



M 8779

Reg. No. : .....

Name : .....

**II Semester B.Sc. Degree (CCSS – 2014 Admn. – Regular)  
Examination, May 2015  
CORE COURSE IN BOTANY/PLANT SCIENCE  
2B02 BOT/PLS : Angiosperm Anatomy and Microtechnique**

Time: 3 Hours

Total Marks : 40

SECTION – A

Answer all :

1. A fixative
  - a) Acetocarmine
  - b) FAA
  - c) DPX
  - d) Basic Fuschin
2. Not a component of periderm
  - a) Secondary cortex
  - b) Cork cambium
  - c) Fascicular cambium
  - d) Cork
3. Apical cell theory was put forward by
  - a) Hanstein
  - b) Schidmt
  - c) Nageli
  - d) Strasburger
4. Aerenchyma is a type of
  - a) Sclerenchyma
  - b) Parenchyma
  - c) Collenchyma
  - d) Prosenchyma

(4×1=4)

P.T.O.



## SECTION - B

Answer **any eight** :

5. Write on the types of meristems based on origin.
6. What is calyptragen ?
7. Explain the types of concentric vascular bundles.
8. Write the composition of Carnoy's fluid.
9. Phloem is a complex tissue. Discuss.
10. Name a natural dye. Give details of its source.
11. Give three anatomical adaptations shown by halophytes.
12. What is meant by double staining ? Give an example.
13. Write the primary structure of Boerhaavia stem.
14. Differentiate between vessel and tracheid.
15. What is tyloses ? Explain its significance.
16. Differentiate between heartwood and sapwood. **(8×2=16)**

## SECTION - C

Answer **any four** :

17. State the aims of killing and fixing tissues.
18. What is a microtome ? Give its advantages and write short notes on the types you have studied.
19. Write on the organisation of the shoot apex.



20. Explain how secondary increase in thickness occurs in the dicot root.

21. Explain the anatomy of the isobilateral leaf.

22. Give an account on different types of secretory tissues you have studied. **(4×3=12)**

## SECTION - D

Answer **any one** :

23. With the help of suitable diagrams describe the anomalous secondary growth in *Bignonia* stem.

24. Describe the structure of the monocot root with the help of diagrams. Write how it differs from that of the dicot root.

25. Give a detailed account on staining techniques and the composition of stains you have studied. **(1×8=8)**