

## RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES

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

## **BIO 2213 - ANIMAL BEHAVIOUR**

Time: Two (02) hours

Answer any four (04) questions

- 1. Using examples, briefly discuss <u>three</u> processes that influence behavioural development in organisms.

  (25 marks)
- 2. Write a brief account on the broad types of animal play behaviour and their function.

(25 marks)

3. Members of social animal groups often produce alarm calls when a predator is spotted. By doing so, they draw attention to themselves and increase the chances of being killed by the predator. Yet, such altruistic behaviour is common among animals. Using appropriate examples, briefly describe two mechanisms through which such behaviour could evolve.

(25 marks)

- 4. Write short notes on the following;
  - a) Parent offspring conflict
  - b) Marginal value theorem
  - c) Batesian mimicry
  - d) Red queen evolution
  - e) Müllarian mimicry

(25 marks)

18

5. Wynne-Edwards (1986) suggested that if a population over-exploited its resources, it would go extinct, and so adaptations have evolved to ensure that members of each group or species behave in a manner that benefits the species or the group. Does the hoarding behaviour observed in temperate birds and mammals support this view? Discuss your answer.

(25 marks)

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