



**STRATHMORE UNIVERSITY BUSINESS SCHOOL
BACHELOR OF SCIENCE IN SUPPLY CHAIN & OPERATIONS MANAGEMENT
END OF SEMESTER EXAMINATION
SCM 2201: WAREHOUSING AND INVENTORY MANAGEMENT**

DATE: 13th December 2023

Time: 15:30-17:30

Instructions

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

QUESTION ONE (30 MARKS)

- a) Outline **FOUR** costs associated with holding inventory in a warehouse. **(4 marks)**
- b) Using an example, explain the postponement inventory management strategy. **(4 marks)**
- c) Discuss **THREE** main reasons why it is important to be able to trace the origin of an inventory item. **(6 marks)**
- d) Explain **FOUR** ways effective warehouse management can help improve customer service. **(8 marks)**
- e) Differentiate between manufacturing stock and MRO stock giving **TWO** categories of goods included in each. **(8 marks)**

QUESTION TWO (20 MARKS)

- a) Explain the concept of “Cross docking” in your own words highlighting **TWO** of its benefits. **(4 marks)**
- b) Discuss the following legal principles that apply when insuring for losses in transportation.
 - a. Ownership of goods
 - b. Force Majeure
 - c. Negligence**(6 marks)**
- c) Describe the stages of an inventory cycle. **(10 marks)**

QUESTION THREE (20 MARKS)

- a) Outline **FOUR** principles of efficient and safe material handling activities in a warehouse. **(4 marks)**
- b) You are the officer in charge of packaging among other responsibilities. Explain **FIVE** factors you would consider when selecting packaging materials. **(10 marks)**

- c) From the following particulars, calculate the Economic Order Quantity (EOQ): -
- Annual requirements – 1,600 units
 - Cost of Materials per unit - \$ 40
 - Cost of placing and receiving one order - \$50
 - Annual carrying cost for inventory value – 10%
- (6 marks)**

QUESTION FOUR (20 MARKS)

- a) Using examples, discuss **FIVE** ways technology can improve the warehouse operations. **(10 marks)**
- b) Assume that at the end of June the amount in inventory of item 54321 was zero. On 1 July, 200 units were received for which we paid \$100 per unit. A further 200 units were received on 1 October for which we paid \$150 per unit. Issues were made of 100 units on 1 August, 60 units on 1st September and 100 units on 1 November. Replacement value of item 54321 is \$160 and Standard cost of item 54321 is \$130.
- Task
Calculate the value of the Issue on 1 November using the following stock valuation methods.
- a. First In First Out (FIFO)
 - b. Last In First Out (LIFO)
 - c. Weighted average costing
 - d. Standard costing
 - e. Replacement costing

(10 marks)

QUESTION FIVE (20 MARKS)

- a) Illustrate the procedure of receiving inventory in a warehouse. **(4 marks)**
- b) Your firm has acquired one acre of land in Syokimau, Machakos County. The board of directors have decided to construct a warehouse therein. As a warehousing expert, examine **FOUR** kinds of information required when designing the warehouse. **(8 marks)**
- c) As a warehouse manager, you have noted that the picking has become very slow and therefore customers have to wait for longer periods. Elaborate to the warehouse officers, **FOUR** types of information required by an order picker to successfully complete their task. **(8 marks)**