

Reg. No .....

Name .....

**B. Sc DEGREE END SEMESTER EXAMINATION - OCTOBER 2019****SEMESTER 1 : BOTANY****COURSE : 19U1CPBOT1 : CRYPTOGAMS, GYMNOSPERMS AND PLANT PATHOLOGY***(For Regular - 2019 admission)*

Time : Three Hours

Max. Marks: 60

**Section A****Answer any 8 (1 marks each)**

1. Name the isogamous sexual reproductive method in *Spirogyra*.
2. What is the nature of reserve food material in Phaeophyceae?
3. What are antibiotics? Give two examples.
4. What are the partners found in the thallus of Lichen?
5. Describe the antherozoid of *Riccia*.
6. Name the type of stele found in *Selaginella* stem.
7. Name the negatively geotropic root in *Cycas*.
8. What is the mode of spread of nutfall of areca nut?

(1 x 8 = 8)

**Section B****Answer any 6 (2 marks each)**

9. Explain various asexual reproductive methods that are found in algae.
10. *Puccinia graminis* is a heteroecious species. Justify.
11. Explain amphigynous anthredium.
12. Describe the thallus structure of *Usnea*.
13. How do bryophytes help in soil conservation?
14. Distinguish homosporous and heterosporous.
15. What is transfusion tissue?
16. Mention the causative organism and control measures of leaf mosaic of tapioca.

(2 x 6 = 12)

**Section C****Answer any 4 (5 marks each)**

17. What are the post fertilization changes in *Polysiphonia*?
18. Explain the process of formation of pycnidium in *Puccinia* with the help of suitable diagram.
19. Comment on the ultrastructure of a typical fungal cell.
20. With the help of suitable diagrams give an account of antheridia in *Riccia*.
21. Describe the life cycle of *Cycas*.
22. Describe the structure of coralloid root and mention its importance.

(5 x 4 = 20)

**Section D****Answer any 2 (10 marks each)**

23. Explain triphasic life cycle taking a suitable alga as an example.
24. Describe the life cycle of *Puccinia* with the help of suitable diagrams.
25. Give a detailed account on the sporophyte of *Selaginella*.
26. Give a brief account of symptoms and methods of spreading nut-fall of Areca nut. Also name the causative organism. What are the measures adopted to control the disease?

(10 x 2 = 20)