



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE &
TECHNOLOGY**
**SCHOOL OF BIOLOGICAL PHYSICAL MATHEMATICS AND
ACTUARIAL SCIENCES**
DEPARTMENT OF BIOLOGICAL SCIENCES
**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN BIOLOGICAL SCIENCES WITH IT**
2ND YEAR SECOND SEMESTER 2024/2025 ACADEMIC YEAR
MAIN CAMPUS - REGULAR

COURSE CODE: SBB 1203

COURSE TITLE: ANIMAL PHYSIOLOGY II

**EXAM VENUE: BOT-LAB STREAM: BSC BIOLOGICAL
SCIENCES**

DATE: 14/4/25 EXAM SESSION: 15-17.00 HRS

TIME: 2 HOURS

Instructions:

- 1. Answer ALL questions in Section A and Any two questions in Section B**
- 2. Candidates are advised not to write on question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A: ANSWER ALL QUESTIONS (30 MARKS)

1. Describe three adaptations of mammalian alveoli to their function. (3 marks)
2. Explain how human body PH is controlled for optimal enzyme activities. (3 marks)
3. State functions of the middle and inner ear. (3 marks)
4. Explain what would happen in a mammal if the cerebrum was removed. (3 marks)
5. Describe three adaptations of mammalian ovum to its function. (3 marks)
6. What would happen if secretion of follicle stimulating hormone was stopped in human beings. (3 marks)
7. Describe functional and structural differences sensory and motor neurons. (3 marks)
8. Distinguish between a hormone and enzyme. (3 marks)
9. Describe the role of bioluminescence in insects that interact indirectly with mammals. (3 marks)
10. Describe the mechanism of muscle contraction and relaxation. (3 marks)

SECTION B: ANSWER TWO QUESTIONS (40 MARKS)

11. Describe the role of hormones in the human reproductive system. (20 marks)
12. Describe the mechanism of breathing, gaseous exchange and explain how the rate of breathing is controlled. (20 marks)
13. Describe adaptations of mammalian circulatory system to its functions and how it is regulated. (20 marks)
14. Describe the structure of mammalian eye to its function and how accommodation of objects is achieved. (20 marks)