



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF APPLIED & HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

P1

UNIVERSITY EXAMINATION FOR:

DIPLOMA IN APPLIED CHEMISTRY

MAR 2024 J& S FT

AAB 2106 : BIOLOGY II

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2024

TIME: 2 HOURS

DATE: Pick Date Dec 2024

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.

QUESTION ONE

- I. What are the roles of bones in animals (5 marks)
- II. What are the characteristics of cardiac muscles (3 marks)
- III. Describe locomotion in earthworms (4 marks)
- IV. What are the divisions of the peripheral nervous system (4 marks)
- V. Outline the roles of the gonadotrophin hormones in males and females (4 marks)
- VI. Outline factors that influence the efficacy of alveolar gaseous exchange (5 marks)
- VII. Describe gaseous exchange in fish (5 marks)
- VIII. How is the small intestine adapted to its function (5 marks)



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QUESTION TWO

- I. What are the key components of homeostatic mechanisms (10 marks)
- II. Outline the excretion mechanisms in plants (5 marks)

QUESTION THREE

- I. Describe the response in plants (spontaneous movements) due to internal stimuli (10 marks)
- II. Describe the ultrafiltration that occurs in glomeruli (5 marks)

QUESTION FOUR

- I. Describe the homeostatic mechanisms in thermoregulation (10 marks)
- II. Describe childbirth as a positive feedback mechanism (5 marks)

QUESTION FIVE

- I. Describe the hydrological cycle (10 mks)
- II. Outline the roles of the female internal structures (5 marks)

