****

Register Number:

DATE: 11-04-2018 (1PM)

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-560027**

**M.Sc. BOTANY – II SEMESTER**

**SEMESTER EXAMINATION– APRIL 2018**

**BO.8215- Diversity of Pteridophytes and Gymnosperms**

**Time: 2 ½ hrs Max.Marks-70**

**This question paper has ONE printed page and THREE parts**

**Instructions: Draw diagrams and write examples wherever necessary**

**A. Write on any TEN of the following in one or two sentences: 10x2=20**

1. Vallecular canal
2. Tassel
3. Columella
4. Lepidocarpon
5. Velum
6. Heterospory
7. Coralloid roots
8. *Ginkgo,* a living fossil
9. Pycnoxylic wood
10. Aril
11. Polyembryony
12. Xerophytic traits of Gymnosperms

**B. Write Critical notes on any FIVE of the following 5x6=30**

13. Fructifications of *Calamites*

14. Gametophyte of *Tmesipteris* and *Pteris*

15. Characteristic features of Marattiales

16.Experimental work in gymnosperms

17. Leaf anatomy of *Cordaites*

18. Affinities of Gymnosperms, with special reference to order Gnetales

19 Telome theory

**C .Give a comprehensive account of any TWO of the following 2x10=20**

20. Stelar evolution

21. Comparitive account of embryogeny in *Cedrus and Podocarpus*

22. Economic importance of Gymnosperms

BO-8215-A-18