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

033/2A

BIOLOGY 2A (ACTUAL PRACTICAL A)

(For Both School and Private Candidates)

Time: 2:30 Hours

Monday, 12th November 2018 a.m.

Instructions

- This paper consists of two (2) questions.
- Answer all the questions.
- Bach 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 are provided with specimen X.
 - (a) Write the procedure you will follow to prepare a solution of specimen X for investigation.
 - (b) Using the chemical reagents provided, carry out experiments to identify the food substance(s) present in specimen X. Record your experimental work as shown in Table 1.

Table 1

Food tested	Procedure	Observation	Inference

- (c) State two properties of the food substance(s) identified in specimen X.
- (d) Name four other sources which contain the same food substances as that identified in specimen X.
- (e) Mention the parts of the human alimentary canal in which the digestion of the food substance in specimen X take place.
- (f) Explain how the body store excess food substance(s) identified in solution X.
- (g) Why the food substance(s) identified in solution X important in the human body?
- 2. You have been provided with specimens C, D and F.
 - (a) (i) Identify specimens C, D and F by their common names.
 - (ii) To which Kingdom(s) do specimens C, D and F belong?
 - (b) (i) Name the habitats of specimens C, D and F.
 - (ii) How specimen D is adapted to its habitat?
 - (iii) Name the Classes in which scientist place specimens C and F.
 - (iv) State three distinctive characteristics that made you to agree with other scientists that specimens C and F must dwell in the Class you named in (b)(iii) and not otherwise.
 - (c) (i) In which ways are specimens C and F of advantage to man?
 - (ii) Draw a diagram of specimen F and label the parts which are involved in sensitivity and locomotion.