



133/3A

TANZANIA HEADS OF ISLAMIC SCHOOLS COUNCIL
FORM SIX INTER ISLAMIC MOCK EXAMINATION

BIOLOGY 3A
(ACTUAL PRACTICAL)

(For Both School and Private Candidates)

TIME: 3:20 Hours

Tuesday, 10th March 2026 a.m.

Instructions

1. This paper consists of **THREE (3)** questions.
2. Answer **all** questions.
3. Question **one (1)** carries **twenty (20)** marks and the other two (2) carry **fifteen (15)** marks each.
4. All writing must be in a blue or black ink, except for drawing which must be in pencil.
5. Communication devices 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 specimen M. Dissect the specimen in a usual way to fully display urinogenital system.

Leave your dissection properly displayed for assessment.

- (a) (i) Draw a large diagram of your dissection and label nine parts.
(ii) Name the function of any five parts you labelled in 1 (a) (i) above.
- (b) Outline five features that qualify specimen M as a mammal.
- (c) Explain five (5) functions of the organ responsible for the formation of urine in specimen M.
- (d) (i) Identify the nitrogenous waste produced by specimen M.
(ii) What factor(s) determine the type of nitrogenous waste excreted by specimen?
2. You have been provided with specimen N, thermometer and 2% hydrogen peroxide (H_2O_2) solution. Carryout the procedures (i) – (viii) then answer the questions that follow:
- (i) Label three test tubes 1, 2 and 3.
- (ii) Cut three cubes of 1cm^2 each from the specimen N provided.
- (iii) Put one of the cubes in the test tube.
- (iv) Grind the two cubes left in a mortar containing a small amount of fine sand.
- (v) Divide the grinded cubes into two portions, put the first portion into the test 2.
- (vi) Put the remaining portion into test tube 3 boil it with some little water and allow it to cool.
- (vii) Add 4cm^3 of hydrogen peroxide to test tube 1 and make accurate observation including the temperature of the contents in the test tube as shown in the table below.
- (viii) Repeat the procedure in 2 (vii) above with test tube 2 and 3 each time making accurate observations including the temperature and amount of any gas produced.

Experiment results

Test tubes	Temperature ($^{\circ}\text{C}$)	Other observation
1		
2		
3		

Questions:

- (a) Suggest the substance present in the specimen N that reacts with hydrogen peroxide.
 - (b) Name the sub cellular unit in which substance in 2 (a) occurs.
 - (c) Name the biochemical process catalyzed in 2 (a) which takes place in the specimen N.
 - (d) Suggest the purpose of
 - (i) Grinding the specimen N with fine sand
 - (ii) Boiling the specimen N
 - (e) Write balanced equation between substance in 2 (a) and hydrogen peroxide.
 - (f) Name the gas produced by the reaction in 2 (e).
 - (g) Suggest the biological significance of substance in 2 (a).
 - (h) From your experimental observation regarding reaction's energetic, name the type of reaction shown between substance in 2 (a) and hydrogen peroxide.
 - (i) Suggest three possible industrial uses of substance in 2 (a).
3. You have been provided with specimen S, F, Y and X. Observe them carefully and answer the questions that follow.
- (a) Identify specimens S, F, Y and X by their common names.
 - (b) Classify the specimens S, F, Y and X to their class level.
 - (c) State how specimens S and F are adapted to their habitats based on water requirement.
 - (d) How specimens F and S are similar.
 - (e) What are the advantage of specimen X in reproduction of flowering plants?

Wabillah Tawfiiq