THE UNITED REPUBLIC OF TANZANIA NATIONAL EXAMINATIONS COUNCIL OF TANZANIA DIPLOMA IN SECONDARY EDUCATION EXAMINATION

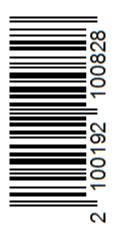
733/2A BIOLOGY 2A

(ACTUAL PRACTICAL 2A)

Time: 3 Hours Year: 2023

Instructions

- 1. This paper consists of three (3) questions.
- 2. Answer **all** questions.
- 3. Question number one (1) carries twenty (20) marks and the rest carry fifteen (15) marks each.
- 4. Cellular phones and any unauthorized materials are not allowed in the examination room.
- 5. Write your **Examination Number** on every page of your answer booklet (s)



- 1. Dissect the provided specimen M in the usual way and display the digestive system. Deflect the alimentary canal to the left-hand side of the specimen and answer the following questions:
 - a) Draw a diagram of the dissected specimen **M** and label seven parts concerned with digestion.
 - b) Which precautions did you take when opening the inner skin? Give two points.
- 2. You are provided with solution **R** and required to answer the following questions:
 - a) Using the provided reagents, carry out the biochemical test to identify food substances contained in solution **R**. Tabulate your result as shown in the following table: -

Food Tested	Procedure	Observation	Inference

- b) State the role of each of the food substances identified in solution **R** to human body.
- c) Why was heat required during the testing of food substance identified in solution \mathbf{R} ?
- 3. You provided with specimens **A**, **B** and **C**, observe them and answer the following questions:
 - (a) (i) What are observable features used to place specimen A into its respective kingdom? Give two points.
 - (ii) In what ways is specimen **A** is successfully adapted to its habitat? Give three points.
 - (iii) How is specimen A important for industrial development. Give three point.
 - (b) (i) Identify the name of the organism from which specimen ${\bf B}$ was taken.

- (ii) How is the specimen **B** important to the organism from which it was taken? Give two points.
- c) What are the observable features used to place specimen C into its respective class? Give three points.