

**Central Tribal University of Andhra Pradesh**  
**Semester End Examination – Jan/Feb-2024**

**Name of the Program: B.Sc. Botany**

**Name of the Subject : Biodiversity**

**Subject Code : Semester: I**

**Max Time: 3 Hours Max. Marks: 70**

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**Part-A**

**Answer all ten questions. Each question carries 1 mark each.**

**10q x 1m = 10**

1. Phycology is the study of-  
(a) Algae (b) Fungi (c) Bryophyte
2. Fusion between gametes of unequal sizes is called-  
(a) Anisogamy (b) Oogamy (c) Isogamy (d) Dichogamy
3. The plant in which root, stem and leaf is not differentiated is called.....thallus
4. Reserve food material in Rhodophyceae is-  
(a) Glycogen (b) Starch (c) Mannitol (d) Floridian starch
5. What is the main function of a bacterial capsule?
6. What color are Gram-negative bacteria?
7. During what phase is bacterial growth the fastest?
8. What is a virion?
9. Are antibiotics used to treat viral infections? No/Yes
10. What is gemma?

**Part-B**

**Answer any four questions. All questions carry 5 marks each.**

**4q x 5m = 20**

11. Describe the distinctive characteristics of algae.
12. How algae differ from fungi?

13. Write in short the role of Bryophyta in plant succession.

14. How is amphibian nature exhibit in bryophyte?

15. Write the Land adaptive features in Peridophyta.

16. Give an illustrated account of structure of viruses.

### Part-C

Answer either A or B from each question. All questions carry 10 marks each.

4q x 10m = 40

17. a) Describe various types of life cycles found in algae.

OR

b) What are fungi? Classify fungi based on mode of nutrition.

18. a) Describe economic significances of Sphagnum with reference to food, peat, horticulture, medicinal, surgical dressings and pollution monitoring.

OR

b) Give an illustrated account of multiplication of plant viruses.

19. a) Describe the structure of bacterial cell and its mode of reproduction.

OR

b) What is reproduction? Name the different modes of reproduction.

20. a) Write explanatory note on the sexual reproduction of Marchantia or any Bryophyte.

OR

b) Give an illustrated account of the structure and development of the sporophyte of Funeria.