

UNIVERSITY OF COLOMBO – SRI LANKA

FACULTY OF ARTS

EXAMINATION IN ARTS – PART I

SECOND SEMESTER END EXAMINATION – 2016/2017

GYG 2220 – Biodiversity Conservation

Two hours

Answer **three (03)** questions only.

A world map will be provided.

01. “Biodiversity is an essential factor for human survival and the maintenance of ecosystem process”. Discuss this statement focusing ecosystem services.

(20 Marks)

02. (i).Data collected from three islands about species under two parameters are shown in Table-1. According to given data, which island has the highest biodiversity? Explain the reasons for your answer.

Table -1: Data of species in three different islands

Name of the island	Number of species	Number of individuals
A	16	417
B	7	860
C	3	2014

(05 Marks)

(ii).Using your knowledge on life kingdom, discuss the importance of classifying species in to different groups when understanding the complexity in biodiversity.

(15 Marks)

03. (i). Explain the structure of a tropical rainforest using a diagram.

(05 Marks)

(ii). Explain different adaptation measures of species to different physical geographical conditions of the environment selecting any of two biomes in the world.

(15 Marks)

04. (i). State the major characteristics of invasive species. (05 arks)

(ii). Explain the threats from invasive species to biodiversity using examples from real world. (15 Marks)

05. (i). What do you meant by value of biodiversity? (05 arks)

(ii). Explain the factors that influence the habitat degradation in natural ecosystems. (15 Marks)

06. (i). Name and mark **six** biodiversity hotspots on the provided world map. Select at least one from the following continent. (05 Marks)

- a) Asia
- b) Africa
- c) America
- d) Australia

(ii). Discuss the local and global importance of identifying biodiversity hotspots in conserving the biodiversity. (15 Marks)
