



EXAMINATION NO.: _____
THE MALAWI NATIONAL EXAMINATIONS BOARD

2026 JUNIOR CERTIFICATE EXAMINATION

BIOLOGY

(100 marks)

Subject Number: J022

Time Allowed: 2 hours
 8:00 – 10:00 am

Tuesday, 2 June

Instructions

1. This paper contains 12 printed pages. Please check.
2. Write your **Examination Number** in the spaces provided on top of each page of this question paper before you start answering the questions.
3. This paper has **three** sections. A, B, and C. Answer **all** the questions in **all** the **three** sections.
4. In the table provided on this page, **tick** against the question numbers: **21 to 33** if answered.
5. Hand in your question paper to the invigilator when time is called to stop writing.

Question Number	Tick if answered	Do not write in these columns	
1 – 5			
6 – 10			
11 – 15			
16 – 20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			

AB - External

56435 / 002, 030, 037, 040, 054, Total 061
 1 2 3 4 5 6

J022



61
 35
 96

67
 36
 103
 7
 96

©2026 MANEB

Turn over



Section A (20 marks)

Answer **all** questions in this section. **Encircle** the letter corresponding to the correct answer. Each question carries **1 mark**.

1. Which of the following scientific apparatus is used for heating?
A. measuring cylinder
B. white tile
C. conical flask
D. glass jar
2. Which of the following vertebrates is an example of a reptile?
A. tortoise
B. salamander
C. frog
D. skate
3. Which of the following are the components of exhaled air?
A. hydrogen and water vapour
B. carbon dioxide and water vapour
C. carbon dioxide and hydrogen
D. hydrogen and air
4. Which of the following non-flowering plants reproduce both sexually and asexually?
A. moses
B. ferns
C. liverworts
D. algae
5. Which of the following nutrients help in repairing worn out tissues in the human body?
A. proteins
B. carbohydrates
C. lipids
D. vitamins
6. Which of the following sexually transmitted infections lead to infertility?
A. trichomoniasis
B. genital warts
C. chlamydia
D. candidiasis
7. What name is given to carnivores that feed on dead animals?
A. detritivores
B. scavengers
C. vultures
D. omnivores
8. Which of the following is the function of stomata in plant leaves?
A. manufacturing gases
B. manufacturing glucose
C. eliminating excess glucose
D. eliminating excess water
9. Which of the following would be used as an antiseptic when a student is cut by a scalpel?
A. chlorine
B. water
C. methylated spirit
D. hydrochloric acid
10. A habitat is a place where organisms
A. feed.
B. dwell.
C. breed.
D. graze.

Continued/...

11. What name is given to animals that live both on land and water?
- amphibians
 - crocodiles
 - fish
 - reptiles
12. Which of the following is the correct order of a food chain?
- butterfly→nectar→chameleon→snake
 - nectar→chameleon→snake→butterfly
 - snake→chameleon→butterfly→nectar
 - nectar→butterfly→chameleon→snake
13. Which of the following characteristics of living things is shown when a millipede stops when touched?
- respiration
 - irritability
 - movement
 - excretion
14. Which of the following is the correct order of the regions of a mammalian tooth?
- crown, neck and root
 - crown, root and neck
 - neck, crown and root
 - root, crown and neck
15. Which of the following are characteristics of monocotyledonous plants?
- tap root system
 - fibrous root system
 - parallel venation
 - network venation
- 1 and 3
 - 1 and 4
 - 2 and 3
 - 2 and 4
16. Which of the following are types of stems?
- rhizomes and corns
 - buds and corns
 - elect and rhizomes
 - rhizomes and tubers
17. Which of the following make up the small intestines?
- rectum and duodenum
 - colon and rectum
 - duodenum and ileum
 - caecum and colon
18. Which of the following is the function of lymphocytes?
- producing antibodies
 - engulfing germs
 - transporting oxygen
 - transporting antibodies
19. Which of the following characteristics of living things are common to both plants and animals?
- irritability
 - respiration
 - locomotion
 - excretion
- 1, 2 and 3
 - 1, 2 and 4
 - 1, 3 and 4
 - 2, 3 and 4
20. What role do epithelial cells play in the human respiratory system?
- trapping dust
 - trapping mucus
 - producing cilia
 - producing mucus

Continued/...



Section B (50 marks)

Answer **all** the questions in this section in the spaces provided.

21. a. State any **two** functions of the midrib in a plant leaf.

(2 marks)
- b. Mention any **two** structural differences between a vein and an artery.

(2 marks)
- c. What name is given to a tail-like structure used for movement in bacteria?

(1 mark)
22. a. Mention any **one** sexually transmitted infection that can be transmitted from a mother to a child at birth.

(1 mark)
- b. Explain any **two** adaptations of capillaries to their function.

(4 marks)

Continued/...



2026

23. a. Mention any **two** conditions necessary for photosynthesis.

(2 marks)

- b. Name any **two** internal parts of a leaf that contain chloroplasts.

(2 marks)

- c. State any **one** role of calcium in the human body.

(1 mark)

24. a. Mention any **one** enzyme contained in intestinal juice.

(1 mark)

- b. **Figure 1** is a diagram showing a microorganism.

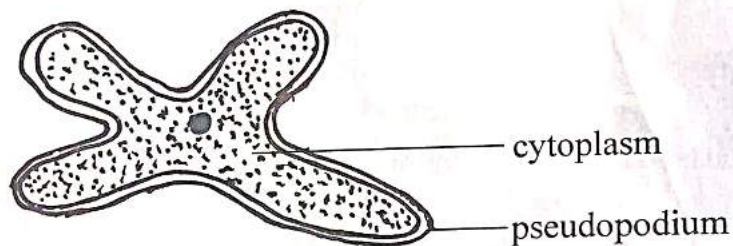


Figure 1

- (i) Identify the microorganism.

(1 mark)

- (ii) To which group of microorganisms does it belong?

(1 mark)

- (iii) Describe **one** way in which the microorganism moves.

(2 marks)

Continued/...

2026

25. a. Mention any **one** safety rule when using glassware in the laboratory.

(1 mark)

- b. **Figure 2** is a graph showing the relationship between light intensity and the rate of photosynthesis in a water plant.

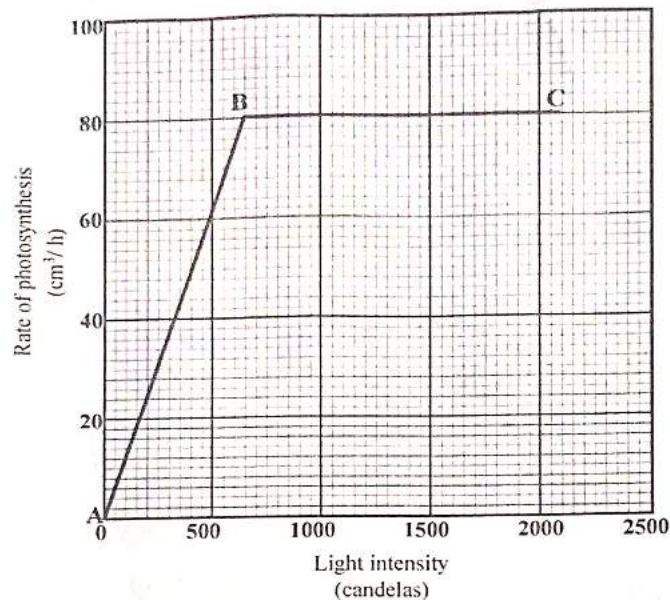


Figure 2

Using the graph:

- (i) Determine the rate of photosynthesis when light intensity is 350 candelas

(1 mark)

- (ii) Identify the following variables:

input variable

(1 mark)

output variable

(1 mark)

- (iii) Describe the relationship between light intensity and the rate of photosynthesis from point A to B.

(2 marks)

Continued/...

26. a. Describe **two** causes of conductive deafness in humans.

(4 marks)

- b. State **one** function of spines as modified leaves in plants.

(1 mark)

27. a. Mention any **one** type of bleeding in human beings.

(1 mark)

- b. **Figure 3** is a diagram showing the human brain.

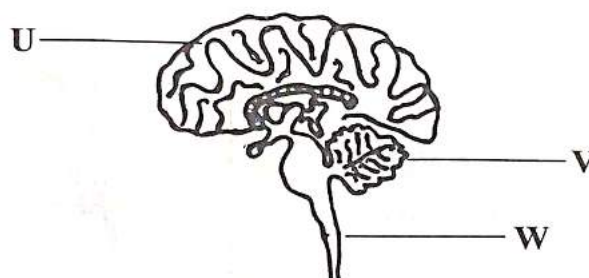


Figure 3

- (i) Identify the parts labelled **U** and **V**.

U: _____

(1 mark)

V: _____

(1 mark)

- (ii) Mention **two** functions of the part labelled **W**.

(2 marks)

Continued/...

2026

28. a. Describe **one** way in which hook worms are transmitted.

_____ (2 marks)

- b. Explain **one** way in which screening of blood obtained from a donor is important before it is transfused to a patient.

_____ (2 marks)

- c. State **one** function of the alveoli in the human respiratory system.

_____ (1 mark)

29. a. State the **main** source of energy in an ecosystem.

- b. **Figure 4** is a diagram showing a type of a movable joint.

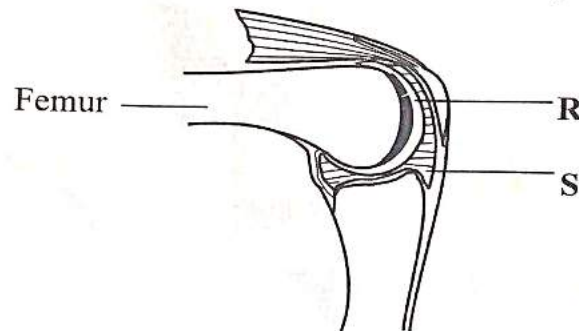


Figure 4

- (i) Identify the type of the movable joint.

_____ (1 mark)

- (ii) Name the part labelled **R**.

_____ (1 mark)

- (iii) Give the function of the part labelled **S**.

_____ (1 mark)

Continued/...

30. a. State any **one** way of preventing scurvy.

(1 mark)

- b. **Figure 5** is a diagram showing a child suffering from a nutritional deficiency disease.



Figure 5

- (i) Identify the nutritional deficiency disease.

(1 mark)

- (ii) Give any **one** sign of the nutritional deficiency disease.

(1 mark)

- (iii) Describe any **one** way in which the nutritional deficiency disease could be prevented.

(2 marks)

Continued/...

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

Continued/...

2026

33. Describe the breathing mechanism in human beings.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has some faint, light-colored smudges or stains, particularly towards the bottom left corner. The overall appearance is that of a clean but slightly used piece of stationery.

(10 marks)

END OF QUESTION PAPER

This paper contains 12 printed pages.

