



Register Number:

Date:

**ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE-27**  
**B.Sc. Botany - III SEMESTER**  
**SEMESTER EXAMINATION: OCTOBER 2019**  
**BO 318 – PTERIDOPHYTES, GYMNOSPERMS AND PALEOBOTANY**

Time- 2 1/2 hrs

Max Marks-70

This paper contains ONE printed page and THREE parts

**A. Answer any TEN of the following**

**10X2=20**

1. Pseudofossils
2. Ligule
3. Amphiphloic siphonostele
4. Annularia
5. Eusporangiate development
6. Circinate vernation
7. Tyloses
8. Shoot dimorphism in *Pinus*
9. Manoxylic wood
10. Pavement tissue
11. Birbal Sahni
12. Petrification

**B. Answer any FIVE of the following**

**5X6=30**

13. Affinities between Pteridophytes and Gymnosperms
14. *Calamites*
15. Heterospory – a prerequisite to seed habit
16. Gametophytes in *Lycopodium*
17. Female cone of *Pinus*
18. Salient features of Cycadales
19. Types of fossils

**C. Answer any TWO of the following in detail**

**2X10=20**

20. Internal structure of sporocarp (HLS) in *Marsilea*
21. *Pentoxylon*
22. Secondary growth in *Gnetum*

BO318\_C\_19

