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

133/3A

BIOLOGY 3A
(ACTUAL PRACTICAL 3A)
(For Both School and Private Candidates)

Time: 3:20 Hours **Year: 2024**

Instructions

1. This paper consists of **three (3)** questions.
2. Answer **all** the questions.
3. Question **one (1)** carries **twenty (20)** marks and the other **two (2)**, carry **fifteen (15)** marks each.
4. All writing should be in **blue** or **black** ink, **except** diagrams which must be in pencil.
5. Communication devices and any unauthorised materials are **not** allowed in the examination room.
6. Write your **Examination Number** on every page of your answer booklet(s).

1. You have been provided with specimen C_1. Dissect the specimen in a usual way and display the digestive system and pin it to your right hand side.

   (a) Draw a large, neat diagram of your dissection and label twelve parts.
   Leave your dissection properly displayed for assessment.

   (b) What are the roles played by digestive parts you have labelled in 1(a)? Give five points.

2. You have been provided with specimen **N**.

   (a) Observe the specimen carefully then answer the following questions:
   (i) What function do the structures constituting the female and male parts play in the specimen?
   (ii) How does the specimen manage to attract insects for pollination?
   (iii) How does fertilization process take place in the specimen?

   (b) Using a scalpel, remove all petals and sepals from the specimen then answer the following questions:
   (i) Draw a neat and well labelled diagram of the remaining part of the specimen.
   (ii) Which part of the specimen receives the male gametes during pollination?
   (iii) How the part responsible for transfer of male gametes to the place where fertilization takes place adapted to its function?

3. You have been provided with specimens **R**, **S** and **T**. Study the specimens and answer the following questions.

   (a) (i) What are the common names of specimens **R**, **S** and **T**?
   (ii) Specimens **S** and **T** belong to which Class(s)?
   (iii) Why do specimens **R**, **S** and **T** placed in the Class they belong?

   (b) (i) Where is the habitat for specimens **R** and **S**?
   (ii) How does specimen **S** adapted to its habitant?
   (iii) In what ways do specimens **S** and **T** considered useful to human being?