

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

033/2A

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

Time: 2:30 Hours

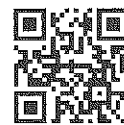
Friday, 03rd November 2017 a.m.

Instructions

1. This paper consists of **two (2)** questions. Answer **all** the questions.
2. Each question carries 25 marks.
3. Except for diagrams which must be drawn in pencil, all writings must be in blue or black ink.
4. Calculators, cellular phone and any unauthorised materials are **not** allowed in the examination room.
5. Write your **Examination Number** on every page of your answer booklet(s).



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1. You have been provided with solution X.

- (a) Perform experiments using the reagents provided to identify the type of food substance(s) present in the solution X. Tabulate your results as shown in Table 1.

Table 1

Food tested	Procedure	Observations	Inference

- (b) (i) Name two sources of food from which each of the food substances identified in 1 (a) could have been extracted.
(ii) Give the name of the end product after digestion for each food substance identified in 1(a).
- (c) Explain the role(s) of each food identified in 1(a).
- (d) Why it is important to use dilute hydrochloric acid in this experiment?

2. Study specimens **K₁**, **K₂**, **K₃** and **K₄**.

- (a) (i) Identify specimens **K₁**, **K₂**, **K₃**, and **K₄** using their common names.
(ii) State the Phylum/Division of each specimen **K₁**, **K₂**, **K₃** and **K₄**.
- (b) (i) Name the Class(s) to which specimens **K₂** and **K₄** respectively belongs.
(ii) Give three distinctive characteristics which convinced you to agree with other scientists that specimens **K₂** and **K₄** must be placed in the Class(s) you named in (b)(i).
- (c) (i) State one advantage and one disadvantage of specimen **K₁**.
(ii) Explain three functions of specimen **K₃** to plants.
- (d) Identify three observable structures which are typical characteristic of Kingdom Animalia in both specimens **K₁** and **K₂**.