

UNIVERSITY OF COLOMBO, SRI LANKA

FACULTY OF ARTS

SECOND YEAR EXAMINATION IN ARTS (ONLINE), SEMESTER II - 2019/2020

GYG 2220– BIODIVERSITY AND CONSERVATION

OPEN BOOK EXAMINATION

Instructions to Students:

- The question paper starts on page 2
- All written assessments must be **handwritten**. Handwriting must be **clear and readable**.
- Answers should be written on an **A4 size paper** (ruled/lined paper/otherwise), using a **black ball point pen**.
- As is the case of an in-person examination, word processing or type setting of answers will not be permitted. This rule does not apply to any candidate who has been exempted by the University under applicable bylaws (e.g., due to visual impairment).
- The **index number must be written on the top right-hand side** of each page of the answer script. Do not write your name anywhere on the answer script.
- **Number the pages** of the answer script using the following format at the **bottom of the page**: E.g., if it consists of 5 pages 1/5, 2/5...etc.
- Use the **common front page** (provided on LMS) as the first page of the answer script. You may print, or hand write the front page which must be the first page of your assessment.
- The **total number of pages** should be indicated on the front page of the answer script.
- **Scan/take photos of the answer script and convert it to a single PDF file** in the order of the page numbers.
- The full page of the answer script must be properly covered in the scanned image, and the scanned image must be clear/readable.
- LMS does not permit individual pages to be uploaded separately.
- **The only acceptable file format is PDF. The PDF file should be named with your index number**, e.g. A 12345
- Uploading answer scripts as JPEG/JPG or any other form will not be permitted.
- Complete and upload the final version of the answer script to LMS **within the stipulated 24 hours**.
- Once the answer script has been uploaded to LMS, take **a screen shot of the full page** of the LMS with the word 'submitted', as an acknowledgement and keep with you.
- **If there is an unexpected technical issue** with the uploading of an answer script to LMS, you may send your answer script via email to exam2@arts.cmb.ac.lk within the stipulated 24-hour period.

UNIVERSITY OF COLOMBO, SRI LANKA

FACULTY OF ARTS

SECOND YEAR EXAMINATION IN ARTS (ONLINE) SEMESTER II - 2019/2020

GYG 2220– BIODIVERSITY AND CONSERVATION

OPEN BOOK EXAMINATION

Duration: **24 hours** for completion and submission of answer scripts to LMS

Answer **03** questions selecting at least one question from each part

Part I

01. (I). Citing examples from a home gardens, explain the flow of energy through an ecosystem.
(Maximum 400 words for the answer) (08 Marks)
- (II). Discuss the importance of enhancing the interest of general public for home gardening in the conservation of biodiversity, using appropriate examples. (Maximum 700 words for the answer) (12 Marks)
- 02.(I). Giving suitable examples from the animal kingdom, explain the criteria used by the R. H. Whittaker to classify organisms. (Maximum 400 words for the answer) (08 Marks)
- (II). Discuss the importance of the knowledge of classifying living organisms, to understand the behaviours and distribution of species compositions of a habitat. (Maximum 700 words for the answer) (12 Marks)
03. (I). “Conserving aquatic protected areas is challenging than conserving terrestrial protected areas”. Explain this idea citing suitable examples. (Maximum 400 words for the answer) (08 Marks)
- (II). Discuss the responsibilities and the obstacles faced by the conservation biologists in developing countries, during the process of infrastructure development and *in-situ* conservation of species using examples. (Maximum 700 words for the answer) (12 Marks)

Part II

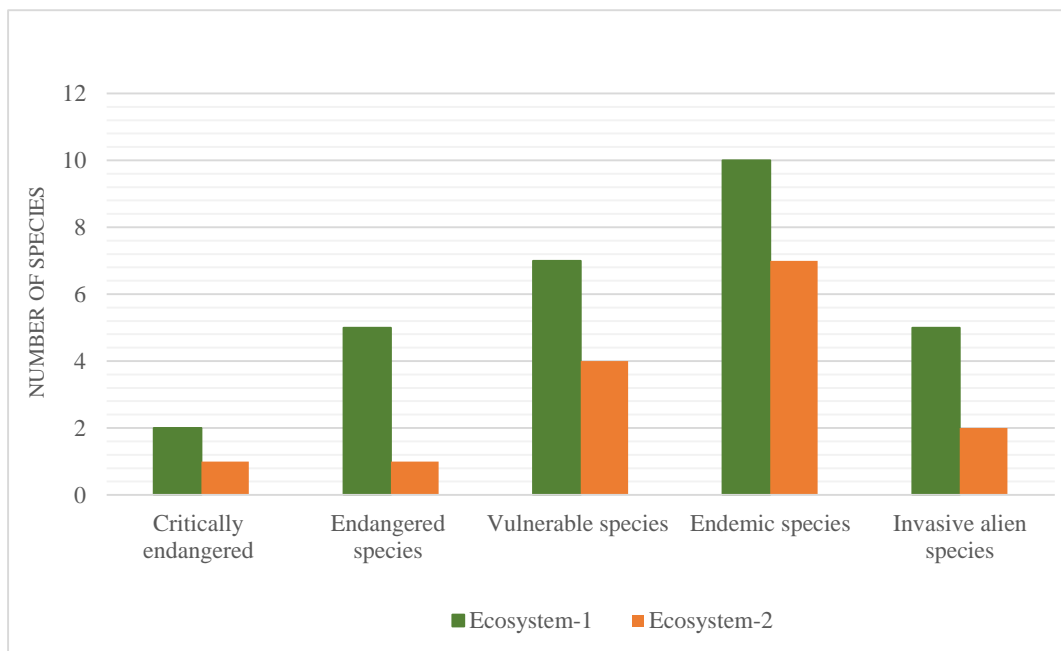
04. I. Compare the importance and threatened nature of the species in two ecosystems given in Figure 1. (Maximum 400 words)

(08 Marks)

II. “Causes for loss of biodiversity are greatly affecting the tropical regions of the world”. Confirm this idea using appropriate examples. (Maximum 700 words for the answer)

(12 Marks)

Figure 1: Threatened, endemic and invasive alien species of two different ecosystems



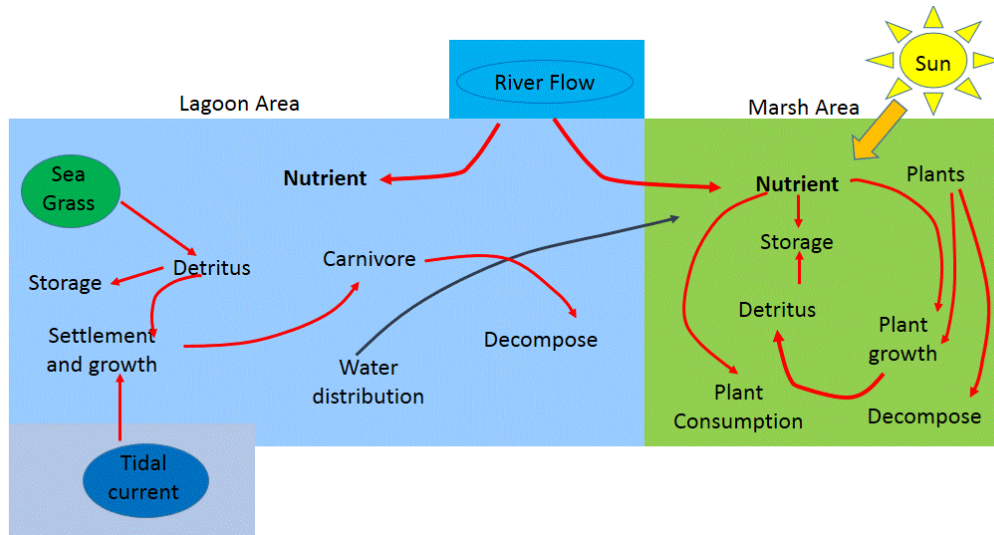
05. I. Explain the components, processes and relationships of the ecosystem depicted in Figure 2. (Maximum 400 words for the answer)

(08 Marks)

II. Discuss the importance of proper functioning of an ecosystem for the sustainability of biodiversity. (Maximum 700 words for the answer)

(12 Marks)

Figure 2: Linkages of a Marsh and a Lagoon wetland ecosystems



06. I. Explain the movement of carbon through terrestrial ecosystems using the provided information in Figure-3. (Maximum 400 words for the answer)

(08 Marks)

II. Discuss how the human perturbations on carbon cycle have impact on the global biodiversity. (Maximum 700 words for the answer)

(12 Marks)

Figure 3: The terrestrial part of the carbon cycle

