

Reg. No. :

Name :

K15U 0572

I Semester B.Sc. Degree (CCSS - Reg./Supple./Improv.) Examination, November 2015

(2014 Admn. Onwards)

COMPLEMENTARY COURSE IN BOTANY/PLANT SCIENCE 1C01 BOT/PLS: Diversity of Life - Microbes and Thallophytes

Time: 3 Hours

Total Marks: 32

(Answer all)

- 1. Which one of the following is a binucleate spore?
 - a) Basidiospore

b) Aplanospore

c) Endospore

- d) Aecidiospore
- 2. Sexual reproduction is absent in
 - a) Spirogyra

b) Polysiphonia

c) Nostoc

d) Volvox

- 3. Usnea is a
 - a) Fruticose lichen

b) Crustose lichen

c) Foliose lichen

- d) Leptose lichen
- 4. The protein coat of virus is called
 - a) Pyrenoid
- b) Capsid
- c) Head
- d) Capsule
- 5. The characteristic colour of Rhodophyceae is due to the presence of
 - a) Phycocyanin
- b) Xanthophyll
- c) Phycoerythrin d) Fucoxanthin

 $(5 \times 1 = 5)$

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SECTION – B (Answer any four)

- 6. Give the vegetative structure of Sargassum.
- 7. What are the different types of lichens based on external form?
- 8. Explain Plakea. Write an example in which this phenomenon is found.
- 9. Give an account on the nutritional types of bacteria.
- 10. Describe the scalariform conjugation in spirogyra.
- 11. Write an account on the different methods of vegetative reproduction in Chara.

 $(4 \times 2 = 8)$

SECTION - C (Answer any three)

- With the help of diagrams explain the lytic cycle in the reproduction of bacteriophage.
- 13. Write the salient features of Fungi.
- 14. Differentiate archea with eubacteria.
- Describe the asexual reproduction in Rhizopus with diagrams.
- 16. Explain the thallus structure and hormogonia formation in Nostoc. (3x3=9)

SECTION - D

(Answer any two)

- Describe the anatomy of axis and sexual reproduction in Sargassum with diagrams.
- Name the fungus that causes black stem rust disease. Describe the different spore stages this fungus with diagrams.
- 19. With the help of labeled diagrams describe the anatomy of thallus and sexual reproduction in Usnea.
- 20. Explain the structure and life cycle of a bacterium with diagrams.

(2×5=10)