

KENYA CERTIFICATE OF BASIC EDUCATION

SENIOR SCHOOL ASSESSMENT

TERM 2: ENDTERM ASSESSMENT 2026

GRADE 10 – BIOLOGY 007 JULY

Time: 2 Hours

LEARNER'S DETAILS

Name: _____

School:

Assessment Number: _____

Date:

School Code: _____

Signature:

INSTRUCTIONS TO CANDIDATES

1. Write your name in the spaces provided above.
2. Write the name of your school and your school code in the spaces provided.
3. Write your assessment number and the date of the assessment and sign in the spaces provided.
4. This paper consists of two sections: A and B.
5. Answer all questions in section A and section B.
6. Answer the questions in English.
7. All answers **MUST** be written in the spaces provided in the paper.
8. Do **NOT** remove any page from this question paper.

FOR OFFICIAL USE ONLY (EXAMINER'S USE)

SECTION	SECTION A	SECTION B	% SCORE	EE1	EE2	ME1	ME2	AE1	AE2	BE1	BE2
SCORE RANGE	30 MARKS	50 MARKS		90-100	75-89	58-74	41-57	31-40	21-30	11-20	1-10
POINTS				8 POINTS	7 POINTS	6 POINTS	5 POINTS	4 POINTS	3 POINTS	2 POINTS	1 POINT
LEARNER'S TOTAL SCORE											

SECTION A (30 MARKS)

Answer ALL questions in this section.

1. During a career talk at **Alliance Senior School**, a biologist explains different applications of Biology.

a) Define Biology. (1 mark)

b) State two applications of Biology in everyday life. (2 marks)

- i. _____
- ii. _____

2. During a visit to a laboratory in **Nairobi**, learners observed different professionals.

Match the fields in Column A with careers in Column B.

Column A

- i. Botany
- ii. Zoology
- iii. Microbiology
- iv. Genetics

Column B

- A. Microbiologist
- B. Plant Scientist
- C. Animal Scientist
- D. Genetic Engineer

3. Learners collected insects near Lake Nakuru.

a) Name two apparatus used in collecting insects. (2 marks)

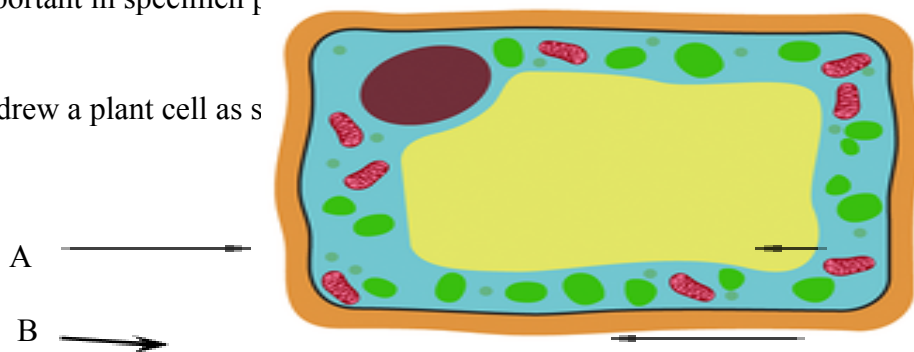
- i. _____
- ii. _____

b) State one importance of preserving specimens. (1 mark)

4. State whether the following statements are **TRUE** or **FALSE**:

- a) A microscope is used to observe cells. _____
- b) Ethanol is used for cooking food in Biology experiments. _____
- c) Labels are important in specimen preservation. _____

5. Gregory drew a plant cell as shown below.



Identify parts A, B, C and D. (4 marks)

A: _____

B: _____

C: _____

6. Using the diagram above, distinguish between plant and animal cells (any TWO differences).

Plant Cell	Animal Cell

7. Three learners from **Mema Senior School** observed different cells and gave various description:

- i. **Brian:** “This cell absorbs water efficiently.”
- ii. **Amina:** “This cell contains chloroplasts.”
- iii. **Kevin:** “This cell transmits impulses.”

a) Identify the specialized cells described. (3 marks)

Learner	Brian	Amina	Kevin
Specialized cell			

8. During a Biology lesson in Kisumu Girls Senior school, Grade 10 learners conducted an experiments on food test:

a) Name three food substances tested. (3 marks)

- i. _____
- ii. _____
- iii. _____

b) State one factor affecting enzyme activity. (1 mark)

9. Outline two stages of photosynthesis.

- i. _____
- ii. _____

10. State the functions of:

a) Xylem

b) Phloem

SECTION B (50 MARKS)

Answer ALL questions

11. At **Jomo Kenyatta Senior School**, students displayed a “Career Wheel”.

a) State two factors influencing career choice. (2 marks)

i. _____

ii. _____

b) Explain three importance of Biology in society. (3 marks)

i. _____

ii. _____

iii. _____

c) Mention one career that relate the following fields of Biology: (3 marks)

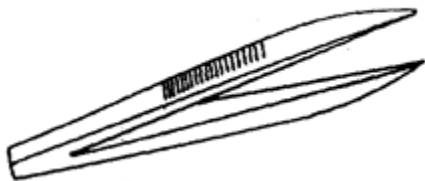
i. Ecology _____

ii. Genetics _____

iii. Microbiology _____

12. Learners carried out a project in **Kericho Tea Senior School**.

a) Identify the apparatus represented by the diagram below and states its function,



i. Name _____ (1 mark)

ii. Function _____ (1mark)

b) Apart from the apparatus shown in 12 (a) above List two apparatus used in specimen collection. (2 marks)

i. _____

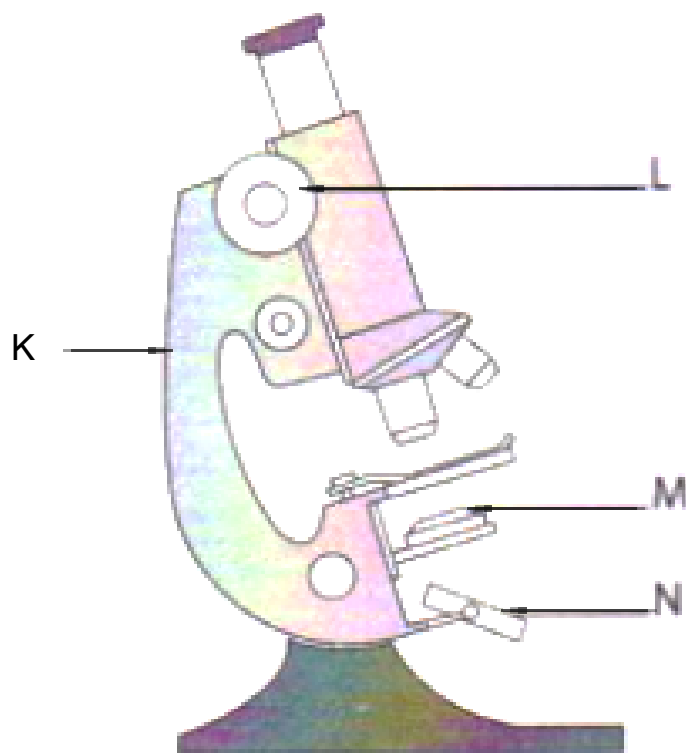
ii. _____

c) Outline steps in preparing a herbarium. (4 marks)

i. _____

- ii. _____
- iii. _____
- iv. _____

13.A learner is using a light microscope to study the components of an animal cell.



a. Name the part labelled (2 marks)

K _____

N. _____

b. State the functions of the parts labelled L and M.

L - _____ (1 mark)

M - _____ (1 mark)

c) Describe two differences between light and electron microscopes. (4 marks)

	Light microscope	Electron microscope
i		
ii		

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14. Learners tested enzyme activity using liver.

a) Define enzyme. (1 mark)

b) Describe the role of enzymes in cells. (2 marks)

- i.

- ii.

c) Explain three factors affecting enzyme activity. (3 marks)

- i.

- ii.

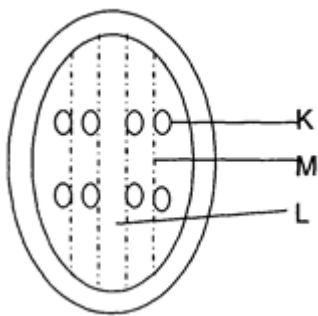
- iii.

d) State two functions of water in cells. (2 marks)

- i.

- ii.

15. During a Biology practical lesson, learners observed a diagram of a chloroplast and discussed its parts and role in plant nutrition.



a. Name the parts labeled M and L.

M-

 (1 mark)

L-

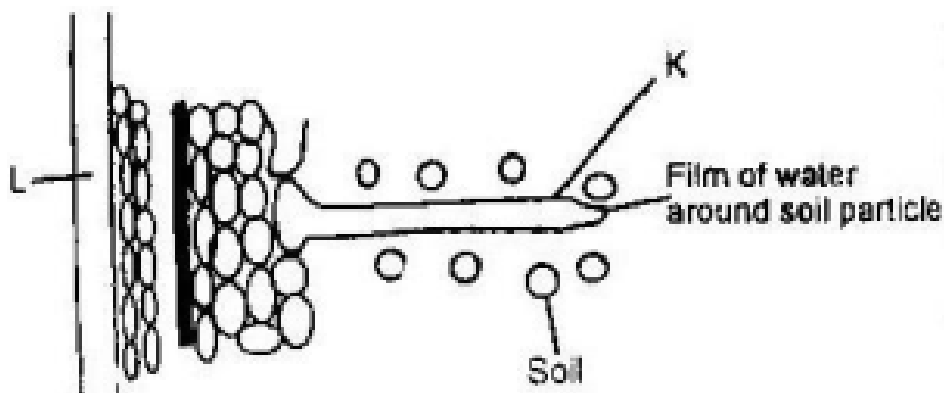
 (1 mark)

b. Describe the process that takes place in the structure labeled K. (2 marks)

c) Explain the importance of photosynthesis. (2 marks)

- i. _____
- ii. _____

16. Learners performed a dye experiment. They set up the experiment as shown below to represents the pathway of water from soil into the plant.



a. Name the structures labeled K and L (2mks)

K _____

L _____

b. Explain how water from the soil reaches the structure labeled L. (3mks)

c. Name the process by which mineral salts enter into the plant. (1mk)

d. Explain two factors affecting transpiration. (2 marks)

- i. _____
- ii. _____

17. Learners at Moi Girls Senior School **Eldoret** studied leaves.

a) Name two gaseous exchange sites. (2 marks)

- i. _____
- ii. _____

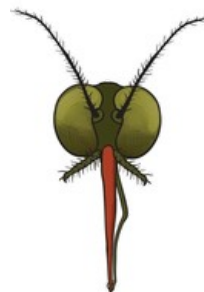
b) Describe how stomata open and close. (3 marks)

- i. _____
- ii. _____
- iii. _____
- iv. _____

18. During an Biology lesson, learners examined different insect mouthparts and discussed how their structures are adapted to specific feeding habits



X



Y

a) Identify the types of mouthparts shown. (2 marks)

X: _____. Y: _____.

b) Explain how each is adapted to feeding. (4 marks)

X	Y

19. Grade 10 learners visited a hospital in **Nairobi County**, to study about the blood.

a) Name two components of blood. (2 marks)

b) Describe the pumping mechanism of the heart. (4 marks)

20. During a sports activity learners were involved in some training about respiration:

a) Distinguish between aerobic and anaerobic respiration. (2 marks)

b) Define respiratory quotient. (2 marks)

c) State two factors affecting respiration rate. (2 marks)

- i.

- ii.

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