



ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU-27  
M.Sc., BOTANY- I SEMESTER  
SEMESTER EXAMINATION: OCTOBER 2019  
BO-7318: PALEOBOTANY, PALYNOLOGY AND PLANT ANATOMY

Time- 2 ½ hrs

Max Marks-70

This paper contains ONE printed pages and three parts

Draw labelled diagrams and give examples wherever necessary

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

1. Petrification
2. Foliar sclereids
3. Apical cell theory
4. Yellow stone national park
5. Heart wood
6. Coal balls
7. Bicollateral Vascular bundle
8. Pollen of *Parthenium*
9. Histogen theory
10. Acetolysis technique
11. Axial parenchyma
12. Pollen calendar

B. Write critical notes on any FIVE of the following

5 x 6 = 30

13. Branches of Palynology
14. Techniques used to study macrofossils
15. NPC system of pollen classification
16. Fossil angiosperm
17. Ranunculaceous and Cruciferous type of stomata
18. Anatomy of dorsiventral leaf
19. Types of nodal anatomy

C. Give a comprehensive account of any TWO of the following

2 x 10 = 20

20. Ultra structure of plant cell wall
21. Anomalous secondary growth in *Aristolochia indica*
22. a. Pollen flora of honey    b. Exploration of oil