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

033/2A

## BIOLOGY 2A (ACTUAL PRACTICAL A)

(For Both School and Private Candidates)

Time: 2:30 Hours

## .

Year: 2022

## **Instructions**

- 1. This paper consists of **two** (2) questions. Answer **all** the questions.
- 2. Each question carries **twenty five (25)** marks.
- 3. Except for diagrams which must be drawn in pencil, all writings should be in blue or black ink.
- 4. Cellular phones and any unauthorised materials are **not** allowed in the examination room.
- 5. Write your **Examination Number** on every page of your answer booklet(s).



You have been provided with longitudinal sections of specimens  $T_1$  and U. Study carefully the specimen  $T_1$  and U with their cutting side facing upward and then answer the following questions:

- (a) What is the type of reproduction exhibited by specimen  $T_1$  and U?
- (b) Give two advantages and disadvantages of the types of reproduction exhibited by specimen  $T_1$ .
- (c) Draw the diagrams of specimens  $T_1$  and U and label their internal and external parts.
- (d) Which process would not proceed normally if the internal part of specimens U and  $T_1$  are totally removed from the live plants?
- (e) State two economic importance of the specimen  $T_1$  in our daily life.
- 2. You have been provided with specimens **L**, **M**, **N** and **P**. Using a hand lens, carefully study the specimens and then answer the following questions:
  - (a) Why is it not recommended to place the specimens **L**, **M** and **N** in the same Kingdom. Give reasons.
  - (b) (i) Classify specimens L, M and N to Class level.
    - (ii) State two reasons for placing the specimens M and N in their respective Classes in (b)(i).
    - (iii) In what ways do the members of the Class in which specimen L belongs advantageous to other living organisms?
  - (c) Carefully observe the specimen **P** and then answer the following questions:
    - (i) In which Phylum does the specimen **P** was taken? Give reason to support your answer.
    - (ii) Name four organisms which can be placed in the same Phylum/Division of specimen  ${\bf P}$ .
    - (iii) What are the advantages of specimen **P** in daily life? Give three points.