



# TECHNICAL UNIVERSITY OF MOMBASA

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SCHOOL of Applied and Health Sciences

Department of Pure & Applied Sciences

**UNIVERSITY EXAMINATION FOR**

**DIPLOMA IN ANALYTICAL CHEMISTRY**

**DIPLOMA IN SCIENCE LABORATORY TECHNOLOGY**

Ach 2206 LABORATORY MANAGEMENT (DAC 23S/DSLT 23S)

END OF SEMESTER EXAMINATION (Ordinary)

**SERIES:DEC 2024**

**TIME:2HOURS**

**DATE : / /2024**

**Instructions to Candidates**

You should have the following for this examination

*Answer Booklet, examination pass and student ID*

This paper consists of **five** questions. Attempt question ONE (Compulsory) and any other TWO questions.

**Do not write on the question paper.**

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|--|---------|
| a) (i) Name activities involved when sourcing for suppliers      | 2 mark  |
| (ii) State the importance of preventive maintenance of equipment | 3 marks |
| b) (i) Differentiate between list price and selling price        | 2 marks |
| (ii) Define the term tender period                               | 1 mark  |
| c) State FOUR benefits of preventive maintenance                 | 4 marks |
| d) (i) State THREE advantages of delivery note                   | 3 marks |
| (ii) State the purpose of a proforma invoice                     | 1 mark  |
| e) (i) List THREE types of inventory                             | 3 marks |
| (ii) Define the term outsourcing                                 | 1 mark  |
| f) (i) State TWO advantages of using invoice software            | 2 marks |
| (ii) Explain the main objectives of strategic sourcing           | 2 marks |

- g) (i) State THREE factors that influence purchasing 3 marks  
(ii) Define the term credit note 1 mark  
h) List the benefits of calibration of laboratory equipment 2 marks

**Question TWO**

- a) Discuss FIVE types of suppliers 5 marks  
b) List disadvantages of centralized procurement 5 marks  
c) Discuss functions of a store 5 marks

**Question THREE**

- a) Discuss restricted tendering process 6 marks  
b) Explain various store keeping objectives 6 marks  
c) Explain factors which leads the department to reject delivery 3 marks

**Question FOUR**

- a) Discuss different types of procurement a business can undertake 6 marks  
b) Describe the functions of an invoice 6 marks  
c) Explain the benefits of blanket purchasing order 3 marks

**Question FIVE**

- a) Discuss general laboratory user equipment maintenance 4 marks  
b) Explain characteristics of a departmental stores 5 marks  
c) Distinguish between procurement and purchasing 6 marks

**ACH 2206 Laboratory Management**

**Lecturer:** mwirigi m'twaruchiu mtwaruchiumwirigi@tum.ac.ke 0721-648461

**Meetings:** Tuesday 7: 00 a.m – 10:00 a.m

**OBJECTIVES:** Describe the purchasing and receiving procedures, Explain the importance of controlling and preservation of materials, Perform general laboratory records, Care for laboratory equipments and apparatus.

**Assessment:** Assignment 5%, Tests 15%, Practicals 20%, Examination 60%.

**COURSE CONTENT:**

Material control: Sources of Information; Catalogues, Tender, Price lists, Quotations, Proforma invoice. Purchasing Procedure; Factors affecting purchase, Departmental purchase system, Centralized purchase system. Receiving Procedure; Types and main features of Stores; Functions of a Store Keeper; Qualities and duties. Store documents; Inventory, Order form, Delivery note, Invoice, Debit note, Credit note. Control of Stock levels. Security and Protection of materials. Laboratory records: Filing Arrangement, Names of materials, Filing control procedure. Laboratory inspection and maintenance: Need for Inspection and Maintenance in a Laboratory; Inspection Areas, Preventive Maintenance, Outline Maintenance, Maintenance Schedule, Servicing.

WEEK	TOPIC	DETAILS
2	Material control	<ul style="list-style-type: none"> <li>-Information regarding the potential suppliers</li> <li>-Types of suppliers</li> <li>-Strategic sourcing</li> <li>- Types catalogue</li> <li>-Price list</li> <li>-Tendering processes</li> <li>-Types of tender</li> </ul>
3	Quotation and purchase	<ul style="list-style-type: none"> <li>-Quotation in purchasing</li> <li>-Difference between a quotation and an estimate</li> <li>-Proforma invoice</li> <li>-Purchasing procedure</li> <li>-Definition of procurement</li> <li>-Types of procurement</li> <li>-procedure for purchasing materials</li> <li>-Factors That Influence Purchase Decisions</li> </ul>
4	<i>Centralized Purchasing</i>	<ul style="list-style-type: none"> <li>-Define centralized purchasing</li> <li>-Benefits of centralized procurement</li> <li>-Advantages and disadvantages of centralized procurement</li> </ul>
5	C. A .T-I	
6	Policy & Procedures concerning the receipt of Purchase Goods	<ul style="list-style-type: none"> <li>-Receiving procedure</li> <li>- receipt of goods purchased</li> <li>-Inspection of a shipment</li> <li>-Determining acceptance of goods</li> <li>-</li> </ul>
7	Departmental stores	<ul style="list-style-type: none"> <li>-Features of departmental store</li> <li>-Characteristics of departmental store</li> <li>-Store keeping</li> <li>-Functions of a store</li> <li>-Duties and responsibilities of a manager</li> <li>- Duties and responsibilities of a store keeper</li> </ul>

		- Duties and responsibilities of computer operator
8	Store documents	Types of inventories-Category records, Vendor records, Item records - Functions of inventory control -Lab inventory process -Order form -Delivery note -Invoice -Debit note -Credit note
9	Credit note	-when to issue a credit note -Information should a credit memo include -Credit memo in accounting -Credit memos from banks -online accounting software
10	Stock control and inventory	-Stock control methods -Keeping track manually -Keeping track using computer software -Radio Frequency Identification (RFID) for inventory control -Stock security- Control the quality of stock - Stock control administration
11	C .A .T .-II	
12	Laboratory Equipment Care and Maintenance	- General cleaning -Calibration of lab equipment -Repair of lab, equipment - General lab equipment maintenance - Types of preventive maintenance - Benefits of Preventive Maintenance - Disadvantages of Preventive Maintenance
13	„	-Laboratory safety symbols -Cost of preventive maintenance -Avoidance of too much preventive maintenance -Designing a preventive maintenance program -Preventive maintenance software help
14	Revision	

