

RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES

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

BDC 3301 - BIODIVERSITY AND CONSERVATION

Time: Three (03) hours

Answer	any	SIX	(06)	of	the	following	questions.
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1. "Biodiversity loss has a tremendous impact on ecosystem functioning" Justify this statement with suitable examples.

(100 marks)

- 2. Biodiversity of a country or region provides its people with numerous benefits." Discuss this statement emphasizing different benefits and assign values to biodiversity. (100 marks)
- 3. a) What are the major predictions of island biogeography theory?

(20 marks)

b) List five (05) founder scientists of island biogeography theory.

(10 marks)

c) Explain reasons for the restricted distribution of marsupials.

(75 marks)

4. "Protected areas can play an important role in creating awareness among the people on the importance of Conservation of Biodiversity in Sri Lanka." Comment on this statement highlighting the role of environmental education from a conservation point of view.

(100 marks)

5. a) Define the terms "Reintroduction" and "Rehabilitation".

(10 marks)

- b) Using successful examples of reintroduction animals, explain the factors that you consider important in reintroduction programs. (90 marks)
- 6. Rusty spotted cat (*Prionailurus rubiginosus*), Sloth Bear (*Melursus ursinus*) and Purple-faced Leaf Monkey (*Semnopithecus vetulus*) are considered as threatened mammals in Sri Lanka. Discuss the reasons for these species be placed in the threatened category and potential solutions to conserve these species.

(100 marks)

7. Write short notes on the following;

- a) different categories of protected areas in Sri Lanka.
- b) importance of international convention on biodiversity conservation
- c) IUCN categories of threatened species
- d) management of human wild animal conflict in the Mihintale area