

Name..... Reg. No.....

**BSc DEGREE END SEMESTER EXAMINATION MARCH 2017**  
**SEMESTER - 6: BOTANY (CORE COURSE)**  
**COURSE: U6CRBOT10: BRYOLOGY, PTERIDOLOGY, GYMNOSPERMS**  
**& PALEOBOTANY**  
*(For Regular - 2014 Admission)*

Time: Three Hours

Max. Marks: 60

**PART A**Answer **All** questions. Each question carries 1 mark.

1. What is seta?
2. Name a heterosporous pteridophyte.
3. What are impressions?
4. What is the peculiarity of the xylem of *Gnetum*?
5. Name two vegetative reproductive methods in *Riccia*?
6. What are the Pteridophyte characters seen in Gymnosperms?
7. Name the fruiting body of *Marsilea*?
8. Name the member under hepaticae having the most advanced sporophyte?  
(1 x 8 = 8)

**PART B**Answer **Any Six** questions. Each question carries 2 marks.

9. Why do we consider the bryophytes as the amphibians of the plant kingdom?
10. Define paleobotany?
11. What is a synangium?
12. What are coralloid roots?
13. What are elators?
14. What are Petrifications?
15. What is Protonema?
16. What are the peculiarities of Needles?
17. Mention any two Angiosperm characters that are found in the Gymnosperms that you have studied?
18. What are trabeculae?  
(2 x 6 = 12)

**(PTO)**

### PART C

Answer **Any Four** questions. Each question carries 4 marks.

19. Comment on the male cones of *Pinus* and *Gnetum*?
20. Draw a neat labeled sketch of *Funaria* capsule?
21. Comment on the Indian Contributions to Paleobotany?
22. Briefly discuss the affinities of *Gnetum* with Angiosperms?
23. Draw a neat labeled sketch of TS of *Pinus* needle?
24. Briefly discuss the vegetative modes of reproduction among the Pteridophytes that you have studied?

(4 x 4 = 16)

### PART D

Answer **Any Two** questions. Each question carries 12 marks.

25. With detailed illustrations, compare the sporophytes of *Riccia*, *Marchantia* and *Anthoceros*. Also suggest the advanced one giving reasons?

**OR**

26. Compare the strobilar organizations among *Equisetum* and *Selaginella* with detailed illustrations?
27. Compare the stem anatomy of *Cycas*, *Pinus* and *Gnetum*. How do they differ from each other?

**OR**

28. With suitable illustrations discuss the stellar organization among the various species of *Lycopodium* that you have studied?

(12 x 2 = 24)

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