



UNIVERSITY OF RUHUNA
FACULTY OF FISHERIES AND MARINE SCIENCES &
TECHNOLOGY

Academic Year 2022/2023

Bachelor of Science Honours in Fisheries and Marine Sciences Degree/ Bachelor of
Science Honours in Marine and Freshwater Sciences Degree

Level II Semester II Examinations – April/May 2024

OCG 2253: Biological Oceanography

Section II

Answer only **Three (03)** questions

Time 1 ¹/₂ hrs /75 marks

01. i. Describe the main factors influencing the spatial variations in global marine primary production. (10 Marks)
ii. Explain the species contributing to the above spatial variations. (15 Marks)
02. Briefly explain **any two (02)** of the following. (25 Marks)
a.) Diversity and succession of hydrothermal vent communities
b.) Rocky shore vs sandy shore
c.) Non-phytoplanktonic primary production.
03. Write short notes on **any three (03)** of the following regarding the marine ecosystems. (25 Marks)
a.) Diversity of marine phytoplankton
b.) P/E curve
c.) Venomous marine organisms
d.) Bioerosion
e.) Role of zooplankton in marine food webs
04. i. List the main challenges to the organisms that live in the deep-sea environment. (05 Marks)
ii. Explain adaptations of organisms to overcome the challenges in deep-sea environments. (20 Marks)
05. “Despite the challenges rocky shore communities are highly successful in land-sea interphase”. Discuss this statement. (25 Marks)

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