

**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 **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 **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.