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

/2B

## BIOLOGY 2B (ACTUAL PRACTICAL B)

(For Both School and Private Candidates)

ne: 2:30 Hours

Thursday, 13<sup>th</sup> 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 have been provided with solution N.
  - (a) Carry out food test experiments to identify the food substance(s) present in solution N Record your experimental work as shown in Table 1.

Table 1:

Food tested	Procedure	Observation	Inference
		1.480	
		17 11 11	

- (b) State the role(s) of the food substances identified in 1(a) above to a person who has just recovered from malaria.
- (c) Which enzymes in the small intestine are involved in the digestion of the for substance(s) identified in 1(a)?
- (d) State four adaptive features which enable the ileum to absorb digested food efficiently
- 2. Study specimens  $E_1$ ,  $E_2$  and  $E_3$  then answer the following questions.
  - (a) Name the Kingdom of each specimen  $E_1$ ,  $E_2$  and  $E_3$ .
  - (b) State three characteristics of each kingdom you named in 2(a).
  - (c) State the differences between specimens  $E_1$  and  $E_3$  with respect to:
    - (i) Habitat
    - (ii) Mode of nutrition.
  - (d) State two advantages and one disadvantage for each of specimen  $E_1$ ,  $E_2$  and  $E_3$ .