



K16U 1207

Reg. No. : .....

Name : .....

**II Semester B.Sc. Degree (CCSS – Reg./Supple./Improv.)**  
**Examination, May 2016**  
**CORE COURSE IN BOTANY/PLANT SCIENCE**  
**2B02 BOT/PLS : Angiosperm Anatomy and Microtechnique**  
**(2014 Admn. Onwards)**

Time : 3 Hours

Total Marks : 40

**SECTION – A**

Answer all:

1. A dehydrating agent
  - a) Carnoy's fluid
  - b) Safranin
  - c) Acetone
  - d) DPX
  
2. Vascular tissues are reduced in
  - a) Xerophytes
  - b) Halophytes
  - c) Hydrophytes
  - d) Mesophytes
  
3. Conductive wood
  - a) Heartwood
  - b) Hardwood
  - c) Sapwood
  - d) Softwood
  
4. Reserve food in Aleurone grains.
  - a) Starch
  - b) Fats
  - c) Protein
  - d) Oils

(4×1=4)

**SECTION – B**

Answer **any eight** questions :

5. Give the characteristics of meristems.
6. Differentiate between ring porous and diffuse porous wood.
7. Write the composition of FAA.

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8. What is tyloses ?
9. What is a whole mount ? How is it prepared ?
10. Give an account on different types of starch grains.
11. Explain extra stelar secondary growth.
12. What is vital staining ? Give an example.
13. Write about the different types of collenchyma.
14. Give any four anatomical adaptations seen in hydrophytes.
15. Discuss xylem as a complex tissue.
16. What are the advantages of microtome sections over free hand sections ?  
(8×2=16)

SECTION – C

Answer **any four** questions :

17. What is meant by dehydration ? State its advantages and name the reagents used.
18. Briefly describe how normal secondary growth occurs in the dicot stem.
19. Explain the structure of the dorsio-ventral leaf with the aid of a diagram.
20. What is maceration ? How is it done ?
21. Write notes on non living inclusions you have studied.
22. Write an account on secretory tissues.  
(4×3=12)

SECTION – D

Answer **any one** question :

23. Describe anomalous secondary growth in *Dracaena* stem with labelled sketches.
24. What is meant by double staining ? Explain the process of preparing a permanent slide.
25. Discuss the various theories related to the organisation of shoot apex.  
(1×8=8)