

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

**133/3B**

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

**Time: 3:20 Hours**

**Thursday, 17<sup>th</sup> May 2018 a.m.**

**Instructions**

1. This paper consists of **two (3)** questions.
2. Answer **all** the questions.
3. Question **one (1)** carries **20** marks and other **two (2)**, 15 marks each.
4. Except for diagrams which must be drawn in pencil, all writing should be in blue or black ink.
5. Calculators, cellular phones and any unauthorized materials are **not** allowed in the examination room.
6. Write your **Examination Number** on every page of your answer booklet(s).



1

ACSEE-0518



1. You have been provided with specimen **Q**. Dissect the specimen **Q** in a usual way to fully display the nervous system.
- (a) Draw a large, neat and well labeled diagram of your dissection.

**Leave your dissection properly displayed for assessment.**

- (b) Propose the sex of the specimen **Q** and give one external feature you have considered in proposing the sex.
- (c) Enumerate five features which help specimen **Q** to adapt to its life.
2. You have been provided with solutions **A** and **B** which contain various food substances.
- (a) Use only the chemicals and reagents provided to identify the food substances present in solutions **A** and **B**. Tabulate your work as showing in the following table.

| Food Tested | Procedure | Observation | Inference |
|-------------|-----------|-------------|-----------|
|             |           |             |           |

- (b) For any two types of food identified, name the type of bond which holds up its constituent units.
- (c) Identify enzymes responsible for digestion of any two food substances identified.
3. You have been provided with specimens **C** and **D**.
- (a) (i) Identify the Kingdoms and Phylum to which each of the specimens **C** and **D** belong.
- (ii) Give three features that can convince other scientists worldwide to agree that specimens **C** and **D** belongs to the Kingdom(s) you identified in 3 (a) (i).
- (b) (i) What role does the specimen **C** play in the ecosystem?
- (ii) Draw a large, neat and well labeled diagram of the specimen **D**.