

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE HONOURS DEGREE EXAMINATIONS

DEPARTMENT OF APPLIED BIOLOGY AND BIOCHEMISTRY

THEORY: ANIMAL PHYSIOLOGY SBB 1206

May 2006

3 HOURS (100 marks)

INSTRUCTIONS

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

1. Describe the structural organization of the heart and explain how it accomplishes sustained blood flow.
2. Write an essay on the functions of hormones secreted by the adrenal medulla.
3. Give a detailed account of the eye structure and how the visual cycle is accomplished.
4. Write notes on the following;
 - (a) Glial cells (8 marks)
 - (b) Chemoreceptors (9 marks)
 - (c) The synapse (8 marks)
5. Give an account of urea production in the liver and its removal in the kidney.
6. Explain gas exchange in the lungs.

END OF EXAMINATION

