

RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES

B.Sc. (General) Degree in Applied Sciences
First Year - Semester II Examination - November/December 2016

BIO 1206 – ANIMAL DIVERSITY II

Time: Two (02) hours

Answer (04) four questions.

Illustrate your answers with suitable diagrams where appropriate.

- 1. a) Briefly discuss the characteristic features of Gnathosmata.
 - b) Give the characters which are used to distinguish fish belonging to Agnathans and Gnathosmata.
 - b) Describe the diversity of scale types in fish.
- 2. Amphibians are the first vertebrates to colonise land. Describe the adaptive features that led them colonise land and diversify.
- 3. Using anatomical features of snakes, prove that the snakes are the most derived of all reptilian groups.
- 4. a) Outline the features that can be observed in Archaeopteryx skeleton that are common for both reptiles and birds.
 - b) Illustrate the structure of bird wing and explain how the wing shape correlates its nature of flight.
 - c) Briefly describe the four basic forms of bird wings with suitable examples.

- 5. a) Succinctly describe the soft tissue characteristics that differentiate mammals from other chordates.
 - b) Briefly comment on the behaviour and ecology of monotremes.

END