Reg. No. : $\qquad$
Name : $\qquad$

## I Semester B.Sc. Degree (C.B.C.S.S. - O.B.E. - Regular/Supplementary/ Improvement) Examination, November 2022 <br> (2019 Admission Onwards) COMPLEMENTARY ELECTIVE COURSE IN BOTANY 1C01BOT : Microbiology, Phycology, Mycology and Lichenology

Time : 3 Hours
Max. Marks : 40
Instruction : Draw diagrams wherever specified.
PART - A

Short answer questions. Answer all.

1. Spherical or bean shaped bacteria are called
a) bacillus
b) coccus
c) spirillum
d) pili
2. Fungi are always
a) parasitic
b) saprophytic
c) autotrophic
d) heterotrophic
3. Reserved food in Rhodophyceae is
a) starch
b) oils
c) laminarin
d) floridean starch
4. An ascocarp that is globose in shape and completely enclosed by peridium lacking ostiole is
a) apothecium
b) cleistothecium
c) perithecium
d) epithecium
PART - B

Answer any eight.
5. Write a short note on Gram staining of bacteria.
6. What is a heterocyst ? What is its function ?
7. Distinguish between scalariform conjugation and lateral conjugation.
8. Summarize different pigments seen in algae.
9. Give an illustration of the female conceptacle in sargassum.
10. What are Pyrenoids? Give example.
11. Comment on the classification of algae by Fritsch.
12. Differentiate between sclerotia and rhizomorph.
13. Write four differences between prokaryotes and eukaryotes.
14. What are fruticose lichen? Give example.
15. Describe the internal structure of Usnea.
16. Outline the six kingdom classification proposed by Carl Woese.

PART - C
Answer any four.
17. Differentiate between ascocarp and basidiocarp.
18. Outline general characters of phaeophyceae.
19. The lifecycle of Polysiphonia is triphasic. Discuss.
20. Draw a neat labelled diagram of sex organs in Chara.
21. Write a brief note on economic importance of lichens.
22. Give a detailed account on fungal cell wall.

PART - D
Answer any one.
23. Describe the lifecycle of Puccinia.
24. Discuss the economic importance of microbes.
25. Comment on the thallus variation in algae.

