TEVETA

Technical Education, Vocational and Entrepreneurship Training Authority

DIPLOMA IN SCIENCE LABORATORY TECHNOLOGY

LEVEL 6 YEAR 1 EXAMINATIONS

FINAL INTEGRATED SUMMATIVE EXAMINATIONS

SITTING: JULY/AUGUST 2025

SUBJECT: LABORATORY MANAGEMENT AND ETHICS

TIME: THREE (3) HOURS **TOTAL MARKS: 100**

PASS MARK: 50

INSTRUCTIONS TO CANDIDATE.

1. Write your Examination number and National Registration Card (NRC) number on the answer booklet provided. Ensure you append your signature in the space provided on the answer booklet.
2. Write the ANSWER SCRIPT SERIAL NUMBER on the examination register and on the entry slip.
3. This paper has SEVEN (7) questions. Question ONE (1) is compulsory. Answer FOUR (4) questions from the remaining SIX (6) questions.
4. Diagrams may be used where necessary to clarify your answer.
5. Cellphones and programmable calculators are not allowed in the examination room.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO

QUESTION 1 (COMPULSORY)

(a) Define 'laboratory management'. **[2 marks]**

(b) Explain the functions of the four **(4)** bench fittings that are found in a teaching laboratory. **[12 marks]**

(c) Explain three **(3)** factors that are considered when designing a laboratory facility. **[6 marks]**

TOTAL: 20 MARKS

QUESTION 2

(a) Figure 1 below shows a laboratory device.

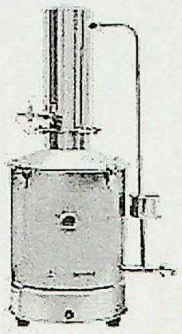


Figure 1

(i) Identify the device in figure 1. **[2 marks]**

(ii) State the importance of the device in figure 1. **[2 marks]**

(b) State four **(4)** methods used to minimize vibrations in the laboratory balance room. **[4 marks]**

(c) Mr. Mulyata owns a laboratory storage facility. Explain three **(3)** reasons laboratory storage facility is important. **[12 marks]**

TOTAL: 20 MARKS

QUESTION 3

(a) Describe the following types of stores,

(i) Control store room. **[4 marks]**

(ii) Dispensing store. **[4 marks]**

(b) Explain six **(6)** functions of a store keeper. **[12 marks]**

TOTAL: 20 MARKS

QUESTION 4

(a) Define the term 'inventory'. **[2 marks]**

(b) State the function of the following technical devices that are found in a laboratory.

(i) Laboratory computer. **[2 marks]**

(ii) Micron film. **[2 marks]**

(iii) Film projector. **[2 marks]**

(iv) Memory card. **[2 marks]**

(c) Differentiate between the duties of a leader and those of a manager. **[10 marks]**

TOTAL: 20 MARKS

QUESTION 5

(a) Explain five **(5)** functions of communication. **[10 marks]**

(b) Describe five **(5)** qualities of a good leader. **[10 marks]**

TOTAL: 20 MARKS

QUESTION 6

A laboratory is experiencing equipment malfunctions and employee complaints about cramped working conditions. Answer the following questions.

(a) Diagnose two **(2)** layout design flaws that contribute to these problems. **[4 marks]**

(b) Recommend an administrative protocol to enhance equipment maintenance procedures. **[2 marks]**

(c) State two **(2)** ethical guidelines that the laboratory manager should apply to address staff discontent and promote a positive work environment. **[4 marks]**

(d) Explain five **(5)** crucial benefits of a well-designed staffing plan in ensuring the efficient and effective operation of a laboratory. **[10 marks]**

TOTAL: 20 MARKS

QUESTION 7

(a) Outline five **(5)** good laboratory practices in a laboratory. **[5 marks]**

(b) State five **(5)** examples of improper laboratory practices. **[5 marks]**

(c) Explain five **(5)** types of confidential information. **[10 marks]**

TOTAL: 20 MARKS