

# University of Buea

Faculty of Sciences  
Department of Plant & Animal Sciences



Course Instructor:  
**Dr. Salah A. Martin**

**ZOO 409**

**(COMPARATIVE ANIMAL PHYSIOLOGY I)**

[www.geocities.com/salahmartin/ZOO409](http://www.geocities.com/salahmartin/ZOO409)

**FIRST SEMESTER EXAMS (2006-2007)**

Wednesday, 28<sup>th</sup> February 2007  
15-18h at Restau IV, V, VI

**Instructions:** Answer all the Questions (From 1-7)

- 1) Explain very briefly how the physiology of the following systems is regulated by the nervous and/or endocrine systems.
  - a) Circulatory system (2 marks)
  - b) Respiratory system (1 mark)
  - c) Urinary system (1 mark)
  - d) Digestive system (1 mark)
- 2)
  - a) How is the nervous system organized? (4.5. Marks)
  - b) In a tabular form only, present the anatomy and the physiology of the human brain (6 marks)
  - c) Using a flow chart only, show the main divisions of the vertebrate peripheral nervous system (4.5. marks)
- 3) Describe the mechanism of action and give the specific physiological effects of:
  - a) Estrogens (5 marks)
  - b) Growth Hormone (GH) (5 marks)
- 4) Show how the following physiological processes are regulated in vertebrates
  - a) Ovulation (5 marks)
  - b) Calcium homeostasis (5 marks)
  - c) Glucose homeostasis (5 marks)
  - d) Stress responses (5 marks)
- 5) Describe the role of the following substances that circulate in blood
  - a) ADH (Vasopressin) (2.5 marks)
  - b) ACE (Angiotensin Converting Enzymes) (2.5 marks)
  - c) Thrombopoietin (2.5 marks)
  - d) Natriuretic Peptide A & B (2.5 marks)
- 6) Discuss how insect hormones condition metamorphosis in butterfly (5marks)
- 7) How is the reproductive endocrinology involved in the following stages in a mature human female?
  - a) Menstrual cycle (5 marks)
  - b) Gestation (2.5 marks)
  - c) Parturition (2.5 marks)
  - d) Menopause (2.5 marks)

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Thursday, 22 February 2007

The Minister of Economy and Finance  
Yaoundé,

Your Excellency,

## **A request for Processing My Salary**

I have the honour to request for the processing of my salary in line with the Vice Chancellor's decision No. 2007/0086/UB/AcA/TTSD/TSS appointing me as Assistant Lecturer of Animal Physiology in the Department of Plant and Animal Science the Faculty of Science, University of Buea.

Please, your Excellency accept my highest considerations.

Sincerely

Salah Anchang Martin (Ph.D.)