

Register Number:

Date: /02/2022

ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27

M.Sc. BOTANY - I SEMESTER

SEMESTER EXAMINATION: OCTOBER 2021

(Examination conducted in January – March 2022)

**BO 7321 – Paleobotany, Palynology and Plant Anatomy**

**Time - 2 ½ Hours Max. Marks - 70**

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

**Draw diagrams wherever necessary**

**A. Define any TEN of the following 10x2=20**

1. Wodehouse technique

2. Vienna code

3. *Acacia* pollen grains

4. Primary cell wall

5.Histogen theory

6. Gunnar Erdtman

7. Ranunculaceous stomata

8. Trilacunar node

9. *Harrisocarpotn sahnii*

10. Primary thickening meristem

11. Concentric vascular bundle

12. Foliar sclereids

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

13. Methods of atmospheric pollen monitoring

14. Root-stem transition

15. Transfer technique and maceration technique

16. Korper-Kappe theory

17. Plastochronic changes in shoot apex

18. Application of paleobotany in coal exploration

19. Ring porous wood and diffuse porous wood

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

20. a) NPC system pollen classification

b) Honey pollen flora and its applications

21. Different types of fossil plant preservations

22. a) Structure and activity of vascular cambium

 b) Anomalous secondary growth in *Bignonia* stem