



**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**FACULTY OF APPLIED SCIENCE**  
**DEPARTMENT OF APPLIED BIOLOGY AND BIOCHEMISTRY**  
**BACHELOR OF SCIENCE HONOURS DEGREE IN APPLIED BIOLOGY AND**  
**BIOCHEMISTRY**  
**ANIMAL PHYSIOLOGY (SBB 1206)**

**Main Examination Paper**

**SEPTEMBER 2024**

This examination paper consists of 2 pages

Time Allowed : 3 hours  
Total Marks : 100  
Special Requirements : NIL  
Examiner's Name : MS J. B. CHANGE

**INSTRUCTIONS**

1. Answer **Four (4)** questions. Each question carries 25 marks.
2. Where a question contains subdivisions, the mark value for each subdivision is given in brackets.
3. Illustrate your answer where appropriate with large, clearly labelled diagrams.

**MARK ALLOCATION**

QUESTION	MARKS
1.	25
2.	25
3.	25
4.	25
5.	25
6.	25
<b>TOTAL</b>	<b>100</b>

1. Describe the digestion and absorption of three major biomolecules.
  
2. Write short notes on the following:
  - (a) Hormones of the anterior pituitary gland. (8 marks)
  - (b) Hormones of the adrenal medulla gland. (8 marks)
  - (c) Pancreatic hormones. (9 marks)
  
3. Discuss the role of the kidney in osmoregulation.
  
4. (a) Explain how sound travels through the ear until it reaches the auditory nerve. (10 marks)  
(b) Describe the structure and function of the human eye. (15 marks)
  
5. (a) Relate the function of an immunoglobulin to its structure. (10 marks)  
(b) Briefly explain three main functions of the lymphatic system. (15 marks)
  
6. (a) Describe the relationship between the ovarian and uterine cycle. (15 marks)  
(b) Compare and contrast spermatogenesis and oogenesis. (10 marks)

**END OF EXAMINATION**