

THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT



LAKE ZONE FORM FOUR MOCK EXAMINATION
(GEITA, KAGERA, MARA, SIMIYU, SHINYANGA AND MWANZA)

033/2C

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

Time: 2:30 Hours

Year: 2025

INSTRUCTIONS

1. This paper consists of **two (02)** questions. Answer **all** questions
2. Each question carries **twenty five (25)** marks
3. Except for diagrams which must be drawn in **pencil** all writings should be in **blue or black ink**
4. Cellular phones and any unauthorized materials **are not allowed** in the examination room
5. Write your **Examination Number** in every page of your answer booklet.

This paper consists of **2** printed pages

1. You are provided with methylated spirit, toothpick, cotton wool, and samples labeled A and B which are stimuli of receptors in your body. Carry out experiments in terms (i) – (iv) then answer the questions that follow.
 - (i) Look at your body and observe the sense organ that covers your body
 - (ii) Take a toothpick and pick slightly on the upper part of your hand then note the feeling
 - (iii) Touch each sample and feel their coarseness
 - (iv) Take a cotton wool and soak into methylated spirit, rub it on your hand and observe what is happening.

Questions

- (a)
 - (i) Give the name of the sense organ that covers your body.
 - (ii) Explain the functions of the sense organ mentioned in (a) (i)
 - (b)
 - (i) What do you feel when you pricked the upper part of your hand with a toothpick?
 - (ii) What type of sensory receptors are responsible for the feeling in (b) (i)
 - (c)
 - (i) Identify the coarseness felt in each sample.
 - (ii) What type of sensory receptor is responsible for the feeling in (c) (i)
 - (d)
 - (i) What did you feel when you rubbed methylated spirit on your skin?
 - (ii) Give two types of sensory receptors responsible for the feeling
 - (e) Draw the diagram to show the reflex arc with respect to the feeling in (b)(i)
 - (f) What was the aim of the experiment
 - (g) Explain the roles of hairs and sweat pores on the sense organ covering your hand
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2. Study specimens **W** and **X** then answer the questions that follow.
 - (a) Identify specimens **W** and **X** by using their common name
 - (b) Compare specimens **W** and **X**, then state their observable difference.
 - (c) Briefly explain the types of germination which occur in specimens **W** and **X**
 - (d) Draw a well-labelled diagram of specimens **W** and **X**
 - (e) State three conditions for specimens **W** and **X** to germinate