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 2026

SUBJECT: BIOLOGY 1 (THEORY)

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. There are seven (7) questions in this paper. Answer five (5) questions.
4. Diagrams may be used where necessary to clarify your answer.
5. Cell phone and programmable calculators are not allowed in the examination room.

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

QUESTION 1

a. Figure 1 shows a Eukaryotic cell

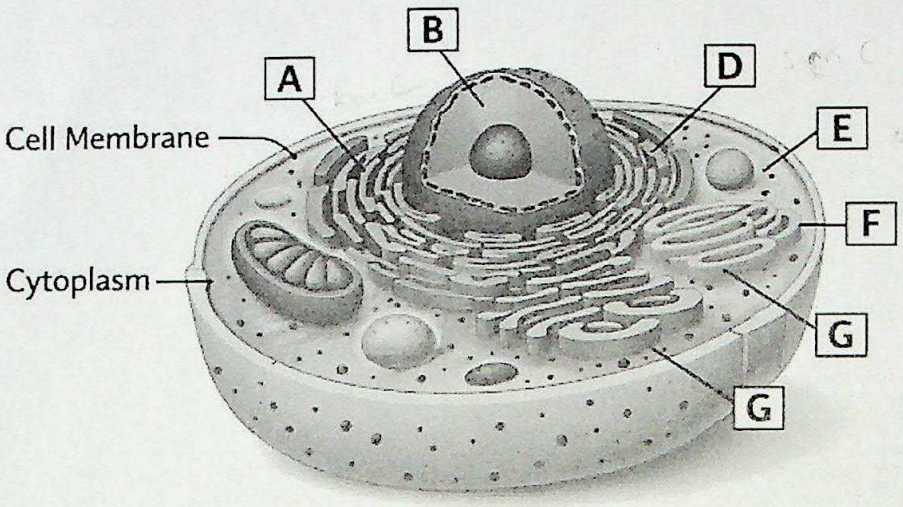


Figure 1

(i) Identify the parts labeled A, F and G. **[3 marks]**

(ii) State the functions of part A, F and G. **[3 marks]**

b. Distinguish between a prokaryotic cell and a eukaryotic cell. **[4 marks]**

c. Describe five (5) stages of meiosis. **[10 marks]**

Total: 20 marks

QUESTION 2

a. Outline five (5) distinguishing features exhibited by arthropods. **[10 marks]**

b. Compare and contrast cartilaginous fishes and bony fishes. **[10 marks]**

Total: 20 marks

QUESTION 3

a. Describe the nucleus.

[10 marks]

b. Highlight five (5) differences between mRNA and rRNA. **[10 marks]**

Total: 20 marks

QUESTION 4

a. Outline the key and lock model of enzyme action. **[10 marks]**

b. Explain the factors that affect enzyme activity.

[10 marks]

Total: 20 marks

QUESTION 5

a. Explain how the leaf is adapted to carrying out its function. **[10 marks]**

b. Describe the mechanism of opening and closing of stomata. **[10 marks]**

Total: 20 marks

QUESTION 6

a. Define the term fire. **[2 marks]**

b. Describe the fire triangle. **[6 marks]**

c. Explain the following methods of extinguishing fires

(i) Cooling **[6 marks]**

(ii) Smothering Starvation. **[6 marks]**

QUESTION 7

a. Explain double fertilization in a angiosperm. **[10 marks]**

b. Explain the pathway and mechanism by which water is absorbed from the soil and transported to external parts of the plant.

[10 marks]

Total: 20 marks