

**PRESIDENT'S OFFICE REGIONAL ADMINISTRATION AND LOCAL
GOVERNMENTS**

TUNDUMA TOWN COUNCIL

FORM TWO JOINT EXAMINATIONS

BIOLOGY

TIME: 2:30 HOURS.

MAY 2025

INSTRUCTIONS:

- 1. This paper consists of three sections A, B and C.**
- 2. Answer ALL questions from both sections.**
- 3. All writings MUST be blue or black ink, drawings in pencil.**

SECTION A (15 MARKS)

1. Items (I – x) are multiple choices, choose the correct answer and write its letter in the space provided.
 - i) Which of the following is a characteristic of ALL living organism?
 - A. Ability to change position
 - B. Ability to think
 - C. Ability to reproduce
 - D. Ability to feel
 - E. Ability to smell
 - ii) Which type of symbiotic relationship benefits one organism while harming the others?
 - A. Mutualism
 - B. Parasitism
 - C. Commensalism
 - D. Holozoic
 - E. Atrophic nutrition
 - iii) What type of organism is primarily responsible for nitrogen fixation in the soil?
 - A. Fungi
 - B. Bacteria
 - C. Protozoa
 - D. Viruses
 - E. Plants

- iv) The cell theory states that
1. All living things are made up of cells
 2. Cells are the basic unit of life
 3. All cells arise from pre-existing cells.

Which statement is not a part of the cell theory?

- A. Cells are the smallest unit of life.
 - B. All cells contain a nucleus
 - C. All living things are composed of one or more cells
 - D. All cells arise from pre-existing cells
 - E. Cells are fundamental units of life
- v) Which safety equipment is essential for protecting eyes while working with hazardous chemicals?
- A. Gloves
 - B. Lab coat
 - C. Safety goggles
 - D. Fume hood
 - E. Lens
- vi) What is the term for a group of organism's that can interbreed and produce a fertile offspring?
- A. Genus
 - B. Species
 - C. Order
 - D. Family
 - E. Kingdom
- vii) Conditions or factors that can change or be changed in an experiment.....
- A. Hypothesis
 - B. Variables
 - C. Conclusion
 - D. Problem
 - E. Experimentation
- viii) What does the term "reduce, reuse, recycle" refer to in the context waste disposal?
- A. Strategies to minimized waste generation.
 - B. Methods of hazardous waste disposal
 - C. Process for creating new products from waste
 - D. Ways to dispose biological wastes
 - E. Strategies to increases waste generation

- ix) The following are diseases caused by virus,
- A. Malaria, Tuberculosis and Rabies
 - B. Cholera, HVI/AIDS and Malaria
 - C. Covid 19, HIV/AIDS and Hepatitis B
 - D. Genital herpes, Syphilis and Cholera
 - E. Gonorrhea, Rabies and Malaria
- x) Which of the following is a characteristics used to classify organism into “Eukaryotic”
- A. Presence of nucleus
 - B. Presence of membrane bound organelles
 - C. Reproduction only through binary fission
 - D. Multicellular forms
 - E. Presence cytoplasm

i	ii	iii	iv	v	vi	vii	viii	ix	x

2. Match the items in LIST A with the corresponding item in LIST B by writing the letter of the correct response in the space provided.

LIST A	LIST B
i. The semi-permeable barrier that controls passage of materials in and out of the cell ii. Known as the power house of the cell, producing ATP i. Organelle responsible for photosynthesis in plant cells iv. The control center of the cell containing genetic material v. The jelly-like substance where cellular components are suspended.	A. Mitochondria B. Cytoplasm C. Nucleus D. Cell membrane E. Ribosome F. Cell wall G. Chloroplast H. Golgi Apparatus

ANSWERS

i	ii	iii	iv	v

SECTION B (70 MARKS)

3.a) State five points which you can use to educate the community about the prevention and control measures of disease caused by Plasmodium sp.

- i.
- ii.
- iii.
- iv.
- v.

b) If you are given a chance to advise your fellow students about things they should do during puberty, what will be your five points to tell them?

- i.
- ii.
- iii.
- iv.
- v.

4. a) Give the meaning of the following terms

i. Biology laboratory

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ii. Safety signs

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.... b) With the aid of diagram, briefly describe the following warning signs.

i. Biohazard

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ii. Toxic

iii. Flammable

5. a) What do you understand by the following terms as used in biology?

- i. Digestion

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ii. Peristalsis

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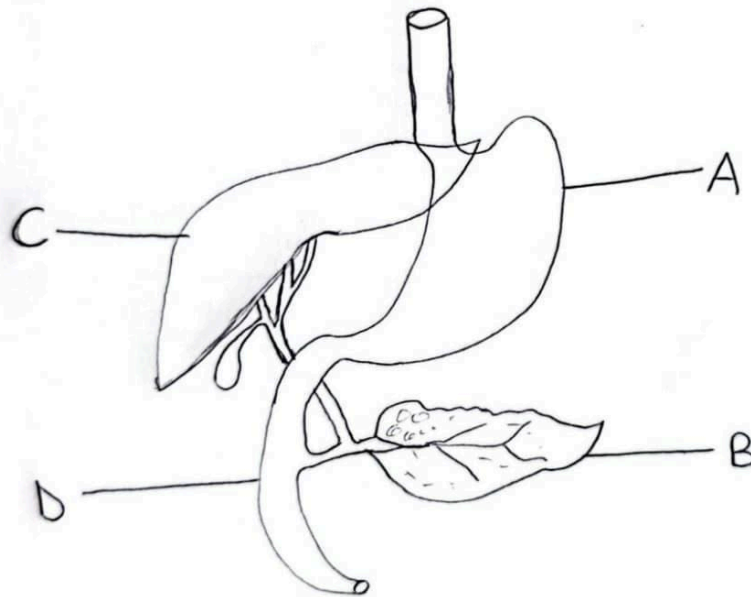
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b) Study the following diagram carefully the answer the questions that follows.



i. Name the parts labeled A, B and D

A.....

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B.....
C.....

ii. Which food substances are digested in part A and D ?

Part A:

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Part B :

.....

iii. Name the secretions coming from part B and C

B.....

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C.....

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6. a) State three Phyla of the kingdom Fungi.

i.

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ii.

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iii.

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b) In which ways fungi are important to life of human being? Explain in five points.

i.

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ii.

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iii.

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- iv.

[illegible]

7.a) State the functions of the following parts of a light microscope

- Mirror.....
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- Lenses.....
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- Fine adjustment knob
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b) An object was magnified X 400 under a microscope. If the magnification of the eye piece lens was X 20, what was the magnification of the objective lens?

i.
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ii.
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iii.
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iv.
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b) Complete the table below, by filling in the space provided.

DISEASE	CAUSES	MAJOR SYMPTOM
Malaria	I	Pain in the joints
Tuberculosis	Mycobacterium tuberculosis	II
III	IV	Rice water diarrhea
V	Calcium and vitamin D deficiency	Bowed legs or knock knees
Kwashiorkor	VI	Protruding stomach

9. a) Explain the functions of the following

i. Spatula in biology laboratory

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..... ii.
 Roughage in a diet

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iii. Petroleum jelly in first Aid Kit

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 ...

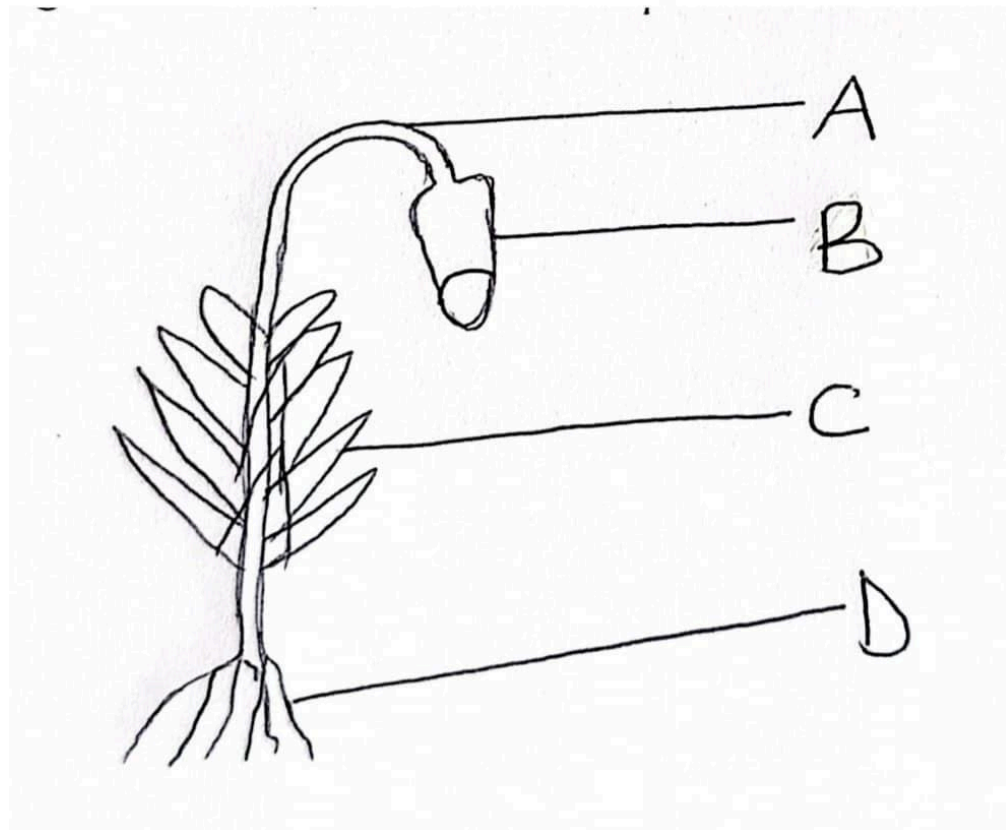
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iv. Specimen bottle in biology laboratory

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b) Study the diagram below then answer the questions that follows.



i. Name the organism in the diagram above

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a. What do the letters A, B, C and D in a diagram above represent?

A.

B.

C.

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10. What are the effects of poor waste disposal in our environment?.

[illegible]

[illegible]