



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF APPLIED & HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

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P2

**UNIVERSITY EXAMINATION FOR:**

*DIPLOMA IN APPLIED CHEMISTRY*

MAR 2024 J& S FT

AAB 2106 : BIOLOGY II

SPECIAL/SUPPLEMENTARY EXAMINATION

**SERIES:** MARCH 2025

**TIME:** 2 HOURS

**DATE:** Pick Date MARCH 2025

**Instructions to Candidates**

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** Question(s). Attempt question ONE (Compulsory) and any other TWO questions.

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**QUESTION ONE**

- I. Name two types of receptors that detect change in the body internal environment (2 marks)
- II. What are the characteristics of smooth muscle? (3 marks)
- III. How are fish adapted for movement in water? (4 marks)
- IV. Outline the three main types of skeletons in animals (3 marks)
- V. Name the waste products produced by plants (4 marks)
- VI. Name the phases of the female reproductive cycle (4 marks)
- VII. Name the gas volumes obtained in spirometry (4 marks)
- VIII. What is the importance of autotrophic nutrition (3 marks)
- IX. Which are the three domains used in modern taxonomy (3 marks)



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## QUESTION TWO

- I. Describe the sympathetic nervous system (SNS) as the body prepares the body for "fight or flight" in response to stressful situations. (10 marks)
- II. Outline any five asexual reproduction methods (5 marks)

## QUESTION THREE

- I. Describe how plants move in response to external stimuli (10 marks)
- II. Describe how nerve impulses are transmitted in neurons (5 marks)

## QUESTION FOUR

- I. Describe the trophic levels through which nutrients and energy pass as one organism eats another (10 marks)
- II. How is the body of the birds adapted for flight (5 marks)

## QUESTION FIVE

- I. Describe the ecological levels of organisation (10 marks)
- II. Name any five male internal structures of reproduction(5 marks)

