ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU-27 M.Sc.BOTANY –I SEMESTER SEMESTER EXAMINATION –OCTOBER-2018 BO 7415: PALEOBOTANY, PALYNOLOGY AND PLANT ANATOMY

Supplementary candidates only.

Attach the question paper with the answer booklet

Time: 2½hrs. 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 one or two sentences:

10 x 2=20

- 1. Coal ball
- 2. Spores of Psilotum
- 3. Adolphus Brongniart
- 4. NPC system
- 5. Duramen
- 6. Bicollateral bundle
- 7. Lignite
- 8. Summit meristem
- 9. Copropalynology
- 10. Mestome sheath
- 11. Fusiform initial
- 12. File meristem

B. Write Critical notes on any FIVE of the following:

5 x 6=30

- 13. Root-stem transition
- 14. Exine ornamentation of pollen
- 15. Geological phenomena of external origin responsible for fossilization
- 16. Concepts of protoxylem and metaxylem
- 17. Quiescent centre concept
- 18. Types of major venation pattern according to Hickey
- 19. Role of aerobiology in respiratory allergy and immunology

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

2 x10=20

- 20. a) Characteristic features and functions of tunica and corpus
 - b) Types of stomata based on the arrangement of subsidiary cells
- 21. Techniques for studying microfossils
- 22. a) Erdtman's acetolysis technique b) Anomalous secondary growth in Aristolochia stem

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