

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?