TB174080C **Reg. No: .....**

Name: .....

B. Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MARCH 2019
(2017 Admissions Regular, 2016 Admissions Improvement/Supplementary & 2015 Admissions Supplementary)
SEMESTER IV - CORE COURSE (BOTANY)
BO4B04TB – BRYOLOGY AND PTERIDOLOGY

Time: Three Hours **Maximum Marks: 60**

PART A

I Answer all questions. Each question carries 1 mark

1. Name the major group of plants called the amphibians of the plant kingdom.
2. What is the function of the scales in *Riccia*?
3. Give an example for a hornwort.
4. Common name of *Equisetum*.
5. A pteridophyte with synangium.

(5x1=5)

PART B

II Answer any five questions. Each question carries 2 marks

6. What is an operculum? What is its function?
7. How do *Marchantia* reproduce vegetatively?
8. What are the parts of the sporophyte in *Funaria*?
9. Give examples of Bryophytes important in medicine.
10. List four salient features of Pteridophytes.
11. What is a ligule? Explain its structure.
12. Distinguish between a protostele and a siphonostele.
13. Discuss the structure of the sporangiophore of *Equisetum*.

(5x2=10)

PART C

III Answer any five questions. Each question carries 5 marks

14. Explain the anatomy of the thallus of *Riccia* with a diagram.
15. Illustrate and explain the structure of the sporophyte of *Anthoceros*.
16. Give an account on the salient features of Bryophytes.
17. What are the ecological importance of Bryophytes?
18. List out the hydrophytic and xerophytic features of *Equisetum*.
19. Explain the structure of the prothallus of *Pteris*.
20. Give an account on the economic importance of Pteridophytes.
21. Distinguish between apospory and apogamy. Add a note on its significance.

(5x5=25)

PART D

IV Answer any two questions. Each question carries 10 marks

22. With illustrations, describe the life cycle of *Funaria*.
23. Discuss the life cycle of *Selaginella* with respect to heterospory and seed habit.
24. How are Bryophytes classified? Add a note on the theories on the origin of Bryophytes.
25. Discuss with illustrations, the stellar evolution in Pteridophytes.

(2x10=20)