

**THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATION COUNCIL
DIPLOMA IN SECONDARY EDUCATION EXAMINATION**

733/2A

BIOLOGY 2A

Time: 3 Hour.

Year: 2020

Instructions

1. This paper has three papers.
2. Answer **all** questions.
3. Question **1** contains 30 marks while question 2 and 3 have 10 marks each.
4. Mobile phones are not allowed inside the examination room.
5. Write your Examination Number on every page of your answer booklet.

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1. You are provided with a specimen labelled W

- (a) Dissect specimen W to expose the reproductive and excretory systems.
- (b) Draw a well-labelled diagram showing two parts of the reproductive system and two parts of the excretory system.
- (c) What is the sex of specimen W? Give three supporting observations.
- (d) Identify the thread-like structures in specimen W and explain why they are numerous.

2. You are given two solutions: Solution G and Solution H.

- (a) Perform biochemical tests on each solution using the reagents provided. Tabulate your results as follows:

Test For	Procedure	Observation	Inference

- (b) State three functions of the food substances identified in solution G and H in the human body.
- (c) (i) Name the digestive enzyme responsible for digesting the food substance identified in solution H.
(ii) State the end product of digestion of that food substance.

3. Observe the provided specimens P, K and L.

- (a) (i) List two features used to place specimen P into its respective class.
(ii) Suggest three adaptations that help specimen L survive in dry habitats.
- (b) (i) Identify the organism from which specimen K was obtained.
(ii) State two functions of specimen K to that organism.
- (c) How is specimen P important to human life? Mention three uses.