

Roll No. ....

(12/24)

**5205**

**B.Sc. EXAMINATION**

(Third Semester)

**BOTANY**

**Paper II**

**Plant Anatomy**

*Time : Three Hours*

*Maximum Marks : 40*

**Note :** Attempt *Five* questions in all, selecting *two* questions from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Write on the following :  $1 \times 8 = 8$

(i) What is Meristem ?

(ii) What is vascular cambium ?

(iii) Who gave the histogen theory ?

(iv) What is Bark ?

(v) Define dendrochronology.

(vi) Write two examples of anomalous secondary growth in monocotyledons stem.

(vii) What are Scales ? Give examples.

(viii) What is quiescent Centre ?

### Unit I

2. Describe structure and functions of various types of simple permanent tissues. 8

3. Describe secondary growth in dicot stem. 8

4. How anomalous secondary growth takes place in Achyranthes ? 8

5. Describe the various types of histological zonation in shoot apex. 8

### Unit II

6. Describe stomatal apparatus and types of stomata. 8

7. (a) Draw V. S. Monocot leaves. 4

(b) Discuss the various types of phyllotaxy. 4

8. Write internal structure of root of Rhizophora. Draw T. S. pneumatophore of Sonneratia. 8

9. What are epidermal appendages ? Discuss their morphological types. 8