

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 86
(For candidates admitted from the academic year 2023 – 2024 and thereafter)

B.COM. END SEMESTER EXAMINATION, APRIL 2026
HONOURS
FOURTH SEMESTER

COURSE : MAJOR CORE
PAPER : FINANCIAL MANAGEMENT
SUBJECT CODE : 23BH/MC/FM44
TIME : 3 HOURS

MAX. MARKS: 100

| SECTION A | | | | |
|------------------|---|--------------------|-----------|-----------|
| Q.NO. | Answer all questions: | (5 x 2 =10) | CO | KL |
| 1. | What is the difference between unsystematic risk and systematic risk? | | 1 | 1 |
| 2. | Distinguish between a direct quote and an indirect quote in relation to foreign exchange prices. | | 1 | 1 |
| 3. | MediCare Health Ltd is investing in new diagnostic equipment. The company invests \$10,000 today at an annual return of 6% for 2 years. Calculate the future value of the investment. | | 1 | 1 |
| 4. | The company expects to receive \$15,000 in 3 years' time from a government healthcare contract. If the discount rate is 5%, calculate the present value of this amount. | | 1 | 1 |
| 5. | The market risk premium is 6%, and the risk-free rate is 4%. a) What is the required rate of return on a share with an equity beta of 1.3? b) What is the beta factor of a company that has a cost of equity of 12%? | | 1 | 1 |
| SECTION B | | | | |
| Q.NO. | Answer any 4 questions : | (4 x 5 =20) | CO | KL |
| 6. | Describe the objectives of financial management. | | 2 | 2 |
| 7. | Ms. Gayathri is to receive Rs. 20,000 after 8 years from now. Her time preference for money is 14%. Advise her whether it would be better to receive Rs. 16,000 after 4 years instead of receiving Rs. 20,000 at the end of 8 years. | | 2 | 2 |
| 8. | PetroNova Energy Ltd, an oil and gas exploration and production company, is deciding whether to develop and launch a new enhanced drilling technology. Research and development costs are expected to be \$400,000, and there is a 70% chance that the product launch will be successful and a 30% chance that it will fail. If the launch is successful, the levels of expected profits and the probability of each occurring have been estimated and drawn on a decision tree, depending on whether market adoption of the technology is high, medium, or low. | | 2 | 2 |

| | | | | | | | | | | | | | |
|---|---|------------------------|---------------|---|-----|-----------------------------------|----------|-------------------------------------|---------|---|---------|---|---|
| | <p>Using rollback analysis, advise PetroNova Energy Ltd whether they should develop the new product or not. Show all workings clearly.</p> | | | | | | | | | | | | |
| 9. | <p>Meera Ltd. is engaged in large scale customer retailing. From the following information, you are required to forecast its working capital requirements for the year 2025-26:</p> <table border="0"> <tbody> <tr> <td>Projected annual sales</td> <td style="text-align: right;">Rs. 65,00,000</td> </tr> <tr> <td>Percentage of net profit on cost of sales</td> <td style="text-align: right;">20%</td> </tr> <tr> <td>Average credit allowed to debtors</td> <td style="text-align: right;">10 weeks</td> </tr> <tr> <td>Average credit allowed to creditors</td> <td style="text-align: right;">4 weeks</td> </tr> <tr> <td>Average stock carrying (in terms of sales requirement)</td> <td style="text-align: right;">8 weeks</td> </tr> </tbody> </table> <p>Add 10% to allow for contingencies</p> | Projected annual sales | Rs. 65,00,000 | Percentage of net profit on cost of sales | 20% | Average credit allowed to debtors | 10 weeks | Average credit allowed to creditors | 4 weeks | Average stock carrying (in terms of sales requirement) | 8 weeks | 2 | 2 |
| Projected annual sales | Rs. 65,00,000 | | | | | | | | | | | | |
| Percentage of net profit on cost of sales | 20% | | | | | | | | | | | | |
| Average credit allowed to debtors | 10 weeks | | | | | | | | | | | | |
| Average credit allowed to creditors | 4 weeks | | | | | | | | | | | | |
| Average stock carrying (in terms of sales requirement) | 8 weeks | | | | | | | | | | | | |
| 10. | <p>Orion Electronics PLC is a UK-based multinational company that prepares its consolidated financial statements in pounds sterling (£).</p> <ul style="list-style-type: none"> Orion has a wholly owned subsidiary in Japan whose financial statements are prepared in Japanese yen and must be translated into pounds for consolidation. Orion has exported equipment to a Canadian customer and will receive CAD 2 million in three months. The company has also agreed to import components from a US supplier, with payment of USD 1.5 million due in four months. <p>The finance director is concerned about the impact of exchange rate movements.</p> <p>Required:</p> <ol style="list-style-type: none"> Identify the foreign currency risks faced by Orion Electronics PLC, based on the information provided. (2 marks) Explain the impact of the identified risks on Orion Electronics PLC. (3 marks) | 2 | 2 | | | | | | | | | | |

| 11. | <p>A company is evaluating a project requiring an initial investment of \$200,000. The project is expected to generate the following cash inflows:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Cash Flow (\$)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>90,000</td> </tr> <tr> <td>2</td> <td>80,000</td> </tr> <tr> <td>3</td> <td>70,000</td> </tr> </tbody> </table> <p>Required:</p> <p>a) Calculate the NPV of the project at 6% and at 12%. (3 marks)</p> <p>b) Calculate the Internal Rate of Return (IRR). (2 marks)</p> | Year | Cash Flow (\$) | 1 | 90,000 | 2 | 80,000 | 3 | 70,000 | 2 | 2 | | | | | | | | | | | | |
|----------------------------------|--|---------------------------|----------------|------------------|-----------|----------------------|-----------|--------------------------------|-----------|----------------------------|-----------|-------------------|-----------|-------------------|----------|---------------------|----------|--------------|-----------|----------------------------------|-------------|---|---|
| Year | Cash Flow (\$) | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 90,000 | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 80,000 | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 70,000 | | | | | | | | | | | | | | | | | | | | | | |
| Q.NO. | SECTION C | | | | | | | | | | | | | | | | | | | | | | |
| | Answer the following questions : (4 x 10 =40) | CO | KL | | | | | | | | | | | | | | | | | | | | |
| 12. | <p>A) The management of Fast Ltd. desires to know the working capital required with effect from January 1, 2026 to finance the production programme. Percentage of various elements of cost to selling price are: Materials 50%; Labour 20%; Overheads 10%</p> <p>You are informed that</p> <ul style="list-style-type: none"> i. Raw materials remain in the stores on an average for one month before issued to production ii. Finished goods remain in the warehouse for two months before sales iii. Each unit of production will be in process for one month iv. Credit allowed by creditors is one month and allowed to debtors is two months v. Selling price is Rs. 9 per unit <p>Production in 2026 is expected to be 1,02,000 units. Advise the management regarding the working capital required for the year.</p> <p style="text-align: center;">(OR)</p> <p>B) XYZ Ltd provides the following extracts from its financial statements: Statement of Financial Position (Extract)</p> <table border="0"> <tbody> <tr> <td>c) Ordinary share capital</td> <td style="text-align: right;">\$750,000</td> </tr> <tr> <td>d) Share premium</td> <td style="text-align: right;">\$120,000</td> </tr> <tr> <td>e) Retained earnings</td> <td style="text-align: right;">\$250,000</td> </tr> <tr> <td>f) 7% Preference share capital</td> <td style="text-align: right;">\$200,000</td> </tr> <tr> <td>g) 9% Long-term loan notes</td> <td style="text-align: right;">\$500,000</td> </tr> <tr> <td>h) Trade payables</td> <td style="text-align: right;">\$180,000</td> </tr> <tr> <td>i) Bank overdraft</td> <td style="text-align: right;">\$90,000</td> </tr> <tr> <td>j) Accrued expenses</td> <td style="text-align: right;">\$60,000</td> </tr> <tr> <td>k) Inventory</td> <td style="text-align: right;">\$300,000</td> </tr> <tr> <td>l) Property, plant and equipment</td> <td style="text-align: right;">\$1,600,000</td> </tr> </tbody> </table> | c) Ordinary share capital | \$750,000 | d) Share premium | \$120,000 | e) Retained earnings | \$250,000 | f) 7% Preference share capital | \$200,000 | g) 9% Long-term loan notes | \$500,000 | h) Trade payables | \$180,000 | i) Bank overdraft | \$90,000 | j) Accrued expenses | \$60,000 | k) Inventory | \$300,000 | l) Property, plant and equipment | \$1,600,000 | 3 | 3 |
| c) Ordinary share capital | \$750,000 | | | | | | | | | | | | | | | | | | | | | | |
| d) Share premium | \$120,000 | | | | | | | | | | | | | | | | | | | | | | |
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| k) Inventory | \$300,000 | | | | | | | | | | | | | | | | | | | | | | |
| l) Property, plant and equipment | \$1,600,000 | | | | | | | | | | | | | | | | | | | | | | |

| | | | |
|-----|---|---|---|
| | <p>Statement of Profit or Loss (Extract)</p> <ul style="list-style-type: none"> • Revenue \$2,400,000 • Cost of sales \$1,500,000 • Distribution expenses \$220,000 • Administrative expenses \$180,000 • Operating profit before interest and tax(PBIT) \$250,000 • Interest on long-term loan notes \$45,000 • Preference dividend paid \$14,000 <p>Required:</p> <p>(a) Calculate the equity gearing ratio. (4 marks)</p> <p>(b) Calculate the total (capital) gearing ratio. (4 marks)</p> <p>(c) Calculate the interest gearing ratio. (2 marks)</p> | | |
| 13. | <p>A) Bright Spark Electronics Ltd is a medium-sized manufacturer of smart home devices. Since its incorporation eight years ago, the company has been financed entirely through ordinary share capital and retained earnings. The board has deliberately avoided borrowing, believing this reduces financial risk. Demand for smart home products has recently grown significantly. Management is considering expanding production capacity by investing \$5 million in automated machinery. The finance director has suggested funding the expansion using a long-term bank loan at a fixed interest rate.</p> <p>The executive directors are uncertain about the implications of taking on debt. During a recent board meeting, some directors argued that the company already faces “high gearing” because it has substantial fixed production costs due to its automated manufacturing process. Others questioned whether taking on debt would increase the company’s risk, especially since the industry is competitive and sales volumes can fluctuate depending on consumer trends and economic conditions.</p> <p>Recent financial information shows:</p> <ul style="list-style-type: none"> • Sales revenue has been volatile over the last three years. • The company has high fixed manufacturing overheads. • Operating profit margins vary significantly when sales change. • The company currently has no interest payments. • Competitors in the industry typically operate with moderate levels of debt financing. <p>The directors have asked you to clarify the issues before they make a final decision.</p> <p>Required</p> <p>a) Explain the difference between operational gearing and financial gearing, using examples from the case to support your answer. (4 marks)</p> <p>(b) Discuss the potential problems that Bright Spark electronics Ltd may face if it introduces high financial gearing. (6 marks)</p> <p>Use information from the case to support your answer.</p> <p style="text-align: center;">(OR)</p> | 3 | 3 |

| | | | |
|-----|--|---|---|
| | <p>B) Omega Soft Ltd is a listed company operating in the software development industry.</p> <p>The following events have recently occurred:</p> <ol style="list-style-type: none"> The government introduces stricter data protection regulations affecting all technology firms. Omega Soft's lead programmer resigns unexpectedly during a major project. A global economic slowdown reduces IT spending by businesses worldwide. Omega Soft's newly launched app contains critical bugs, leading to customer complaints. Interest rates increase significantly, raising borrowing costs across the economy. <p>For each factor above, state whether it is systematic risk or unsystematic risk, and briefly justify your answer.</p> | | |
| 14. | <p>A) Green Wind Ltd is a windmill manufacturing company considering a valuation of the business. The company expects to generate constant annual operating cash flows of \$2,400,000.</p> <p>The following financial information is available:</p> <p>Statement of Financial Position (<i>Extract – Market Values</i>)</p> <ul style="list-style-type: none"> • Ordinary share capital \$10,000,000 • Share premium \$2,000,000 • Retained earnings \$3,000,000 • Market value of equity \$12,000,000 • 6% Long-term loan notes \$8,000,000 • Trade payables \$1,200,000 • Bank overdraft \$600,000 • Inventory \$2,500,000 • Property, plant and equipment \$18,000,000 <p>Additional Information</p> <ul style="list-style-type: none"> • Risk-free rate (R_f) = 4% • Market risk premium = 6% • Equity beta = 1.2 • Cost of debt (K_d) = 5% • Corporate tax rate = 30% • Dividend paid last year = \$900,000 • Depreciation expense = \$1,100,000 <p>Required:</p> <p>(a) Calculate the future cash flows available to the firm after tax. Future Cash Flows = Operating Cash Flows \times (1 – Tax Rate) (2 marks)</p> <p>(b) Calculate: (i) Cost of equity (K_e) using CAPM (ii) WACC $K_e = R_f + \beta$ (Market Risk Premium) WACC = $(E/V) \times K_e + (D/V) \times K_d \times (1 - \text{Tax Rate})$ (5 marks)</p> <p>(c) Calculate the market value (MV) of the company. MV of company = Future Cash Flows / WACC. (3 marks)</p> | 4 | 4 |

| | <p style="text-align: center;">(OR)</p> <p>B) Stream Flix Ltd is an online movie streaming platform listed on the stock exchange. The company's dividend history is shown below:</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Year</th> <th style="text-align: center;">Dividend per share (\$)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2021</td> <td style="text-align: center;">1.20</td> </tr> <tr> <td style="text-align: center;">2022</td> <td style="text-align: center;">1.35</td> </tr> <tr> <td style="text-align: center;">2023</td> <td style="text-align: center;">1.55</td> </tr> <tr> <td style="text-align: center;">2024</td> <td style="text-align: center;">1.80</td> </tr> <tr> <td style="text-align: center;">2025</td> <td style="text-align: center;">2.10</td> </tr> </tbody> </table> <p>Assume that dividends have grown at a constant rate over this period. The current market price of Stream Flix Ltd's shares is \$28.</p> <p>Required:</p> <p>(a) Calculate the annual dividend growth rate. (4 marks)</p> <p>(b) Calculate the cost of equity (Ke) using the Dividend Growth Model. (4 marks)</p> <p>(c) State TWO weaknesses of the Dividend Growth Model. (2 marks)</p> | Year | Dividend per share (\$) | 2021 | 1.20 | 2022 | 1.35 | 2023 | 1.55 | 2024 | 1.80 | 2025 | 2.10 | | |
|------|---|------|-------------------------|------|------|------|------|------|------|------|------|------|------|--|--|
| Year | Dividend per share (\$) | | | | | | | | | | | | | | |
| 2021 | 1.20 | | | | | | | | | | | | | | |
| 2022 | 1.35 | | | | | | | | | | | | | | |
| 2023 | 1.55 | | | | | | | | | | | | | | |
| 2024 | 1.80 | | | | | | | | | | | | | | |
| 2025 | 2.10 | | | | | | | | | | | | | | |
| 15. | <p>A) Global Trade Imports Ltd is a medium-sized import/export company based in Singapore. The company imports electronic components from Japan (priced in Japanese Yen) and exports finished consumer goods to the United States (priced in US Dollars).</p> <p>Over the past year, Global Trade has experienced significant losses due to fluctuations in exchange rates. The Japanese Yen has strengthened against the Singapore Dollar, and at the same time, the US Dollar has weakened, affecting the value of imports and exports when converted in Singaporean Dollar.</p> <p>The finance director has expressed concern about the increasing volatility in exchange rates but admits that the company has not actively managed its foreign exchange exposure. Senior management are unsure about the importance of hedging and whether it is necessary for the company.</p> <p>You have been asked to advise the board.</p> <p>Required</p> <p>(a) Explain what is meant by foreign exchange risk and why it arises. (3 marks)</p> <p>(b) State the preferred movement of a currency for:</p> <p style="margin-left: 20px;">(i) an exporter</p> <p style="margin-left: 20px;">(ii) an importer</p> <p style="margin-left: 40px;">Explain your answers. (4 marks)</p> <p>(c) Explain what is meant by hedging and how it could help Global Trade Imports Ltd. (3 marks)</p> <p style="text-align: center;">(Or)</p> | 4 | 4 | | | | | | | | | | | | |

| | | | |
|--------------|--|----------------------|--------------|
| | <p>B) Greenfield International School is planning to modernise its classrooms by installing interactive smart boards in all Grade 6–12 classrooms. The total cost of the project is estimated at \$450,000.</p> <p>Since the school does not have sufficient reserves, the Board of Governors is considering taking a 5-year bank loan to finance the project. The bank has offered two alternatives:</p> <ul style="list-style-type: none"> • Option 1: A fixed interest rate loan at 9% per annum for 5 years. • Option 2: A floating interest rate loan at <i>Prime Rate</i> + 2%. The current Prime Rate is 6%. <p>Some board members prefer the fixed rate because repayments will be predictable. Others prefer the floating rate because the initial rate (currently 8%) is lower than the fixed rate. The school’s finance committee is also concerned about possible increases in interest rates due to rising inflation and central bank policy changes.</p> <p>Required</p> <p>a) Distinguish clearly between a fixed interest rate and a floating interest rate, using examples from the case. (4 marks)</p> <p>b) Explain what is meant by interest rate risk and discuss how it could affect Greenfield International School if it chooses the floating rate loan. (3 marks)</p> <p>c) List and briefly explain three determinants of interest rates in the economy. (3 marks)</p> | | |
| | SECTION D | | |
| Q.NO. | Answer any one question: | (1 x 15 = 15) | CO KL |
| 16. | <p>The following data relate to Naga Ltd.</p> <p>Earnings per share – Rs. 20</p> <p>Capitalisation rate – 10%</p> <p>Retention ratio – 50%</p> <p>Determine the price of the share under Walter’s model and Gordon’s model if the internal rate of return is (a) 10%; (b) 15%; (c) 5%</p> | 5 | 5 |
| 17. | <p>Sunrise Manufacturing Ltd buys an asset for \$26,000. It will be used on a project for three years, after which it will be disposed of on the final day of year 3 for \$12,500.</p> <p>Tax is payable at 30%. Tax allowable depreciation is available at 25% reducing balance, and a balancing allowance or charge should be calculated when the asset is sold. Net trading income from the project is \$16,000 per year, and the cost of capital is 8%.</p> <p>Required:</p> <p>Forecast the free cash flows of the project and determine whether it is worthwhile using the NPV method.</p> | 5 | 5 |

| Q.NO. | SECTION E Compulsory Case Study (1 x 15 = 15) | CO | KL |
|-------|--|----|----|
| 18. | <p>Fromage Delacroix SA is a family-owned cheese exporter based in Lyon, France, specialising in premium Brie and Camembert. The company has recently expanded into the United States market, where demand for European speciality cheeses continues to grow.</p> <p>Transaction 1: Foreign Currency Receipt</p> <p>Fromage Delacroix has secured a large order from a major US supermarket chain. The goods have already been dispatched, and payment of US\$250,000 is due in three months' time.</p> <p>The current spot exchange rate is quoted as: €0.9100 – €0.9200 per US\$</p> <p>The finance director reminds the team that the bank applies a bid–offer spread. As Fromage Delacroix is selling US dollars, it must use the bank's buying rate (bid rate) when converting the receipt into euros.</p> <p>The treasurer believes that the US dollar may depreciate by 4% against the euro over the next three months due to expected changes in US interest rates and inflation.</p> <p>Transaction 2: Planned Loan for Expansion</p> <p>Due to strong overseas demand, Fromage Delacroix is planning to expand its production facilities. The company intends to take out a €12 million loan in six months' time for a period of two months to finance new equipment purchases. To hedge against rising interest rates, the company is considering entering into a:</p> <p>6–8 Forward Rate Agreement (FRA) quoted at 4%</p> <p>Required:</p> <p>(a) Calculate the amount in euros that Fromage Delacroix would receive today using the spot rate and the appropriate side of the spread. (3 marks)</p> <p>(b) Calculate the impact on the euro receipts if the US dollar depreciates by 4% as predicted. Advise whether the company should lead or lag the receipt and briefly justify your answer. (4 marks)</p> <p>(c) Determine the effective borrowing cost if, in six months' time, the market interest rate is 5%. (3 marks)</p> | 5 | 6 |
