

## STRATHMORE BUSINESS SCHOOL BACHELOR OF SUPPLY CHAIN AND OPERATIONS MANAGEMENT END OF SEMESTER EXAMINATION SCM 2104: SUPPLY CHAIN FINANCE

**Date**: Tuesday, 2<sup>nd</sup> August 2022 **Time:** 2 Hours

## **Instructions**

1. This examination consists of **FIVE** questions.

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

QUESTION 1 (30Marks)

a) Discuss how supply chain structure, timing, and source of uncertainty influence the decision by firms to integrate operations with finance

(6 Marks)

b) Critically evaluate the difference between the physical supply chain and the financial supply chain

(4 Marks)

c) XYZ limited maintains a minimum cash balance of Sh. 20,000 and has a daily variance of cash flows of Sh. 6,250,000. Interest rate is equal to 0.025% per day and transaction cost for each sale of purchase of securities is Sh. 20. Compute the return point, the upper limit and average cash balance and present them on a well labelled diagram

(6 Marks)

d) With the help of a well-labeled diagram, discuss how receivables discounting functions as a financial instrument along the supply chain

(6 Marks)

e) LL Ltd requires 4,000 units of a component in its manufacturing process in the coming year which costs Sh.100 each. The items are available locally and the lead time in one week. Each order costs Sh.100 to prepare and process while the holding cost is Shs.40 per unit per year. How many units should be ordered each time an order is placed to minimize inventory costs? What is the reorder level? (Assume 360 days in an year) How many orders will be placed per year? And the total relevant costs

(6 Marks)

f). Explain the three main flows through the supply chain

(2 Marks)

Question 2 (20 Marks)

a) Giving examples, discuss the difference between operational and financial flexibility

(4Marks)

- b) Discuss the benefits of supply chain finance to financial institutions, buyers and suppliers (12 Marks)
- c) Discuss two risks associated with inventory financing (4 Marks)

QUESTION 3 (20 Marks)

- a) Discuss how the following theories; Separation property, static trade-off pecking order bargaining theory of the capital structure influence the financial decisions along the supply chain
   (10 Marks)
- b) Financial risk is one of the most important aspects of supply chain finance, distinguish, giving examples of exogenous from endogenous financial risk in the supply chain

(4 Marks)

c) Supply chain finance decisions influence the overall financial performance. Discuss how supply chain finance decisions affect the inventory days, payable days, and profitability of the organization (6 Marks)

QUESTION 4 20 Marks

a) Discuss the concept of sustainable supply chain and how firms can incorporate sustainability in the supply chain (4 Marks)

- b) Discuss five benefits of incorporating sustainability in the supply chain (10 Marks)
- c) With help of a well labelled diagram differentiate aggressive approach from the conservative approach of working capital finance (6 Marks)

QUESTION 5 20 Marks

The following information reflects an extract of the financial performance of Paraclete Ltd

	Kes 000	Kes 000
Sales Revenue		920
Cost of sales		
Opening inventories	242	
Purchases	668	
	910	
Closing Inventories	(266)	(644)
Gross Profit		276
Current Assets		
Inventories		266
Trade Receivables		264
Cash		24

All purchases and sales are on credit. There has been no change in the level of trade receivables or payables over the period.

The following information relates to overall industry performance for the period under investigation

Ratio	Industry Average(s)	Main Competitor
Operating cash cycle	40 days	30 days
Trade receivable days	120days	100 days
Inventory turnover days	60 days	60 days
Trade payable days	140 days	130 days

Businesses in the industry are reviewing options on how they can reduce the inventory turnover days as well as the trade receivable days and are considering the option of joining a supply chain finance program.

## Required

- a) Calculate the length of the OCC for the business and comment (8 Marks)
- b) What options does the business have if it wants to reduce the Operating Cash cycle? (4 Marks)
- c) Are the businesses in the industry justified in their quest to reduce the inventory and trade receivable days? What options do they have at their disposal if they have to reduce the inventory turnover and trade receivable days? (8 Marks)