

Reg. No.....

Name.....

B. Sc. DEGREE END SEMESTER EXAMINATION OCTOBER 2017**SEMESTER – 3: BOTANY (CORE COURSE)****COURSE: 15U3CRBOT03 – BRYOLOGY, PTERIDOLOGY, GYMNOSPERMS & PALAEOBOTANY***(For Regular - 2016 Admission and Supplementary / Improvement 2015 Admission)*

Time: Three Hours

Max. Marks: 60

PART A

I. Answer ALL questions; each question carries ONE mark.

1. Name the receptacle in which the male reproductive structure is enclosed in *Marchantia*?
2. Name the bryophyte group in which Nostoc colony is present on the thallus?
3. Name a Bryophyte with pseudoelater?
4. Name a pteridophyte with haplostele?
5. Name a common species of *Pteris*?
6. Name a Gymnosperm with winged seed?
7. Name the negatively geotropic roots in *Cycas*?
8. Name one fossil gymnosperm?

(1 x 8 = 8)

PART B

II. Answer ANY SIX questions; each question carries TWO marks.

9. Write short note on the economic importance of bryophytes.
10. Explain photosynthetic filaments of *Riccia*?
11. What are the salient features of Bryophytes?
12. Describe the structure of mature synangium of *Psilotum* with diagram.
13. Explain heterospory and seed habit ?
14. Explain the structure and function of ligule?
15. What are the general characters of Gymnosperms?
16. Describe the branches of *Pinus*?
17. Describe Indian contribution to Palaeobotany?
18. What is called Bars of sanio ?

(2 x 6 = 12)

Part C

III. Answer ANY FOUR questions; each question carries FOUR marks.

19. Explain the Sporophyte of *Riccia* with diagram?
20. Explain Archegoniophore of *Marchantia*?
21. Explain the economic importance of Pteridophytes?
22. Explain the xerophytic adaptations of equisetum stem?
23. Describe the affinities of Gymnosperm with Angiosperm and Pteridophytes.
24. Explain the structure of male cone of *Cycas*? (4 x 4 = 16)

Part D

IV. Answer ANY TWO questions; each question carries TWELVE marks.

25. Describe the external and internal characters of *Anthoceros* thallus and explain the sporophyte of *Anthoceros* with diagram?

OR

26. Explain the structure and reproduction in *Riccia* with diagram?
27. Describe the Anatomy of *Marsilea*?

OR

28. Differentiate the leaves of *Pinus* and *Cycas* with neat labeled diagram. (12 x 2 = 24)
