategies?
- (a) Differentiation strategy
 - (b) Cost leadership strategy
 - (c) Best-cost provider strategy
 - (d) Focus Strategy **(2 Marks)**

(B) Compulsory Application Based Independent MCQs

- (i) A traditional desi ghee company modernized its production and introduced pro-biotic desi ghee, facing initial market doubts. Aggressive marketing campaigns highlighted its benefits, gaining acceptance. During which stage of the product life cycle did the desi ghee company face doubts but gained acceptance through aggressive marketing campaigns?
- (a) Introduction stage
 - (b) Growth stage
 - (c) Maturity stage
 - (d) Decline stage
- (2 Marks)**
- (ii) ValueMart is a discount retail chain that targets budget-conscious consumers by offering a wide range of products at the lowest possible prices. The company achieves this by sourcing goods in bulk, negotiating lower prices with suppliers, and maintaining lean operations. ValueMart's goal is to dominate the market by attracting price-sensitive customers from competitors. Which of Michael Porter's Generic Strategies is ValueMart primarily employing?
- (a) Differentiation
 - (b) Focused Cost Leadership
 - (c) Cost Leadership
 - (d) Focused Differentiation
- (2 Marks)**
- (iii) A women's clothing brand recognized new opportunities and researched emerging trends and consumer preferences. They introduced a new clothing line, received positive feedback from initial trials, and grew through strategic partnerships and targeted advertising. What strategic choice best describes this approach?
- (a) Product Development
 - (b) Market Development
 - (c) Market Penetration
 - (d) Diversification
- (1 Mark)**

PART II – Descriptive Questions (35 Marks)

Question No. 1 is compulsory.

*Attempt any **two** questions out of the remaining **three** questions.*

1. (a) *TechNova*, a leading software development firm known for its cutting-edge operating systems, is developing a groundbreaking new platform. *ElectroWave*, an emerging player in the electronics and hardware industry, specializes in manufacturing advanced devices. *TechNova* and *ElectroWave* have decided to join forces to design innovative laptops

and smartphones, aiming to tap into new markets and broaden their business horizons. What kind of external growth strategy is being considered by *TechNova* and *ElectroWave*? **(5 Marks)**

- (b) Vikram Patel owns a chain of ten bookstores across the Mumbai region. Three of these stores were launched in the past two years. He has always believed in strategic management and enjoyed robust sales of books, magazines, and educational materials until about five years ago. However, with the increasing preference for online shopping, the sales at his physical stores have declined by approximately sixty percent over the last five years. Analyze Vikram Patel's current position in light of the limitations of strategic management. **(5 Marks)**
- (c) Orion Tech Solutions Pvt. Ltd. is renowned for its ability to launch groundbreaking software products. Despite the relaxed and casual work environment at Orion, there is a strong commitment to meeting deadlines. Employees at Orion believe in the "work hard, play hard" ethic. The company has shifted from a formal, hierarchical structure to a more results-oriented approach. Employees are deeply committed to the company's strategies and work diligently to achieve them. They safeguard innovations and maintain strict confidentiality and secrecy in their operations. Their work culture is closely aligned with the organization's values, practices, and norms. What aspects of an organization are being discussed? Explain. **(5 Marks)**
2. (a) Analyze the role of Key Success Factors (KSFs) in determining competitive success within an industry. **(5 Marks)**
- (b) What are distribution channels, and why is analyzing them crucial for business expansion? Describe the three main types of channels explaining their roles in ensuring products reach customers efficiently and with the necessary support. **(5 Marks)**
3. (a) What is a strategic vision, and what are the essential components that make it an effective tool for guiding an organization's future? **(5 Marks)**
- (b) Which strategy is implemented by redefining the business, by enlarging its scope of business and substantially increasing investment in the business? Explain the major reasons for adopting this strategy. **(5 Marks)**
4. (a) Describe the principal aspects of strategy-execution process, which are included in most situations. **(5 Marks)**
- (b) How does the PESTLE framework assist in analyzing the macro-environment?

OR

A manufacturing company is in direct competition with fifteen companies at the national level. The head of marketing department of this company wishes to study the market position of rival companies by grouping them into like positions. Name the tool that may be used by him/her. Explain the procedure that may be used to implement the techniques. **(5 Marks)**

INTERMEDIATE: GROUP – II

PAPER – 6: FINANCIAL MANAGEMENT & STRATEGIC MANAGEMENT

PAPER 6A : FINANCIAL MANAGEMENT

Suggested Answers/ Hints

PART I – Case Scenario based MCQs

1. (d)

2. (b)

| Particulars | Computation | Result |
|---------------------|-----------------|------------------|
| Sales | 100 × 5,00,000 | 5,00,00,000 |
| Less Variable cost | 100 × 4,50,000 | 4,50,00,000 |
| Contribution | | 50,00,000 |
| Less Fixed cost | | 25,00,000 |
| EBIT | | 25,00,000 |
| Less Interest | 15% × 40,00,000 | 6,00,000 |
| EBT | | 19,00,000 |

Operating leverage = Contribution ÷ EBIT = 50 Lakhs ÷ 25 Lakhs = 2 times

Operating leverage = % Change in EBIT ÷ % Change in Sales i.e. if sales increase by 10%, EBIT increase by 20%.

Financial leverage = EBIT ÷ EBT = 25 Lakhs ÷ 19 Lakhs = 1.315 times

Combined leverage = Operating leverage × Financial leverage = 2 × 1.315 = 2.63 times

3. (b)

| Particulars | Weights | Cost in % | Weights × Cost |
|--------------------------|------------------|----------------------------------|------------------|
| Share Capital | 40,00,000 | $5 + 1.9 \times (10 - 5) = 14.5$ | 5,80,000 |
| Reserves & Surplus | 25,00,000 | 14.5 | 3,62,500 |
| Preference Share Capital | 12,00,000 | 12 | 1,44,000 |
| 15% Debentures | 20,00,000 | $15 \times (1 - 25\%) = 11.25$ | 2,25,000 |
| Total | 97,00,000 | Total Cost | 13,11,500 |

Discount rate = WACC = $13,11,500 \div 97,00,000 \times 100 = 13.52\%$

4. (b)

| Particulars | Computation | Result |
|----------------------------|---|-----------------|
| Savings in Tea cost | 200 Employees × 200 days × 3 times × ₹ 10 | 12,00,000 |
| Less: Annual maintenance | | (25,000) |
| Less: Cost of Electricity | 500 units × ₹ 24 per unit × 12 months | (1,44,000) |
| Less: Consumables | | (8,00,000) |
| Less: Depreciation | 5,00,000 ÷ 5 years | (1,00,000) |
| Profit before tax | | 1,31,000 |
| Less: Tax | 1,31,000 × 25% | 32,750 |
| Profit after tax | | 98,250 |
| Add: Depreciation | | 1,00,000 |
| Cash flow after tax | 98,250 + 1,00,000 | 1,98,250 |

5. (b)

| Year | Particulars | Cash flow | PVF@13.52% | PV |
|--------|--------------------------|-----------|------------|-----------------|
| 0 | Initial investment | 5,00,000 | 1 | (5,00,000) |
| 1 to 5 | Savings | 1,98,250 | 3.473 | 6,88,522 |
| | Net present value | | | 1,88,522 |

6. (b) ROCE = EBIT / Total Capital Employed

Total Capital Employed = Total Assets – Current Liabilities

= 50 lakhs – 10 lakhs

= 40 lakhs

EBIT = 40 lakhs × 15%

= 6 lakhs

Now, OL of 3.5 = Contribution / EBIT

Therefore Contribution = 6 Lakhs × 3.5 = 21 lakhs

Sales = **Contribution / PV Ratio = 21 lakhs / 0.7 = 30 lakhs**

7. (d) Calculation: Cost of Debt = (Interest Payment/ Market Price of Bond)

= (8,000 / 95,000) = 8.42%

8. (d) Cost of equity will increase. As the company increases its debt ratio, the financial risk increases, which typically leads to an increase in the cost of equity as equity investors demand a higher return for the additional risk.

PART II – Descriptive Questions

1. (a) Let the EBIT at the Indifference Point level be E

| Particulars | Alternative 1 | Alternative 2 |
|---|---|---|
| Description | Fully Equity of 84 Lakhs | Debt = 56 Lakhs, Equity = 28 Lakhs |
| EBIT | E | E |
| Less: Interest at 12% of ₹ 56 Lakhs | Nil | 6.72 |
| EBT | E | E – 6.72 |
| Less: Tax at 30% | 0.3 E | 0.3 E – 2.016 |
| EAT | 0.7 E | 0.7 E – 4.704 |
| Less: Preference Dividend | Nil | Nil |
| Residual Earnings | 0.7 E | 0.7 E – 4.704 |
| No. of Equity Shares (Face Value ₹ 10) | 8.4 Lakh Shares | 2.8 Lakh Shares |
| EPS = $\frac{\text{Residual Earnings}}{\text{No. of Equity Shares}}$ | $\frac{0.7 E}{8.4 \text{ Lakh Shares}}$ | $\frac{0.7 E - 4.704}{2.8 \text{ Lakh Shares}}$ |

For indifference between the above alternatives, EPS should be equal.

$$\text{So, } \frac{0.7 E}{8.4 \text{ Lakh Shares}} = \frac{0.7 E - 4.704}{2.8 \text{ Lakh Shares}}$$

On cross multiplication and simplification, $2.1 E - 14.112 = 0.7 E$. So, $1.4 E = 14.112$

$$\text{So, } E = \frac{14.112}{1.4} = 10.08$$

So, for same EPS, required EBIT = ₹ 10.08 Lakhs. EPS at that level = ₹ 0.84

Note: Presentation of solution may differ.

(b) **Computation of PV of Future Cash Flows**

| Year | Nature | Cash Flow | DF @ 12% | DCF |
|------|--------------------------------------|-----------|----------|--------|
| 1 | Dividends (₹ 100 × 20%) | 20 | 0.893 | 17.86 |
| 2 | Dividends (₹ 100 × 20%) | 20 | 0.797 | 15.94 |
| 3 | Dividends (₹ 100 × 20%) | 20 | 0.712 | 14.24 |
| 4 | Dividends (₹ 100 × 20%) | 20 | 0.636 | 12.72 |
| 5 | Dividends (₹ 100 × 1.2 × 20%) | 24 | 0.567 | 13.61 |
| 6 | Dividends (₹ 100 × 1.2 × 20%) | 24 | 0.507 | 12.17 |
| 7 | Dividends (₹ 100 × 1.2 × 20%) | 24 | 0.452 | 10.85 |
| 7 | Net Sale Proceeds (₹ 900 × 1.2 – 5%) | 1,026 | 0.452 | 463.75 |

| | | | | |
|---|---------------------------------------|-----|---|--------|
| | Present Value of Cash Inflows | | | 561.14 |
| 0 | Less: Initial Investment (₹ 500 + 5%) | 525 | 1 | 525.00 |
| | Net Present Value | | | 36.14 |

Note: At the end of Year 4, Anand will have 1.2 Share i.e. 1 Bought Share + 1/5th Bonus Share.

(c) i. No of Eq. Shares (before buyback) = Total Earnings (before buyback)/EPS
 $= 18,00,000 / (270/18)$
 $= 1,20,000$ shares

ii. Buyback price = 270 + 10% premium = 297

iii. No of Eq. shares (after buyback) = 1,20,000 (-) 20,000 = 1,00,000 shares

iv. Total Book Value of Equity (after buyback) = 1,00,000 X 193.20 = 1,93,20,000

Now,

Total BV of Eq. (after buyback) = Total BV of Eq.(before buyback) (-) Amt of buyback

1,93,20,000 = x (-) (20,000 X 297)

Therefore x = Total BV (before buyback)

= 2,52,60,000

BV per share (before buyback) = 2,52,60,000 / 1,20,000

= 210.50 per share

2. (a) Evaluation of Factoring Proposal -

| | PARTICULARS | ₹ | ₹ |
|-----|---|-------------------|-----------------|
| (A) | Savings (Benefit) to the firm | | |
| | Administration Cost | 45,000 | 45,000 |
| | Bad Debts Cost (On Recourse basis) In House – 75 lakhs X 1% Factoring – 75 lakhs X 0.5% Net Savings in bad debts cost | (75 lakhs X 0.5%) | 37,500 |
| | Cost of Carrying Debtors Cost | (WN – 1) | 1,06,750 |
| | TOTAL | | 1,89,250 |
| (B) | Cost to the Firm: | | |

| | | | |
|------------|---|-----------------|-----------------|
| | Factor Commission [Annual credit Sales × % of Commission] | 75 lakhs X 1.5% | 1,12,500 |
| | Interest Cost on Net advances | (See WN – 1) | 53,100 |
| | TOTAL | | 1,65,600 |
| (C) | Net Benefits to the Firm (A – B) | | 23,650 |

Advice: Since the savings to the firm exceed the cost due to factoring, the proposal is acceptable.

WN-1 : Calculation of Savings in Interest Cost of Carrying Debtors

(I) In house Management:

Interest Cost = Credit Sales X Avg Collection Period / 360 X Interest (%) p.a

$$= 75,00,000 \times 60/360 \times 10\%$$

$$= \mathbf{1,25,000}$$

(II) If Factoring services availed: If factoring services are availed, then Sukrut Limited must raise the funds blocked in receivables to the extent which is not funded by the factor (i.e amount of factor reserve (+) amount of factor commission for 30 days (+) 20% of net advances)

Calculation of Net Advances to the firm -

$$\text{Debtors} = 75 \text{ lakhs} \times 30/360 = 6,25,000$$

$$(-) \text{ Factor Reserve} = 10\% \text{ of above} = (62,500)$$

$$(-) \text{ Factor Commission} = 1.5\% \text{ of Debtors} = (9,375)$$

$$\mathbf{\text{Net Advance} = 5,53,125}$$

$$\text{Advance from Factor} = 5,53,125 \times 80\% = 4,42,500$$

$$\mathbf{\text{Int cost on Advance from Factor} = 4,42,500 \times 12\% = 53,100}$$

Now, the amount that is not funded by the factor (6,25,000 - 4,42,500) needs to be funded by Sukrut Limited from overdraft facility at 10%

$$\text{Therefore, Int cost on Overdraft (Cost of carrying debtors)} \\ = \mathbf{1,82,500 \times 10\% = 18,250}$$

$$\mathbf{\text{Net Savings in Interest Cost of Carrying Debtors} = 1,25,000 (-) 18,250 = 1,06,750}$$

(b) Level of investment depends on the various factors listed below:

(a) Nature of Industry: Construction companies, breweries etc. requires large investment in working capital due long gestation period.

(b) Types of products: Consumer durable has large inventory as compared to perishable products.

- (c) **Manufacturing Vs Trading Vs Service:** A manufacturing entity has to maintain three levels of inventory i.e. raw material, work-in-process and finished goods whereas a trading and a service entity has to maintain inventory only in the form of trading stock and consumables respectively.
- (d) **Volume of sales:** Where the sales are high, there is a possibility of high receivables as well.
- (e) **Credit policy:** An entity whose credit policy is liberal has not only high level of receivables but may require more capital to fund raw material purchases as that will depend on credit period allowed by suppliers.

3. (a) **WN-1 : Calculation of Cost of Debt (Kd)**

$$\text{Approximation Method} = \frac{\text{Int} (1-t) + (RV - NP)/N}{(RV + NP) / 2}$$

$$RV = 100 + 10\% = 110, NP = 105 - 4\% = 100.8$$

$$= \frac{10 (1 - 0.25) + (110 - 100.8)/10}{(110 + 100.8) / 2} = 7.99\%$$

YTM Method:

$$\text{CMP (Po) (-) Floatation Cost} = \{\text{Int}(1-t) \times \text{PVAF} (r\%, 10\text{years})\} + \{RV \times \text{PVIF} (r\%, 10^{\text{th}} \text{Year})\}$$

$$105 - 4\% = \{10 (1 - 0.25) \times \text{PVAF} (r\%, 10 \text{years})\} + \{110 \times \text{PVIF} (r\%, 10^{\text{th}} \text{year})\}$$

Using trial and error method, NPV at 5% & 10%

| Year | Cash flows | Disc Factor @ 5% | PV (₹) | Disc Factor @ 10% | PV (₹) |
|---------|------------|------------------|-----------------|-------------------|-----------------|
| 0 | -100.8 | 1 | -100.8 | 1 | -100.8 |
| 1 to 10 | 7.5 | 7.7217 | 57.91275 | 6.1446 | 46.0845 |
| 10 | 110 | 0.6139 | 67.529 | 0.3855 | 42.405 |
| | | | 24.64175 | | -12.3105 |

$$\text{IRR} = 5 + \frac{24.64175}{24.64175 - (-12.3105)} \times (10 - 5) = 8.33\%$$

$$\text{Therefore overall cost of debt (Kd)} = (7.99 + 8.33) / 2 = 8.16\%$$

WN-2 : Calculation of Cost of Preference (Kp)

$$\text{Approximation Method} = \frac{\text{Pref. Div.} + (RV - NP)/N}{(RV + NP) / 2}$$

$$RV = 100 \quad NP = 115 - 2\% = 112.7$$

$$= \frac{12 + (100 - 112.7)/10}{(100 + 112.7) / 2} = 10.09\%$$

YTM Method:

CMP (Po) (-) Floatation Cost = {Pref Div × PVAF (r%,10years)} + {RV × PVIF (r%,10th Year)}

$$115 - 2\% = \{12 \times \text{PVAF (r\%, 10 years)}\} + \{100 \times \text{PVIF (r\%, 10}^{\text{th}} \text{ year)}\}$$

Using trial and error method, NPV at 5% & 10%

| Year | Cash flows | Disc Factor @ 5% | PV (₹) | Disc Factor @ 10% | PV (₹) |
|---------|------------|------------------|----------------|-------------------|----------------|
| 0 | -112.7 | 1 | -112.7 | 1 | -112.7 |
| 1 to 10 | 12 | 7.7217 | 92.6604 | 6.1446 | 73.7352 |
| 10 | 100 | 0.6139 | 61.39 | 0.3855 | 38.55 |
| | | | 41.3504 | | -0.4148 |

$$\text{IRR} = 5 + \frac{41.3504}{41.3504 - (-0.4148)} \times (10 - 5) = \mathbf{9.95\%}$$

Therefore, overall cost of debt (Kp) = (10.09 + 9.95) / 2 = 10.02%

WN-3 : Calculation of Cost of equity (Ke)

$$\text{Ke} = \{D1 / (\text{Po} - \text{Floatation})\} + G$$

$$= \{2 + 9\% / 27 - 4.5\} + 0.09$$

$$= \mathbf{18.69\%}$$

Calculation of WACC using market value weights

| Source of Capital | Working | Market Value | Weights | Cost (K) | WACC (Ko) |
|-------------------|--------------------|------------------|----------|----------|---------------|
| | | (₹) | (A) | (B) | (A x B) |
| Equity | 27 x 150000 | 40,50,000 | 0.7377 | 18.69 | 13.7877 |
| Reserves | Included in equity | - | - | - | - |
| Preference | 115 x 7500 | 8,62,500 | 0.1571 | 10.02 | 1.5741 |
| Debentures | 105 x 5500 | 5,77,500 | 0.1052 | 8.16 | 0.8584 |
| | | 54,90,000 | 1 | | 16.22% |

$$\text{WACC (Ko)} = \mathbf{16.22\%}$$

(b) **Change in Reserve & Surplus = ₹ 25, 00,000 – ₹ 20,00,000 = ₹ 5,00,000**

So, Net profit = ₹ 5, 00,000

(i) Net Profit Ratio = 8%

$$\therefore \text{Sales} = \frac{5,00,000}{8\%} = ₹ 62,50,000$$

(ii) Cost of Goods sold

$$\begin{aligned}
&= \text{Sales} - \text{Gross profit Margin} \\
&= ₹ 62, 50,000 - 20\% \text{ of } ₹ 62, 50,000 \\
&= ₹ 50, 00,000
\end{aligned}$$

$$(iii) \text{ Fixed Assets} = \frac{₹ 30,00,000}{40\%} = ₹ 75,00,000$$

$$(iv) \text{ Stock} = \frac{\text{Cost of Goods Sold}}{\text{STR}} = \frac{50,00,000}{4} = ₹ 12,50,000$$

$$(v) \text{ Debtors} = \frac{62,50,000}{360} \times 90 = ₹ 15,62,500$$

$$(vi) \text{ Cash Equivalent} = \frac{50,00,000}{12} \times 1.5 = ₹ 6,25,000$$

Balance Sheet as on 31st March 2024

| Liabilities | (₹) | Assets | (₹) |
|--|-------------|----------------|-------------|
| Share Capital | 50,00,000 | Fixed Assets | 75,00,000 |
| Reserve and Surplus | 25,00,000 | Sundry Debtors | 15,62,500 |
| Long-term loan | 30,00,000 | Closing Stock | 12,50,000 |
| Sundry Creditors (Balancing Figure) | 4,37,500 | Cash in hand | 6,25,000 |
| | 1,09,37,500 | | 1,09,37,500 |

4. (a) Though in a sole proprietorship firm, partnership etc., owners participate in management but in corporates, owners are not active in management so, there is a separation between owner/ shareholders and managers. In theory managers should act in the best interest of shareholders however in reality, managers may try to maximise their individual goal like salary, perks etc., so there is a **principal agent relationship between managers and owners, which is known as Agency Problem**. In a nutshell, Agency Problem is the chances that managers may place personal goals ahead of the goal of owners. Agency Problem leads to Agency Cost. Agency cost is the additional cost borne by the shareholders to monitor the manager and control their behaviour so as to maximise shareholders wealth. Generally, Agency Costs are of four types (i) monitoring (ii) bonding (iii) opportunity (iv) structuring.

Addressing the agency problem

The agency problem arises if manager's interests are not aligned to the interests of the debt lender and equity investors. The agency problem of debt lender would be addressed by imposing negative covenants i.e. the managers cannot borrow beyond a point. This is one of the most important concepts of modern day finance and the application of this would be applied in the Credit Risk Management of Bank, Fund Raising, Valuing distressed companies.

Agency problem between the managers and shareholders can be addressed if the interests of the managers are aligned to the interests of the shareholders. It is easier said than done.

However, following efforts have been made to address these issues:

- ◆ Managerial compensation is linked to profit of the company to some extent and also with the long term objectives of the company.
- ◆ Employee is also designed to address the issue with the underlying assumption that maximisation of the stock price is the objective of the investors.
- ◆ Effecting monitoring can be done.

- (b) (i) **Sales and Lease Back:** Under this type of lease, the owner of an asset sells the asset to a party (the buyer), who in turn leases back the same asset to the owner in consideration of a lease rentals. Under this arrangement, the asset is not physically exchanged but it all happen in records only. The main advantage of this method is that the lessee can satisfy himself completely regarding the quality of an asset and after possession of the asset convert the sale into a lease agreement.

Under this transaction, the seller assumes the role of lessee (as the same asset which he has sold came back to him in the form of lease) and the buyer assumes the role of a lessor (as asset purchased by him was leased back to the seller). So, the seller gets the agreed selling price and the buyer gets the lease rentals.

- (ii) **Leveraged Lease:** Under this lease, a third party is involved besides lessor and the lessee. The lessor borrows a part of the purchase cost (say 80%) of the asset from the third party i.e., lender and asset so purchased is held as security against the loan. The lender is paid off from the lease rentals directly by the lessee and the surplus after meeting the claims of the lender goes to the lessor. The lessor is entitled to claim depreciation allowance.

- (iii) **Sales-aid Lease:** Under this lease contract, the lessor enters into a tie up with a manufacturer for marketing the latter's product through his own leasing operations, it is called a sales-aid lease. In consideration of the aid in sales, the manufacturer may grant either credit or a commission to the lessor. Thus, the lessor earns from both sources i.e. From lessee as well as the manufacturer.

- (iv) **Close-ended and Open-ended Leases:** In the close-ended lease, the assets get transferred to the lessor at the end of lease, the risk of obsolescence, residual value etc., remain with the lessor being the legal owner of the asset. In the open-ended lease, the lessee has the option of purchasing the asset at the end of the lease period.

- (c) The basic objective of financial management is to design an appropriate capital structure which can provide the highest wealth, i.e., highest MPS, which in turn depends on EPS.

Given a level of EBIT, EPS will be different under different financing mix depending upon the extent of debt financing. The effect of leverage on the EPS emerges because of the existence of fixed financial charge i.e., interest on debt, financial fixed dividend on preference share capital. The effect of fixed financial charge on the EPS depends upon the relationship between the rate of return on assets and the rate of fixed charge. If the rate of return on assets is higher than the cost of financing, then the increasing use of fixed charge financing (i.e., debt and preference share capital) will result in increase in the EPS. This situation is also known as favourable financial leverage or Trading on Equity. On the other hand, if the rate of return on assets is less than the cost of financing, then the effect may be negative and, therefore, the increasing use of debt and preference share capital may reduce the EPS of the firm.

The fixed financial charge financing may further be analysed with reference to the choice between the debt financing and the issue of preference shares. Theoretically, the choice is tilted in favour of debt financing for two reasons: (i) the explicit cost of debt financing i.e., the rate of interest payable on debt instruments or loans is generally lower than the rate of fixed dividend payable on preference shares, and (ii) interest on debt financing is tax-deductible and therefore the real cost (after-tax) is lower than the cost of preference share capital.

OR

- (c) When the cost of 'fixed cost fund' is less than the return on investment, financial leverage will help to increase return on equity and EPS. The firm will also benefit from the saving of tax on interest on debts etc. However, when cost of debt will be more than the return it will affect return of equity and EPS unfavourably and as a result firm can be under financial distress. Therefore, financial leverage is also known as "**double edged sword**".

Effect on EPS and ROE:

When, $ROI > Interest$ – Favourable – Advantage

When, $ROI < Interest$ – Unfavourable – Disadvantage

When, $ROI = Interest$ – Neutral – Neither advantage nor disadvantage

PAPER 6B: STRATEGIC MANAGEMENT

ANSWERS

PART I

1. (A) (i) (c) (ii) (b) (iii) (c) (iv) (a) (v) (c)
1. (B) (i) (a) (ii) (c) (iii) (a)

PART II

1. (a) The collaboration between TechNova, a software development firm, and ElectroWave, an electronics and hardware manufacturing company, represents a **co-generic merger**. This type of external growth strategy involves the merger of companies from related but non-competing industries, allowing them to leverage complementary strengths and diversify their product offerings.

TechNova specializes in creating cutting-edge software, while ElectroWave focuses on manufacturing advanced electronic devices. By joining forces, they can combine their expertise to design innovative laptops and smartphones, creating products that neither company could have developed as effectively on their own. This strategic partnership allows them to enter new markets, enhance their competitive advantage, and explore synergies between software and hardware.

The co-generic merger provides significant opportunities for both companies to capitalize on shared technologies, streamline their operations, and expand their customer base. It is a strategic move that enables them to diversify while maintaining a strong focus on their core competencies, ultimately helping them to grow and compete more effectively in the global market.

- (b) Vikram Patel is facing declining sales due to a significant shift of customers toward online platforms. Although he employs strategic management tools, they cannot always overcome every obstacle or guarantee success. The limitations of strategic management in Vikram's situation include:

- The environment in which strategies are developed is highly complex and unpredictable. The entry of online bookstores, a new type of competitor, introduced a different dynamic to the book retail industry. These online platforms, with their extensive reach and pricing power, have dominated the market, posing a formidable challenge to traditional bookstores.
- Another limitation of strategic management is the difficulty in forecasting future developments. Despite his strategic management efforts, Vikram Patel did not anticipate the extent to which online bookstores would impact his sales.
- While strategic management is a time-consuming process, it is crucial for Vikram to continue managing strategically. These

challenging times demand increased effort and adaptability on his part.

- Strategic management can be costly. Vikram Patel might consider hiring experts to understand customer preferences better and adjust his strategies to offer more personalized services. These customized offerings could be difficult for online stores to replicate, giving him a competitive edge.
 - The bookstores owned by Vikram Patel are much smaller in scale compared to online stores. This makes it challenging for him to predict how online platforms will manoeuvre strategically.
- (c) The scenario being referred to is the organizational culture at *Orion Tech Solutions Pvt. Ltd.* A strong culture encourages effective strategy execution when there is alignment and drives performance even when there is minimal alignment. A culture rooted in values, practices, and behavioural norms that align with the requirements for successful strategy execution energizes employees across the organization to perform their roles in a manner that supports the strategy. Orion's culture, built around principles such as listening to customers, encouraging employees to take pride in their work, and providing a high degree of decision-making autonomy, is highly conducive to successfully executing a strategy focused on delivering superior software solutions.

A strong strategy-supportive culture at Orion makes employees feel genuinely better about their jobs, work environment, and the organization's goals. It motivates them to embrace the challenge of realizing the company's vision, perform their duties competently and enthusiastically, and collaborate effectively with others.

2. (a) As industry's Key Success Factors (KSFs) are those things that most affect industry members' ability to prosper in the marketplace – the particular strategy elements, product attributes, resources, competencies, competitive capabilities and business outcomes that spell the difference between profit & loss and ultimately, between competitive success or failure. KSFs by their very nature are so important that all firms in the industry must pay close attention to them. They are the prerequisites for industry success, or, to put it in another way, KSFs are the rules that shape whether a company will be financially and competitively successful.
- (b) Channels represent the **distribution system** through which organizations distribute their products or provide services to customers. They play a pivotal role in reaching target markets, maximizing sales, and establishing competitive advantages.

Channel analysis is important when the business strategy is to scale up and expand beyond the current geographies and markets. When a business plans to grow to newer markets, they need to develop or leverage existing channels to get to new customers. Thus, analysis of channels that suit one's products and customers is of utmost importance.

There are typically three channels that should be considered: sales channel, product channel and service channel.

- ◆ **The sales channel** - These are the intermediaries involved in selling the product through each channel and ultimately to the end user. The key question is: Who needs to sell to whom for your product to be sold to your end user? **For example**, many fashion designers use agencies to sell their products to retail organizations, so that consumers can access them.
- ◆ **The product channel** - The product channel focuses on the series of intermediaries who physically handle the product on its path from its producer to the end user. This is true of Australia Post, who delivers and distributes many online purchases between the seller and purchaser when using eBay and other online stores.
- ◆ **The service channel** - The service channel refers to the entities that provide necessary services to support the product, as it moves through the sales channel and after purchase by the end user. The service channel is an important consideration for products that are complex in terms of installation or customer assistance. **For example**, a Bosch dishwasher may be sold in a Bosch showroom, and then once sold it is installed by a Bosch contracted plumber.

3. (a) A strategic vision serves as a roadmap for a company's future, detailing the specifics of technology, customer focus, geographic and product markets, and the capabilities the organization aims to develop. It answers the critical question, "Where are we going?" and provides a compelling rationale for the chosen direction, ensuring it aligns with the company's long-term objectives.

A strategic vision outlines the organization's aspirations, offering a broad, panoramic view of where it aims to be. It provides a clear direction, charts a strategic path for future endeavors, and helps in shaping the organizational identity.

Essentials of a strategic vision

- ◆ The entrepreneurial challenge in developing a strategic vision is to **think creatively about how to prepare a company for the future.**
- ◆ Forming a strategic vision is **an exercise in intelligent entrepreneurship.**
- ◆ A well-articulated strategic vision **creates enthusiasm among the members of the organization.**
- ◆ The best-worded vision statement **clearly illuminates the direction** in which organization is headed.

- (b) The strategy in question is the **growth/expansion** strategy.

The Growth/Expansion strategy involves redefining the business, expanding its scope, and significantly increasing investments. This dynamic and vigorous approach is synonymous with promise and

success. It entails a substantial reformulation of goals, major initiatives, and strategic moves, including investments, exploration into new products, technologies, and markets, and innovative decision-making. While promising growth, this strategy navigates the enterprise through relatively unknown and risky paths, rich with potential but also pitfalls.

Major Reasons for Adopting Growth/Expansion Strategy:

- It may become imperative when environment demands increase in pace of activity.
- Strategists may feel more satisfied with the prospects of growth from expansion; chief executives may take pride in presiding over organizations perceived to be growth-oriented.
- Expansion may lead to greater control over the market vis-a-vis competitors.
- Advantages from the experience curve and scale of operations may accrue.
- Expansion also includes intensifying, diversifying, acquiring and merging businesses.

4. (a) **Implementation or execution** is an operations-oriented, activity aimed at shaping the performance of core business activities in a strategy-supportive manner. In most situations, strategy-execution process includes the following principal aspects:

- ◆ **Developing budgets** that steer ample resources into those activities that are critical to strategic success.
- ◆ **Staffing the organization with the needed skills and expertise**, consciously building and strengthening strategy-supportive competencies and competitive capabilities and organizing the work effort.
- ◆ **Ensuring that policies and operating procedures facilitate** rather than impede effective execution.
- ◆ **Using the best-known practices to perform core business activities** and pushing for continuous improvement.
- ◆ **Installing information and operating systems** that enable company personnel to better carry out their strategic roles day in and day out.
- ◆ **Motivating people to pursue the target objectives energetically.**
- ◆ **Creating culture and climate conducive** to successful strategy implementation and execution.
- ◆ **Exerting the internal leadership** needed to drive implementation forward and keep improving strategy execution.

(b) The PESTLE framework assists in analyzing the macro-environment by systematically evaluating six external factors that impact an organization's operations and strategy.

1. **Political Factors:** This includes government policies, regulations, political stability, and taxation. Understanding these factors helps organizations anticipate regulatory changes and government interventions that could affect their business environment.
2. **Economic Factors:** This involves assessing economic conditions such as interest rates, inflation, exchange rates, and economic growth. These factors influence business costs, consumer purchasing power, and overall market conditions.
3. **Social Factors:** This examines demographic trends, lifestyle changes, cultural norms, and consumer attitudes. Insights into social factors help businesses align their products and services with evolving consumer preferences and societal trends.
4. **Technological Factors:** This includes technological advancements, innovation rates, and technological infrastructure. These factors impact production processes, product development, and competitive positioning.
5. **Legal Factors:** This involves understanding business laws, employment regulations, health and safety standards, and compliance requirements. Legal factors are crucial for ensuring regulatory compliance and avoiding legal risks.
6. **Environmental Factors:** This covers ecological issues, sustainability practices, and environmental regulations. Awareness of environmental factors helps businesses adapt to climate change and meet sustainability goals.

By analyzing these factors, the PESTLE framework provides a comprehensive understanding of the macro-environment, helping organizations anticipate changes, adapt strategies, and make informed decisions.

OR

A tool to identify the market positions of rival companies by grouping them into like positions is **strategic group mapping**. A strategic group consists of those rival firms which have similar competitive approaches and positions in the market.

The **procedure for constructing a strategic group map** and deciding which firms belong in which strategic group are as follows:

1. **Identify the competitive characteristics** that differentiate firms in the industry typical variables that are price/quality range (high, medium, low); geographic coverage (local, regional, national, global); degree of vertical integration (none, partial, full); product-line breadth (wide, narrow); use of distribution channels (one, some, all); and degree of service offered (no-frills, limited, full).

2. **Plot the firms on a two-variable map** using pairs of these differentiating characteristics.
3. **Assign firms that fall in about the same strategy space** to the same strategic group.
4. **Draw circles around each strategic group** making the circles proportional to the size of the group's respective share of total industry sales revenues.