

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

2C

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

Time: 2:30 Hours

Monday, 17th November 2014 a.m.

Instructions

This paper consists of **two (2)** questions. Answer **all** the questions.

Each question carries **25** marks.

Except for diagrams which must be drawn in pencil, all writings should be in blue or black ink.

Calculators and cellular phones are **not** allowed in the examination room.

Write your **Examination Number** on every page of your answer booklet(s).

1. You are provided with specimens **X** and **Z**.

- (a)
 - (i) Prepare separate solution from specimens **X** and **Z**. Label them as solution **X** and **Z** respectively.
 - (ii) Write the procedure you followed to prepare solution **X** and **Z**.
- (b) Carry out an experiment to identify the food substances present in the solutions **X** and **Z**. Record your experimental work as shown in Table 1 below.

Table 1

| Food tested | Procedure | Observation | Inference |
|-------------|-----------|-------------|-----------|
| | | | |

- (c) State two properties of the food substance identified in the solution **X**.
 - (d) Name four other sources where food substances identified in solutions **X** and **Z** are found.
 - (e) Mention the parts of the alimentary canal in which the digestion of the food substance identified in solution **Z** takes place.
 - (f) Name the enzymes responsible for digestion of food substance identified in solution **Z** until the end product is produced.
 - (g) In which form is the food substance identified in solution **X** stored in human body?
 - (h) State one function of the food identified in each solution **X** and **Z** in human body.
2. You have been provided with specimens **B**, **C**, **D** and **E**.

- (a)
 - (i) Identify specimens **B**, **C**, **D** and **E** by their common names.
 - (ii) To which Kingdom(s) do specimens **C**, **D** and **E** belong?
 - (iii) Name the habitats of specimens **B**, **C**, **D** and **E**.
 - (iv) Write two adaptations of specimen **E** to its habitat.
- (b) State two distinctive characteristics that place each of specimen **C** and **D** into their respective Kingdom.
- (c)
 - (i) List down two advantages of specimen **E**.
 - (ii) State two distinctive characteristics that place specimen **E** into its respective Class.
 - (iii) Draw a well labeled diagram of specimen **E**.