

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

033/2A

**BIOLOGY 2A
ALTERNATIVE A PRACTICAL
(For both School and Private Candidates)**

Time: 2:30 Hours

Friday 8th, October 2010 a.m.

Instructions

1. This paper consists of **two (2)** questions.
2. Answer **all** questions.
3. Each question carries **25** marks.
4. Except for diagrams which must be drawn in pencil all writings should be in blue/black/ball point pen.
5. Calculators are **not** allowed in the examination room.
6. Cellular phones are **not** allowed in the examination room.
7. Write your **Examination Number** on every page of your answer booklet(s).

This paper consists of 2 printed pages.

1. You have been provided with solution T_1 .

- (a) Carry out food tests to identify the substances present in solution T_1 . Record your results in a table as shown below.

Test for	Procedure	Observation	Inference

- (b) What are the functions of the food substances identified in T_1 in the human body?
- (c) (i) State the favourable/suitable pH condition at which the enzymes which digest the food substances present in T_1 work best.
- (ii) Which of the food substances present in T_1 is not stored in the human body?
- (iii) What happens when the levels of this substance mentioned in (c) (ii) above, rise in the body?

2. You are provided with specimens A, B, C, D and E. Observe them carefully and answer the questions that follow:

- (a) (i) Write down the common names of specimens A, B, C, D and E.
- (ii) To which kingdom do specimens C and D belong?
- (iii) Name one (1) common epidemic disease transmitted by specimen A.
- (b) (i) Draw a large well labelled diagram of specimen C.
- (ii) State the economic importance of specimen C.
- (c) (i) What are the distinguishing characteristics of the Phylum/Division to which specimen E belongs?
- (ii) Where can specimen E be found?