

K22U 3407

Reg. No. :

Name :

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

Time : 3 Hours	8 CD 21/10	3-100/12 CS 32	Max. Marks : 40
Instruction : Draw diagrams wherever specified.			
PART – A			
Short answer questio	ns. Answer all .		(4×1=4)
 Spherical or bean a) bacillus 	shaped bacteria are b) coccus	called c) spirillum	d) pili
 Fungi are always a) parasitic 	b) saprophytic	c) autotrophic	d) heterotrophic
3. Reserved food in la) starchc) laminarin	Rhodophyceae is	b) oils d) floridean starch	
4. An ascocarp that lacking ostiole isa) apotheciumc) perithecium	is globose in shape	and completely enc b) cleistothecium d) epithecium	losed by peridium
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.

(8×2=16)

K22U 3407

- 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.

(4×3=12)

(1×8=8)