



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF BUSINESS & ECONOMICS**

**UNIVERSITY EXAMINATION FOR BACHELOR DEGREE LOGISTICS AND  
SUPPLY CHAIN MANAGEMENT**

**3RD YEAR 1ST SEMESTER 2022/2023 ACADEMIC YEAR**

**MAIN CAMPUS**

**COURSE CODE: BEB 1305**

**COURSE TITLE: INVENTORY MANAGEMENT**

**EXAM VENUE:**

**DATE: 13/12/2022**

**EXAM SESSION: 9.00-11.00AM**

**DURATION: 2 HOURS**

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**INSTRUCTIONS**

- 1. Answer QUESTION ONE and any other TWO questions**
- 2. Candidates are advised not to write on the question paper**

## QUESTION ONE

A.) A company requires 3,500 units of a component in its manufacturing process in the coming year. The items takes 3 weeks to be delivered. Each order costs sh. 80 to prepare and process while the holding cost is sh. 40 per unit per year plus 9 % of ordering cost. Required:

i) How many units should be ordered each time an order is placed to minimize inventory costs? (4 marks)

ii) What is the reorder level? (3 marks)

iii) How many orders will be placed per year?( 3 marks)

B.) Stocktaking plays a very crucial role in inventory management. Describe the factors to be taken into consideration before and after the actual activity. ( 10 marks)

C.) Describe five costs associated with ordering of materials. ( 10 marks)

## QUESTION TWO

A. ) With the help of graphical illustration, describe how ABC Classification technique operates. ( 10 marks)

B. Lost or Untracked customers is one of the symptoms of poor inventory management. Elaborate. ( 5 marks)

C. Differentiate between Reserve stock and Safety stock. ( 5 marks)

## QUESTION THREE

A.) Items that have overstayed their shelf life should be removed from the stores because as long as they are stored storage cost is incurred. Describe any five ways of handling dead stock. ( 5 marks)

B.) Describe the two approaches to stock replenishment. ( 5 marks)

C.) Discuss five emerging trends in inventory management.( 10 marks)

## QUESTION FOUR

A.) Given;

Lead time-5 days

Daily usage-200 units

Safety stock- 7 days usage

Maximum stock-3800 units

Minimum stock-1800 units

Required.

1. Find ROP ( 3 marks)
2. Find ROQ ( 3 marks)
3. Show graphical illustration (4 marks)

**B.)** Your friend is planning to start a business of retailing soft drinks. As a professional, advise him on the metrics to use in performance evaluation. ( 10 marks)

#### **QUESTION FIVE**

A.) Inventory costs if not well managed can negatively impact on supply chain performance. Discuss the strategies of optimizing inventory costs. ( 10 marks)

B.) Explain why it is necessary to keep inventory for customer-focused companies.( 10 marks)