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

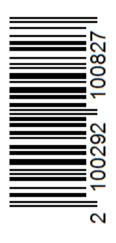
## 733/2A BIOLOGY 2A

(ACTUAL PRACTICAL 2A)

Time: 3 Hours Year: 2021

## **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 specimen X in the usual way to display the digestive system. The candidates were supposed to deflect the gut to their right hand side and respond to the following questions:
  - (a) Draw a large, neat, well-labelled diagram of your dissection.
  - (b) Give the role of each part of the digestive system labeled in (a).
  - (c) Classify specimen X to the order level.
  - (d) Briefly describe four adaptations of specimen X to its mode of life.
  - (e) State two advantages of specimen X in the ecosystem.
  - **2.** Extract food solution from raw food stuff labelled as specimen B. Then label the prepared food solution as solution B and answer the following questions:
    - (a) State the procedures to be followed in preparing solution B from specimen B.
    - (b) Design an experiment to find out the classes of carbohydrates contained in solution B. Tabulate your results as shown in the following table.

Food Test	Procedure	Observation	Inference

- (c) State the role of food substance(s) identified in solution B in your body.
- (d) What is the role of HCl in testing for carbohydrates?
- **3.** You are provided with specimen M:
  - (a) Carefully examine the specimen and then answer the following questions:
    - (i) Identify the specimen by its common name.
    - (ii) Classify the specimen to the Class level.
    - (iii) Draw a well labelled floral diagram for the specimen.
    - (iv) Write a floral formula for the floral diagram you have drawn in 3 (a) (iii).
  - (b) By using a scalpel, cut the longitudinal section of specimen M. Take one part with the cut surface facing upwards. Observe it using a hand lens and then, draw a well labelled diagram showing internal and external parts of the specimen M.