

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

133/3C

BIOLOGY 3C (ACTUAL PRACTICAL C)

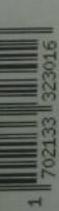
(For Both School and Private Candidates)

Time: 3:20 Hours

Thursday, 18th May 2017 a.m.

Instructions

- 1. This paper consists of three (3) questions.
- Answer all the questions.
- Question one (1) carries 20 marks and the other two (2), 15 marks each.
- Except for diagrams which must be drawn in pencil, all writings should be in blue or black ink.
- 5. Calculators and cellular phones are not allowed in the examination room.
- 6. Write your Examination Number on every page of your answer booklet(s).



Page 1 of 2 AC17044 Dissect specimen A₂ in a usual way to fully display the reproductive and excretory system.
 Pin the ileum to your right hand side.

Leave your dissection properly displayed for assessment.

- (a) Draw a large, neat and well labeled diagram of your dissection.
- (b) (i) Identify the sex of the specimen A2. Give two reasons to justify your answer.
 - (ii) Name the tube which carries the gametes from the area where they are produced to the exit.
 - (iii) Identify the structure responsible for gamete production.
- (c) (i) Identify the structure present in the specimen A2 which is involved in excretion.
 - (ii) How is the structure you named in (c) (i) adapted to its role?
- You have been provided solutions A and B which contain various food substances:
 - (a) Use the chemicals and reagents provided to identify the food substances present in solutions A and B. Tabulate your work as showing in following table.

Food Tested	Procedure	Observation	Inference
			1000
		10000	

- (b) For any two types of food identified in (2)(a) name;
 - (i) The type of bond which holds up its constituent units.
 - (ii) Enzymes responsible for digestion.
- You have been provided with specimens M₁, M₂ and M₃.
 - (a) (i) Identify the specimens M₁, M₂ and M₃ by their common names.
 - (ii) Point out three observable features of each of the specimens M2 and M3 which enabled them adapt to their environments.
 - (b) (i) Classify the specimens M₁, M₂ and M₃ to phylum level.
 - (ii) Draw a large, well labeled diagram of the specimen M1.
 - (c) Examine the role performed by the specimen M₁.