THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATIONS COUNCIL OF TANZANIA

ADVANCED CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

133/3C **BIOLOGY 3C**

ACTUAL PRACTICAL C

(For Both School and Private Candidates)

Duration : 3:30 Hours **Year : 2025**

Instructions

1. This paper consists of **three (3)** questions.
2. Answer **all** questions.
3. Question **one (1)** carries **twenty (20)** marks and other **two (2)**, carries **fifteen (15)** marks each.
4. All writings should be in **blue** or **black** ink, **except** for drawings which must be drawn 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 **R**. Dissect it in a usual way to fully display the viscera general and pin the digestive system to your right-hand. **Leave your dissection properly displayed for Assessment.**

   (a) Draw a neat diagram of the dissected specimen and label ten parts.

   (b) Carefully observe the dissection and then provide one function of two parts which make up:

   (i) the urinogenital system

   (ii) the digestive system

   (c) Account for four features which enable specimen R to survive in its habitat.

2. You have been provided with solution S_3 and solution S_4 .

   (a) Identify the food substances present in solution S_3 and S_4 and prepare an experimental report in a tabular form using the format provided.

Food tested	**procedure**	**observation**	**inference**

   (b) (i) Name the enzyme(s) responsible for the digestion of the food substance(s) identified in solution S_3.

   (ii) Provide one environmental condition specific for the named enzyme(s) to work properly in digestion of the food substance(s) identified in solution S_3.

3. You have been provided with specimens M_1 , M_2 and M_3. Study them carefully and then answer the following questions:

   (a) (i) Identify each of the specimens M_1, M_2 and M_3 by their common names.

   (ii) State from which part of a plant the specimens M_1 and M_2 develop, and give reasons to support the answer.

   (b) (i) Give the name of the plants where specimens M_1, M_2 and M_3 are

obtained.

(ii) Identify the Kingdom, Phylum/Division and Class in which each plant named in 3(b)(i) belongs.

(c) State one observable feature which is the typical characteristic of the class to which each of the specimens M_1, M_2 and M_3 belongs.