

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

03V/2A

BIOLOGY 2A  
(ACTUAL PRACTICAL A)  
(For Both School and Private Candidates)

Time: 2:30 Hours

Monday, 12<sup>th</sup> November 2018 a.m.

Instructions

1. This paper consists of **two (2)** questions.
2. Answer **all** the questions.
3. Each question carries 25 marks.
4. Except for diagrams which must be drawn in pencil, all writings must 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. You are provided with specimen **X**.

- (a) Write the procedure you will follow to prepare a solution of specimen **X** for investigation.
- (b) Using the chemical reagents provided, carry out experiments to identify the food substance(s) present in specimen **X**. Record your experimental work as shown in Table 1.

**Table 1**

Food tested	Procedure	Observation	Inference

- (c) State two properties of the food substance(s) identified in specimen **X**.
- (d) Name four other sources which contain the same food substances as that identified in specimen **X**.
- (e) Mention the parts of the human alimentary canal in which the digestion of the food substance in specimen **X** take place.
- (f) Explain how the body store excess food substance(s) identified in solution **X**.
- (g) Why the food substance(s) identified in solution **X** important in the human body?

2. You have been provided with specimens **C**, **D** and **F**.

- (a)
  - (i) Identify specimens **C**, **D** and **F** by their common names.
  - (ii) To which Kingdom(s) do specimens **C**, **D** and **F** belong?
- (b)
  - (i) Name the habitats of specimens **C**, **D** and **F**.
  - (ii) How specimen **D** is adapted to its habitat?
  - (iii) Name the Classes in which scientist place specimens **C** and **F**.
  - (iv) State three distinctive characteristics that made you to agree with other scientists that specimens **C** and **F** must dwell in the Class you named in (b)(iii) and not otherwise.
- (c)
  - (i) In which ways are specimens **C** and **F** of advantage to man?
  - (ii) Draw a diagram of specimen **F** and label the parts which are involved in sensitivity and locomotion.