



RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES

B.Sc. (General) Degree in Applied Sciences
Second Year - Semester I Examination – June/July 2018

BIO 2213– ANIMAL BEHAVIOUR

Time: Two (02) hours

Answer FOUR (04) questions only.

1. Do animals behave in a manner that benefits the individual or the group/species as a whole? Formulate your opinion with special reference to estrus synchrony in lions.

(100 marks)
2. Discuss three (03) processes that influence behavioural development in organisms.

(100 marks)
3. a) Describe how cooperation may evolve among animals using the concept of Evolutionarily Stable Strategy (ESS).
b) Using examples, describe briefly factors that maintain cooperation as an ESS.

(100 marks)
4. a) Using examples explain the how the concept of diminishing returns could be used to explain animal behaviour.
a) Briefly explain how the concepts of cost and benefit could be used to describe prey selection.

(100 marks)

20
5. Write short notes on the following.

- b) Group scan sampling and focal animal sampling
- b) Red queen evolution
- c) Ideal free distribution
- d) Hoarding behaviour
- e) Kin selection and animal behaviour

(100 marks)

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