

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

033/2B

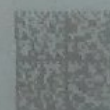
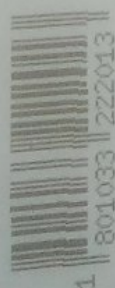
**BIOLOGY 2B
(ACTUAL PRACTICAL B)
(For Both School and Private Candidates)**

Time: 2:30 Hours

Friday, 16th 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 have been provided with solution A.

- (a) Identify the food substances present in solution A by using the chemicals and reagents provided. Tabulate your work as shown in Table 1:

Table 1

Food Tested	Procedure	Observation	Inference

- (b) For each food substance identified in 1(a) name three common sources.
- (c) State the role of each food substance identified in 1(a).
- (d) (i) The digestion of one of the identified food substance in (a) starts in the mouth. Name this food substance and the enzyme responsible for its digestion.
- (ii) Name the part of a digestive system in which most of digestion and absorption take place.
- (iii) Name two enzymes found in the part you named in (d)(ii) that are responsible for digestion of the food substance identified in (a).
- (iv) Explain how the named part in (d)(ii) is adapted for absorption of digested food substances.
- (v) Mention the medium favourable for enzymes found in the part you named in (d) (ii) to work properly.

2. You have been provided with specimens L₁, L₂, L₃ and L₄.

- (a) Use the hand lens to observe these specimens then:
- (i) Identify each of the specimens L₁, L₂, L₃, and L₄ by their common names.
- (ii) Classify specimens L₁, L₂ and L₃ to the Class level.
- (b) Study specimen L₃ carefully then answer the following questions:
- (i) Draw a diagram of specimen L₃ and label three parts.
- (ii) Identify the habitat of specimen L₃.
- (iii) In what ways is the specimen L₃ important in nature?
- (c) State two advantages of the specimen L₁.
- (d) State four advantages of the specimen L₄.