

**FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2022****(Regular/Improvement/Supplementary)****BOTANY****GBOT1B01T: ANGIOSPERM ANATOMY AND MICROTECHNIQUE****Time: 2 Hours****Maximum Marks: 60****SECTION A: Answer the following questions. Each carries 2 marks  
(Ceiling 20 Marks)**

1. What do you mean by middle lamella?
2. Comment on growth of cell wall.
3. Discuss the glandular features of Nepenthes plants.
4. Differentiate between killing and fixing in microscopy.
5. Define bicollateral vascular bundles with an example.
6. Define sieve area.
7. Briefly explain secondary thickening in dicot roots.
8. Point out the major differences between hard wood and soft wood
9. Define dendrochronology.
10. Elaborate FAA.
11. Define mounting.
12. Comment on SEM.

**SECTION B: Answer the following questions. Each carries 5 marks  
(Ceiling 30 Marks)**

13. Briefly explain about hemicellulose in plant cells.
14. Give an example for plants showing parallel venation. Discuss its anatomical features.
15. What is meant by heart wood? Comment on its economic importance.
16. Explain different types of parenchyma.
17. Differentiate between Ocular and stage micrometer.
18. Comment on the principles of microscopy.
19. Briefly explain agents used in Killing and fixing.

**SECTION C: Answer any 1 question. Each carries 10 marks.**

20. What are meristematic tissues? Explain how it is classified and write a short note on its functions.
21. Give a general account of staining tissues in plants. Comment on double staining and vital staining.

**(1 x 10 = 10 Marks)**