

Bago University
Department of Botany
First Semester Examination, March, 2019

First Year (B.Sc.)
Zoology Specialization
Answer All Questions

Bot.1001
Varieties of Plants and their Relatives
Time allowed: (3) Hours

I. Determine whether each statement is TRUE or FALSE.

(10 marks)

1. The scientific name of paddy is *Oryza sativa*.
2. All of the prokaryotes are assigned to kingdom Protista.
3. RSV virus can cause cancer in chickens.
4. The *Euglena* reproduces asexually by binary fission.
5. Zygomycetes are aquatic organisms.
6. Lichen may have been an early invader of Earth's land area.
7. *Chlamydomonas* is a single-celled green alga.
8. Some plant species produce only one type of spore is called heteroporous.
9. The large leaves of ferns are called fronds.
10. Angiosperms are called naked seed plants.

II. Write correct word to complete the following sentences.

(10 marks)

1. Viruses come alive only when they ----- the cell.
2. Many cyanobacterial species can survive in ----- environments.
3. *Thiobacillus* occur naturally in the ----- ore.
4. The phytoplanktons are the ----- producers.
5. The hyphae of Oomycetes are aseptate and -----.
6. Basidiomycetes are commonly called -----.
7. Communication is necessary for the *Volvox* colony to -----.
8. In evolutionary sense, isogamy is probably the ----- condition.
9. The sporangia are borne on the leaves called -----.
10. The spores of ferns are produced in tiny containers called -----.

III. Answer all questions.

(10 marks)

1. What are the components of peptidoglycan?
2. State the uses of bacteria in the production of food and beverages.
3. Name the groups of algae.
4. What features distinguish the diploid plant from haploid plant?
5. Why seed dispersal is important to plants?

IV. Answer all questions.

(20 marks)

1. Describe the classification scheme of R.H Whittaker in 1963.
2. Give some adverse effects of dinoflagellates.
3. Tabulate the major groups of the plant kingdom.
4. Write short notes on Liverworts.

V. Answer any three questions.

(30 marks)

1. With the help of diagram explain the structure of typical Euglenoid cell.
2. Describe the structure of basidiocarp with illustration.
3. Explain the alternation of generations in plants with word diagram.
4. Annotate the diagrammatic explanation life cycle of fern.
5. Describe about the Naked-seeded plants.