



K18U 0493

Reg. No. :

Name :

II Semester B.Sc. Degree (CBCSS-Reg./Supple./Imp.)
Examination, May 2018
CORE COURSE IN BOTANY/PLANT SCIENCE
2B02 BOT/PLS : Angiosperm Anatomy and Microtechnique
(2014 Admn. Onwards)

Time : 3 Hours

Max. Marks : 40

SECTION – A

Answer **all**.

1. The structures specialized for guttation.
a) Stomata
b) Nectaries
c) Hydathode
d) Lenticles
 2. Two large medullary bundles are seen in
a) Boerhaavia
b) Dracaena
c) Ficus
d) Bignonia
 3. The living mechanical tissue is
a) Parenchyma
b) Collenchyma
c) Sclerenchyma
d) Meristem
 4. The common stain used for giving colour to nucleus
a) Safranine
b) Canada balsam
c) Acetocarmine
d) Fast green
- (4×1=4)**

SECTION – B

Answer **any eight**.

5. Expand FAA. Also write any one of its use.
6. Write a note on the working and use of rotary microtome.

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7. How the plant material is macerated ?
8. Explain the process involved in the abscission of leaves.
9. Describe the structural and chemical organization of aleurone grains.
10. Explain the vascular bundle in the primary structure of dicot stem.
11. What are sclereids ? Describe the different sclereids present in plants.
12. Describe the digestive glands in Nepenthes.
13. Explain anatomical features dicot leaf.
14. Differentiate between storied and non storied cambium.
15. Write a note on any two mounting agents.
16. Describe the structure of starch grains. (8×2=16)

SECTION – C

Answer **any four**.

17. Differentiate smear and squash preparation.
18. Explain extrastelar secondary thickening.
19. Write an account on complex tissues.
20. Explain the anatomical adaptations of halophytes.
21. What is tissue system ? Explain different tissue systems in plants.
22. Bring out the anomalous ways of secondary thickening in Dracaena. (4×3=12)

SECTION – D

Answer **any one**.

23. With labeled diagram explain secondary thickening in dicot root.
24. Differentiate single staining and double staining and explain the procedure for the preparation of double staining.
25. Give an account of various theories explaining apical organization in plants. (1×8=8)