

RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES, MIHINTALE

B.Sc. (General) Degree in Applied Sciences
First Year – Semester I Examination – April/ May 2015

BIO 1201 - PLANT DIVERSITY I

Time: Two (02) hours

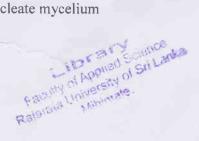
Answer four (04) questions only.

- 1. a) Giving examples, describe the two different types of life cycles that occur among members in the Division Rhodophyta. (60 marks)
 - b) Explain briefly why brown algae are separated from green and red algae and placed in Subkingdom Heterokonta (Stramenophila). (40 marks)
- a) Using appropriate examples, illustrate the vegetative diversity found in order Nostocales. (80 marks)
 - b) Give five economic / ecological importances of algae. (20 marks)
- 3. a) Describe the major steps involved in the development of six kingdom classification of organisms. (80 marks)
 - b) Do you agree with the above system of classification? Justify your answer.

(20 marks)

- 4. a) Give reasons as to why members of Phycomycetes are considered as fungi-like organisms. (20 marks)
 - b) Fungi are characterized by absorptive mode of nutrition. Briefly explain what is meant by "absorptive mode of nutrition". Mention the ecological function of this mode of nutrition.

 (20 marks)
 - c) Compare the following pairs. In each pair, mention which is more advanced in evolution. Give one example for each. (60 marks)
 - i) coenocytic mycelium and uninucleate mycelium
 - ii) sporangiospore and conidium
 - iii) ascus and basidium



5. a) Explain as to why Deuteromycetes are grouped under that phylum. (20 marks)

b) Describe the life cycle of a named fungus that shows a dikaryotic phase. (50 marks)

c) Write a short essay on the importance of fungi to man. (30 marks)
