



TECHNICAL UNIVERSITY OF MOMBASA

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 |

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| 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

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| 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

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| 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

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| 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

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| 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

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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	-Information regarding the potential suppliers -Types of suppliers -Strategic sourcing - Types catalogue -Price list -Tendering processes -Types of tender
3	Quotation and purchase	-Quotation in purchasing -Difference between a quotation and an estimate -Proforma invoice -Purchasing procedure -Definition of procurement -Types of procurement -procedure for purchasing materials -Factors That Influence Purchase Decisions
4	<i>Centralized Purchasing</i>	-Define centralized purchasing -Benefits of centralized procurement -Advantages and disadvantages of centralized procurement
5	C. A .T-I	
6	Policy & Procedures concerning the receipt of Purchase Goods	-Receiving procedure - receipt of goods purchased -Inspection of a shipment -Determining acceptance of goods -
7	Departmental stores	-Features of departmental store -Characteristics of departmental store -Store keeping -Functions of a store -Duties and responsibilities of a manager - Duties and responsibilities of a store keeper

		- 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	

