



UNIVERSITY OF RUHUNA

FACULTY OF FISHERIES AND MARINE SCIENCES & TECHNOLOGY

Academic Year 2023/2024

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

Level I Semester I Examination – October – December 2024

OCG 1121: Earth History, Origin and Evolution of life

Time: 1 hour

Answer only two (02) questions

1.

- i. Describe the birth of our solar system. (15 marks)
- ii. Explain the reasons behind Pluto's reclassification from a planet to a dwarf planet. (10 marks)
- iii. Describe the origin of Earth. (10 marks)
- iv. Describe the theory of continental drift and give the scientific evidence that supports it. (10 marks)
- v. List **five (05)** prezygotic reproductive isolation mechanisms. (05 marks)

2.

- i. Briefly describe how elements lighter than Fe in the solar system are formed.
 - ii. Explain how the elements heavier than gold (Au) in the solar system are formed.
 - iii. Describe the three types of plate boundaries using labeled diagrams.
 - iv. Compare and contrast the characteristics of the continental crust and the oceanic crust.
 - v. What is meant by “**genetic equilibrium**” of a population?
- (10 marks * 5 = 50 Marks)

3.

Write short notes on **any Five (05)** of the following.

- i. *Big Bang* theory
- ii. Red shift vs. blue shift
- iii. Ice giants vs. gas giants
- iv. Natural selection
- v. Modes of Specification
- vi. Theories of the origin of life

(10 marks * 5 = 50 Marks)

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