



**STRATHMORE BUSINESS SCHOOL**  
**BACHELOR OF SCIENCE IN SUPPLY CHAIN AND OPERATIONS**  
**MANAGEMENT**

**END OF SEMESTER EXAM**

**SCM 2104: SUPPLY CHAIN FINANCE**

**DATE:** Thursday, 5<sup>th</sup> December 2024

**TIME:** 13:00 – 15:00

**Instructions**

1. This examination consists of FIVE questions.
2. Answer Question ONE (COMPULSORY) and any other TWO questions.

**QUESTION ONE**

**30 MARKS**

Alicia Ltd is a mid-sized manufacturer of consumer electronics, with annual revenues of Kes .200 million. Despite strong sales and market growth, the company faces significant working capital challenges due to long production cycles and extended payment terms with its customers. On average, customers pay invoices in 60-90 days, while XYZ must pay suppliers within 30 days. The supply chain and the fiancé team are currently exploring options of having to deal with the existing and potential cashflow issues in the company. The company is considering using factoring and its variations to stabilise the situation.

- a) What are the working capital challenges at Alicia Ltd? **(6 Marks)**
- b) Explain how the company can use factoring and its variations in stabilising the situation. **(8 Marks)**
- c) Critically evaluate **Three** benefits and **Three** potential challenges associated with adopting factoring. **(6 Marks)**
- d) Differentiate between the physical supply chain and the financial supply chain. **(3 Marks)**
- e) Explain the **Five** costs associated with holding excessive inventory in the organization **(5 Marks)**
- f) Financing the supply chain can either be through debt or equity finance. Explain **Two** limitations associated with using equity finance. **(2 Marks)**

**QUESTION TWO**

**20 MARKS**

- a) The global credit crisis of 2008 forced trade finance seekers to look for alternatives as liquidity in supply chains became a major concern for businesses. As a result, SCF

assets grew by 17% between 2009 and 2017, driven by five key trends. Critically evaluate the **FIVE** trends associated with growth in SCF. **(10 Marks)**

- b) Adoption of a supply chain requires putting in place good practices. Explain **Five** good practices that firms should consider in the SCF adoption process. **(10 Marks)**

### QUESTION THREE

**20 MARKS**

ABC Ltd requires 4,000 units of a component in its manufacturing process in the coming year. The items are available locally and the lead time is one week. Each order costs Sh.50 to prepare and process while the holding cost is Shs.40 per unit per year.

#### Required:

- i. How many units should be ordered each time an order is placed to minimize inventory costs? **(3 Marks)**
- ii. What is the reorder level? (Assume 360 days in a year) **(2 Marks)**
- iii. How many orders will be placed per year? **(2 Marks)**
- iv. Distinguish positive working capital from negative working capital **(4 Marks)**
- v. With the help of well-labeled diagrams, discuss the three main approaches to working capital finance **(9 Marks)**

### QUESTION FOUR

**20 MARKS**

- a) Discuss the Separation property theory, static trade-off theory, pecking order theory bargaining theory of the capital structure and how they influence the financial decisions along the supply chain. **(10 Marks)**
- b) Explain the **Three** main flows in a supply chain **(3 Marks)**
- c) A company must maintain a minimum cash balance of Sh. 12,000 and has a daily variance of cash flows of Sh. 7,890,000. The interest rate is equal to 0.055% per day and the transaction cost for each sale or purchase of securities is Sh. 25.

#### Required:

Compute the spread, return point, and the upper limit **(7 Marks)**

**QUESTION FIVE****20 MARKS**

- a) Giving examples, discuss **four** reasons why sustainable supply chain finance is important **(8 Marks)**
- b) How Supply Chain Finance Can Enhance ESG Initiatives **(4 Marks)**
- c) The following information relates to the financing information for Waumini Limited, a manufacturing firm that was scouting for new financing options for its project
- i. Waumini has 1,000,000 outstanding common shares. The current stock price is Kes.50 per share. The company paid dividends of Kes 2 per share last year. The expected growth rate of dividends is 5%.
  - ii. Waumini has issued a 10-year corporate bond with a face value of Kes 1,000 and an annual coupon rate of 5%. The current market price of the bond is Kes950.
  - iii. Waumini plans to use 60% equity and 40% debt to finance the expansion project

**Required.**

Determine the cost of equity, cost of debt, and cost of capital for Waumini. **(8 Marks)**