

PRESIDENT'S OFFICE

REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

DAR ES SALAAM REGION

FORM FOUR TERM EXAMINATION 2025

BIOLOGY I

CODE: 033A

TIME 3.00 Hours

Monday 14th July 2025 P.M

INSTRUCTIONS

1. This paper consists of section **A, B,** and **C** with total of **eleven (11)** questions.
2. Answer **all** questions in section A and B and two (2) questions from section C
3. Section A carries sixteen (16) marks, section B **fifty-four (54)** marks and section C carries **thirty (30)** marks.
4. All writing should be in **blue** or **black** pen except for diagrams that must be drawn in pencil.
5. Communication devices and any unauthorized materials are **not** allowed in the examination room.
6. Write your **Examination Number**, on every page of your answer booklets(s)

This paper consists of 4 printed pages

SECTION A (16 Marks)

1. For each of the item (i – x) choose the correct answer from the given alternatives and write item number in the answer booklets provided.
- i. Form one students were required to pick up small organisms such as ants without hurting them. Which apparatus did they use.
 - A. Quadrant
 - B. Sweep net
 - C. Scoop nets
 - D. Aquarium
 - ii. Victims of electric shock can be saved from danger of death by giving one of the following First Aid.
 - A. Pouring a lot of water over the victim
 - B. Pulling the victim away by hand
 - C. Removing the victim from the current using a metallic object
 - D. Turning of the source of electricity
 - E. Making loud noise to call for help before touching the victim
 - iii. A term describes the organisms with similar nutritional habit is knows as
 - A. Community
 - B. Food chain
 - C. Trophic level
 - D. Food web
 - E. Ecosystem
 - iv. The following are the organs responsible for blood sugar regulations
 - A. Liver and heart
 - B. Kidney and liver
 - C. Heart and kidney
 - D. Pancrease and liver
 - E. Spleen and liver
 - v. A term used to identify an individual animal having both male and female sex organ.
 - A. Unisexual
 - B. Monoecious
 - C. Asexual
 - D. Dioecious
 - E. Hermophrodite
 - vi. Straightening and bending of the arm involves contraction of the biceps and triceps muscle. Which of the following alternatives describes the state of the muscles when arm is bent?
 - A. Triceps muscle contracts while biceps relaxes
 - B. Biceps relaxes while triceps muscle relaxes
 - C. Both biceps and triceps relax
 - D. Both biceps and triceps contracts
 - E. Biceps muscle contract while triceps muscle relaxes.
 - vii. Maganga started salivating as he saw pealed half ripe Mango with topping of red Chill powder. What part of the brain concerned with Maganga's salivation.
 - A. Hypothalamus
 - B. Medula oblongata
 - C. Cerebellum
 - D. Cerebrum
 - E. Cerebral hemisphere

- viii. After planting the seed Z the seedling seems to develop while the cotyledon remain below the ground. What type of germination seed Z exhibit?
- Hypergeal germination
 - Epigeal germination
 - Hypogeal germination
 - Isogeal germination
 - Underground germination
- ix. Which of the following is the correct classification of Tape worm (Taenia Solium)
- Kingdom Animalia phylum Annelida class oligochaeta
 - Kingdom Animalia phylum planthylminthes class cestoidea
 - Kingdom Animàlia phylum Nematode class Hirudinea
 - Kingdom Animalia phylum Arthropoda class Arachnida
 - Kingdom Animalia phylum chordate class Aves.
- x. What will happen if phloem tissue is destroyed in green plants?
- Absorption water in the plant body will stop.
 - Translocation of manufactured food will stop
 - Absorption of water and Mineral salt will stop
 - Transport of water and manufactured food will stop
 - Transport of oxygen in the plant body will stop.

2. Match the description of the **list A** with their corresponding in **list B** by writing the letter of the correct response beside the item number in answer sheet provided.

LIST A		LIST B	
i.	Wave like pushes food along the esophagus	A.	Oesophagus
ii.	The process by which end products of digestion are incorporated in the cell metabolism	B.	Pepsin
iii.	Muscular tube that convey food boluses from the pharynx to the stomach	C.	Assimilation
iv.	Breaks down protein into peptides	D.	Villi
v.	Contain acidic medium for digestion	E.	Renin
vi.	Finger like structure increase the surface area for absorption of digested food into blood stream	F.	Duodenum
		G.	Lactase
		H.	Digestion
		I.	Absorption
		J.	Stomach
		K.	Bile
		L.	Peristalsis

SECTION B: (54 Marks)

Answer **all** questions in this section

3. When Form one pupils visited biology laboratory they found out different equipment which were not familiar to them. As form Four student explain to them the role of the following equipment.
- Cage
 - Spatula
 - Petridish
 - Hand lens
 - Beaker
 - Test tube holder.
4. (a) A 45-year-old patient is admitted to the hospital with severe anemia and scheduled for blood transfusion. As the young scientist explain four (4) precaution to be considered before blood transfusion.

- (b) Write alternative name of the following biological terms.
- (i) White blood cells
 - (ii) Platelets
 - (iii) Red blood cell
5. (a) Draw a well labelled diagram of human urinary system and label the following parts
- (i) Renal vein
 - (ii) Renal artery
 - (iii) Ureter
 - (iv) Urinary bladder
- (b) State the function of
- (i) Urethra
 - (ii) Urinary bladder
 - (iii) Ureter
6. (a) Albinism is the hereditary condition where the body lacks melanin pigments in the hair, skin and the eyes. Briefly explain two problems faced by albino's in their environment and how to overcome those problems.
- (b) An albino male marries a heterozygous female. If the female has six children, what will be their probable genotypic and phenotypic for their offspring.
7. While on a school field trip a student observes grasshoppers, butterflies termites and beetle surrounding a mango tree.
- (a) (i) Name the phylum and class to which observed organism belongs
 - (ii) State the distinctive characteristics of the phylum to which the observed organisms belong three (03) points.
 - (b) List Four (4) advantages of the members of the class to which the observed organism belong
8. In order the organism to grow well there must be particular kind of cell division
- (a) Identify and give meaning of the kind of cell division responsible for growth
 - (b) State four (4) advantages of the identified type of cell division mention in 8 (a) above

SECTION C (30 Marks)

Answer **two (2)** questions from this section

9. Life on the earth would have been impossible without the presence of bacteria. Justify (6 points)
10. In our society, many people believes that it is only couples who are planning to get married should seek VCT services use your biology knowledge to impart them with proper understanding on "who should seek VCT services (six points)
11. Many people ask themselves without answers about where did life come from. Use your biological knowledge to answer their questions by providing six (6) points