Max. Marks: 60

 $(1 \times 8 = 8)$

B.Sc. DEGREE END SEMESTER EXAMINATION - OCTOBER 2022

SEMESTER – 1: BOTANY (COMPLEMENTARY COURSE FOR ZOOLOGY)

COURSE: 15U1CPBOT1: CRYPTOGAMS, GYMNOSPERMS AND PLANT PATHOLOGY

(Common for Supplementary 2018/2017/2016 /2015 Admissions)

Time: Three Hours

PART A

I. Answer ALL questions; each question carries 1 mark.

- 1. What are mesosomes?
- 2. Name the negatively geotropic root in *Cycas*.
- 3. What is ligule?
- 4. Name a unicellular fungus.
- 5. What are cap cells?
- 6. Name a foliose lichen
- 7. Name the causative organism of leaf mosaic disease of tapioca.
- 8. What is a plasmid?

PART B

II. Answer ANY SIX questions; each question carries 2 marks.

- 9. Explain the measures to control the bacterial blight of paddy
- 10. Why bryophytes are called amphibians of plant kingdom.
- 11. What is the source of Agar- Agar? Mention its uses.
- 12. State any two usefulness of Virus.
- 13. What are differences between archaebacteria and eubacteria?
- 14. Mention any two uses of lichens.
- 15. Differentiate between hormogonia and akinete.
- 16. Describe the internal structure of *Riccia* thallus.
- 17. Define soredia. Differentiate between soredia and cephalodium.
- 18. Differentiate between homosporous and heterosporous condition. (2 x 6 = 12)

PART C

III. Answer ANY FOUR questions; each question carries 4 marks.

- 19. Explain the structure of TMV.
- 22. Explain the classification of lichen based on the external structure.
- 23. Explain the internal structure of leaflet in Cycas.
- 24. Comment on the beneficial uses of fungi.
- 25. Comment on the morphology of rhizophore in Selaginella.
- 26. Explain the economic importance of gymnosperms.
- 27. Explain the structure of ovule in Cycas

 $(4 \times 4 = 16)$

PART D

IV. Answer ANY TWO questions; each question carries 12 marks.

- 25. Give an illustrated account on the life cycle of Volvox
- 27. Quoting suitable examples, explain in details the economic importance of bacteria.
- 28. Explain and illustrate the life cycle in Pteridophytes.
- 29. Describe the economic importance of Bryophytes.

(12 x 2 = 24)
