TEVETA

Technical Education Vocational and Entrepreneurship Training Authority

DIPLOMA IN SCIENCE LABORATORY TECHNOLOGY

LEVEL 6 YEAR 1 EXAMINATION

FINAL INTEGRATED SUMMATIVE EXAMINATION

SITTING: APRIL / MAY 2026

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 the following terminologies:

(i) Confidentiality. **[2 marks]**

(ii) Professional ethics. **[2 marks]**

(iii) Laboratory ethics. **[2 marks]**

(iv) Laboratory storeroom. **[2 marks]**

(b) Describe six **(6)** factors to consider in the design of a laboratory store. **[12 marks]**

TOTAL: 20 MARKS

QUESTION 2

(a) Define leadership and communication in relation to an organization. **[5 marks]**

(b) State five **(5)** qualities of a Leader. **[5 marks]**

(c) Explain five **(5)** duties of a leader in an organization. **[10 marks]**

TOTAL: 20 MARKS

QUESTION 3

(a) Define administration. **[2 marks]**

(b) State four **(4)** laboratory furnitures that are found in a teaching laboratory. **[4 marks]**

(c) Indicate four **(4)** laboratory bench fittings that are essential in a research laboratory. **[4 marks]**

(d) Describe five **(5)** duties of a laboratory director. **[10 marks]**

TOTAL: 20 MARKS

QUESTION 4

(a) Laboratory equipment is an important tool in the smooth running of laboratory operations. State the use of an analytical balance device. **[2 marks]**

(b) Explain four (**4**) different uses of laboratory balance rooms in various industries. **[12 marks]**

(c) Explain the importance of the following features of a laboratory:

(i) Fume Hood. **[2 marks]**

(ii) Lighting. **[2 marks]**

(iii) Ventilation. **[2 marks]**

TOTAL: 20 MARKS

QUESTIONS 5

(a) State three **(3)** importance of the **"Customs and Exercise Act chapter 322 of the Laws of Zambia."** **[6 marks]**

(b) Describe two (**2**) features of a research laboratory facility. **[6 Marks]**

(c) With the aid of a diagram, draw a well labelled laboratory lay out. **[8 marks]**

TOTAL: 20 MARKS

QUESTION 6

Figure 1 is one of the laboratory equipment used in a teaching Laboratory. Answer the questions that follow:

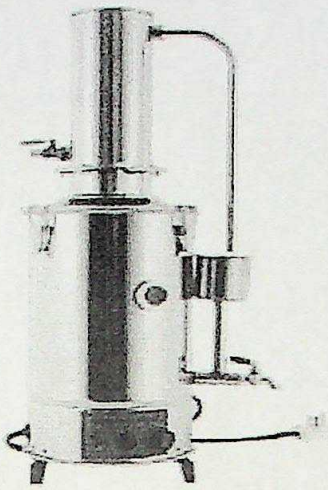


Figure 1

(a) Identify laboratory equipment indicated in figure 1. **[2 marks]**

(b) State three **(3)** types of the same equipment. **[3 marks]**

(c) Indicate two **(2)** precautions that must be adhered to while using this equipment. **[4 marks]**

(d) Describe the material produced by the equipment in figure 1. **[3 marks]**

(e) Explain four **(4)** good laboratory practices **(GLP)** that must be followed while working in a laboratory. **[8 marks]**

TOTAL: 20 MARKS

QUESTION 7

(a) Describe five **(5)** means of storing information in a laboratory. **[10 marks]**

(b) Explain ways technical information is retrieved using the following methods.

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

(ii) Video display. **[2 marks]**

(iii) Book borrowing. **[2 marks]**

(c) Describe the importance of the following technical information sources have:

(i) Reference books. **[2 marks]**

(ii) Statistical books. **[2 marks]**

TOTAL: 20 MARKS

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