

**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.**

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**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).



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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**.