**ST. JOSEPH’S UNIVERSITY, BENGALURU -27**

**M.Sc. (BOTANY) – II SEMESTER**

**SEMESTER EXAMINATION: APRIL 2023**

**(Examination conducted in May 2023)**

**BO 8122 – PTERIDOPHYTES AND GYMNOSPERMS**

**(For current batch students only)**

**Time: 2 Hours Max Marks: 50**

**This paper contains ONE printed page and THREE parts**

**\*Draw diagrams wherever necessary**

**PART-A**

**Answer any FIVE questions in one or two sentences 2X5=10**

1**.** Epiphytic Pteridophytes

2. *Cordaites*

3. Any two ornamental Pteridophytes

4. Polyembryony

5. Any two morphological characters of Taxales

6. Actinostele

7. Origin of gymnosperms

**PART-B**

**Write short notes on any FIVE questions 6X 5=30**

8. Sporophyte structure of *Medullosa*

9. Strobilus of *Equisetum*

10. Morphological characters of Calamitales

11. Anatomical characters of Filicales

12. Classification of gymnosperms according to Pant 1957

13. Reproductive characters of *Lepidostrobus*

14. Xylotomy of gymnosperms

**PART-C:**

**Explain any ONE question in detail 10X1=10**

15. Describe the morphological differences in Marattiales

16. Explain the diversity in reproduction of Gnetales