

UNIVERSITY OF RUHUNA
BACHELOR OF SCIENCE IN FISHERIES AND MARINE SCIENCES DEGREE
Level IV Semester I Examination
July 2015

LIM 4112 Inland Aquatic Ecosystem Management and Conservation

Time: 01 ½ hours

Answer all questions

Part I (15 marks)
Select the correct answer

01. Extinction is more likely in a population of a species with which of the following characteristics?
 - i. small populations of dispersed individuals
 - ii. large populations of relatively high density
 - iii. wide geographic distribution
 - iv. generalist
 - v. all of the above indicate a species that is likely to become extinct

02. Which of the following causes the greatest number of extinctions?
 - i. competition with introduced species
 - ii. commercial hunting
 - iii. pollution
 - iv. habitat alteration
 - v. pest control

03. What was the name of the first international agreement on climate change?
 - i. Red List of 1962
 - ii. Montreal Protocol of 1989
 - iii. International Union for the Conservation of Nature (IUCN) of 1948
 - iv. Kyoto Protocol of 1997
 - v. Convention on Biological Diversity of 1992

04. Ecological boundaries can be classified based on
 - i. Maintenance, species structure, temporal dynamics and origin
 - ii. Origin, special structure, function and temporal variations
 - iii. Origin, special structure, function and temporal dynamics
 - iv. Origin, special composition, function and temporal dynamics
 - v. Maintenance, species structure, temporal dynamics and spatial variation

05. Choose the correct statement
 - i. Ecological Integrity Assessment is a uni-metric index
 - ii. Ecosystem management intend to maintain resources
 - iii. Common feature of natural resource management is its associated uncertainty
 - iv. Ecosystem management meant to maintain biological diversity
 - v. Environmentally critical areas includes productive lands

Part II (35 marks)
Write your answer only within the provided space

1. Define the terms "Ecological Integrity" and "Ecological Threshold".

i. Ecological Integrity

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ii. Ecological Threshold

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2. Name three categories of restrictions or prohibitions commonly used in environmental regulation.

- i.
- ii.
- iii.

3. What are the main three functions of "Environmental Impact Assessment" (EIA)?

- i.
- ii.
- iii.

4. Name three general principles adopted in the enforcement of environmental law.

- i.
- ii.
- iii.

5. What are the three main levels of Biological diversity?

- i.
- ii.
- iii.

6. Define 'Migratory Species'.

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7. What is the main purpose of the Ramsar Convention of 1971?

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8. Name six Ramsar sites in Sri Lanka.

- i.
- ii.
- iii.
- iv.
- v.
- vi.

9. Write four categories that can be used in defining 'ecological boundaries'.

- i.
- ii.
- iii.
- iv.

10. Write four environmentally critical areas that need Environmental Impact Assessments (EIA) regardless of type of the project.

- i.
- ii.
- iii.
- iv.

Part III (50 marks)

1. Describe main steps of Environmental Integrity Assessment.