

**ST. JOSEPH'S COLLEGE (AUTONOMOUS) BENGALURU-27**  
**M.Sc. BOTANY – I SEMESTER**  
**SEMESTER EXAMINATION – OCTOBER-2018**  
**BO 7318: PALEOBOTANY, PALYNOLOGY AND PLANT ANATOMY**

Time: 2½ hrs

Max. Marks: 70

This question paper has ONE printed page and THREE parts  
*Instructions: Draw diagrams and write examples wherever necessary*

**A. Explain any TEN of the following in two or three sentences: 10 x 2= 20**

1. Split-lateral condition
2. Intectate Pollen grain
3. Amber
4. Yellow National Park
5. Plastochron
6. Attactostele
7. Fusiform initial
8. Cruciferous type of stomata
9. Pollen grain of *Acacia*
10. LO analysis
11. Organ genus
12. Alburnum

**B. Write Critical notes on any FIVE of the following: 5 x 6=30**

13. Branches of Palynology and their scope
14. Anomalous secondary growth in *Bignonia* stem
15. Applications of Paleobotanical studies
16. Cytohistological zonation of shoot apex
17. Direct role of geological phenomena in fossilization
18. Wodehouse technique and Acetolysis technique
19. a) Apotracheal parenchyma and its types b) Ultra structure of plant cell wall

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

20. a) Quiescent centre concept b) Honey pollen analysis and add a note on role of bees in agriculture
21. Techniques used for the study of macrofossils
22. a) Aerobiology and its applications b) Characteristic features of major venation and its types