

BOWEN UNIVERSITY, IWO
DEPARTMENT OF BIOLOGICAL SCIENCES

2010/2011 SECOND SEMESTER EXAMINATION

ZLY 309: COMPARATIVE VERTEBRATE ANATOMY

Answer questions **one** and any two others.

Time: 2 hrs 20 mins

1. (a) With the aid of diagrams, describe the progressive fusion of the posterior ends of the oviducts of placental mammals.
(b) Give a comparative account of the vertebrate spinal cord. *(30 Marks)*

2. (a) Discuss the functions of the vertebrate integument. Illustrate with diagrams where necessary. *(20 Marks)*

3. (a) Why was it necessary for vertebrates to develop a blood circulatory system?
(b) Draw and label a diagram of the primitive vertebrate heart. *(20 Marks)*

4. (a) Give an account of the general structure and function of the vertebrate gill.
(b) Describe the **three** main types of vertebrate gills. *(20 Marks)*

5. (a) What are the **two** main functional roles of the vertebrate kidney.
(b) Give an account of the **three** main types of nephron in the adult vertebrate kidney. *(20 Marks)*