



**STRATHMORE UNIVERSITY BUSINESS SCHOOL**  
**BACHELOR OF FINANCIAL SERVICES**  
**AMS 4201: INVESTMENT BANKING**

**END OF SEMESTER EXAMINATION**

**DATE: 14<sup>th</sup> December 2023**

**Time: 10:30-12:30**

**Instructions:**

Answer Question **ONE (COMPULSORY)** and any other **TWO** questions.

**QUESTION ONE**

**(30 Marks)**

a). Initial Public Offering (IPO) serves as a mechanism for companies to transition from private ownership to the public sphere, enabling them to raise capital from the public markets. Provide a case study of a notable IPO in Kenya and evaluate its success. **(10 marks)**

b) Define the term "Chinese wall" in the context of investment banking and its effectiveness in maintaining ethical and legal standards within a financial institution? **(3 marks)**

c) You are an Investment Banker working at SIB Bank. Your team is evaluating an investment opportunity in Ai Power ltd, a technology firm known for its innovative products and strong growth potential. As part of the due diligence process, you have been tasked with performing a discounted cash flow (DCF) valuation to determine the enterprise value and implied share price of Ai Power ltd. The company has provided their projected EBITDA and working capital for the next five years as follows.

Year	EBITDA	Working capital	Depreciation
1	2,000,000	100,000	200,000
2	2,500,000	120,000	200,000
3	3,000,000	150,000	200,000
4	3,500,000	180,000	200,000
5	4,000,000	200,000	200,000

Additionally, the company's management has shared the Weighted Average Cost of Capital (WACC), the Terminal Growth Rate, and the Terminal Value Multiple they believe are appropriate for the business.

- Weighted Average Cost of Capital (WACC): 10%
- Terminal Growth Rate: 3%
- Terminal Value Multiple: 15x
- 2,000,000 outstanding shares

Assume that the company's free cash flows to the firm are expected to stabilize after Year 5. Using the provided financials and assumptions, perform a discounted cash flow (DCF) valuation for Ai Power Ltd: **Note:** Assume the firm is unlevered and the tax rate is 25%.

**Required:**

- 1) Calculate the Free Cash Flow to Firm (FCFF) for each year. **(8 marks)**
- 2) Compute the Present Value of FCFF for each year. **(3 marks)**
- 3) Determine the Terminal Value using the perpetuity and Multiple formula. **(3 marks)**
- 4) Calculate the Enterprise Value by (use average Terminal value). **(2 marks)**
- 5) Calculate the implied share price of Ai Power Ltd. **(1 marks)**

**QUESTION TWO (20 Marks)**

a) Mergers and Acquisitions (M&A) are intricate transactions encompassing the consolidation or acquisition of companies to create a new entity or absorb one into another. Successfully navigating these complexities demands expert guidance and thorough understanding of the target company. Provide a case study of a recent M&A deal in the Kenyan banking sector and an evaluate its success. **(8 marks)**

b) The success of a financial model is heavily reliant on assumptions and forecasting accuracy. Discuss factors that contribute to a successful financial model in investment banking, with a focus **(6 marks)**

c) What are the key financial metrics used to evaluate the attractiveness of an LBO opportunity? Provide an explanation for each metric and its significance in the LBO analysis. **(6 marks)**

**QUESTION THREE (20 Marks)**

a) In the context of an Initial Public Offering (IPO) in Kenya, discuss how the offering price is determined and the factors that influence this crucial pricing decision. **(7 marks)**

b) Madaraka Ltd, an established and prosperous manufacturing company, is strategically considering a leveraged buyout (LBO) as a potential path to further growth and value creation. An LBO involves acquiring a company primarily using borrowed funds, often aiming to restructure the company and, in turn, enhance its overall value. In this case, Madaraka Ltd is evaluating the

possibility of an LBO based on its robust financial performance. The company's EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization) for the last fiscal year stood at a substantial \$40 million, reflecting its financial stability and potential for generating future cash flows. Additionally, Madaraka Ltd foresees a steady growth rate of 5% per year for the next five years, which is a positive outlook for the company's financial future. As part of the LBO strategy, Madaraka Ltd is aiming for a debt-to-equity ratio of 70:30, signifying the intended capital structure for the potential acquisition. Moreover, considering the prevailing tax rate of 30%, understanding the financial implications and feasibility of this LBO approach is essential for Madaraka Ltd to make informed decisions in its pursuit of growth and enhanced market positioning.

**Required:**

- a). Calculate the Free Cash Flow to Firm (FCFF) for each year. **(8 marks)**
- b). Calculate the leveraged IRR for the LBO investment using the provided cash flows and equity investment. **(5 marks)**

**QUESTION FOUR (20 Marks)**

a) Using relevant examples, describe four ethical dilemmas that investment bankers face when advising clients on complex financial transactions. How can conflicts of interest be mitigated in such situations? **(8 marks)**

b) ABC Ltd, a thriving commercial enterprise operating in a competitive market, is diligently preparing to forecast its financials for the upcoming year. Understanding the financial dynamics is crucial for strategic planning and effective decision-making. The company's financial records from the last fiscal year serve as the foundation for this projection. Given the dynamics of the market and the company's growth trajectory, ABC Ltd is aiming to estimate its free cash flow, a pivotal financial metric, for the next year. The company's financial information for the last fiscal year is as follows:

- ✓ Net Income: \$10 million
- ✓ Depreciation and Amortization: \$2 million
- ✓ Changes in Working Capital: -\$1 million
- ✓ Capital Expenditures: \$3 million
- ✓ Interest Expense: \$2 million
- ✓ Tax Rate: 25%

- 1) Calculate the operating cash flow (OCF) **(5 marks)**
- 2). Calculate the free cash flow to the firm (FCFF) **(5 marks)**
- 3). Calculate the free cash flow to equity (FCFE) using the FCFF **(2 marks)**

**QUESTION FIVE****(20 Marks)**

- a). Investment banking has been experiencing significant growth and evolution. Examine its significance and evolution within the context of a developing capital market. **(5 marks)**
- b). Using a Kenyan example, discuss the pivotal role investment banks play in facilitating equity and debt offerings for companies seeking capital through the financial markets **(6 marks)**
- c). Explore the difference between loan syndication and asset-backed securities within the domain of Capital Markets Services in Investment Banking. **(3 Marks)**
- d) In the realm of Investment banking, determining the value of a company is a pivotal task. This process involves the application of various methods aimed at estimating its worth. Discuss any three methods of valuing a company and their significance in today's dynamic business environment. **(6 marks)**