

B.Sc. (CBCS Pattern) Sem-II  
**012A - Botany Paper-I : Morphology and Anatomy of Angiosperms**

P. Pages : 1

Time : Three Hours



**GUG/W/22/11572**

Max. Marks : 50

- Notes : 1. All questions are compulsory and carry equal marks.  
2. Draw well labelled diagrams wherever necessary.

1. a) Give an account on modification of adventitious roots. 5  
b) Give an account on modification of under ground stems. 5
- OR**
- c) Weak forms of plant habit. 2½  
d) Types of compound leaves. 2½  
e) Leaf venation. 2½  
f) Phyllotaxy. 2½
2. a) Give detail account on Racemose and cymose inflorescence. 5  
b) Give an account on simple fruits. 5
- OR**
- c) Vexillary Aestivation. 2½  
d) Cyathium inflorescence 2½  
e) Cohesion of stamens 2½  
f) Modification of Calyx 2½
3. a) Define simple tissue? Describe it's types. 5  
b) Types of Vascular bundle. 5
- OR**
- c) Classification of meristem. 2½  
d) Laticiferous tissue. 2½  
e) Structure of phloem. 2½  
f) Periderm. 2½
4. a) Describe Anatomy of sunflower root. 5  
b) Give an account of anomalous secondary growth in Dracaena stem. 5
- OR**
- c) T.S. Maize root (diagram only) 2½  
d) T.S. Sunflower stem (diagram only) 2½  
e) T.S. Boerhaavia stem secondary structure (diagram only) 2½  
f) T.S. Monocot Leaf (Diagram only) 2½

5. Write answers to **any ten** in two or three lines. Diagrams not necessary.

- a) Fasciculated roots 1
- b) Reticulate convergent 1
- c) Phyllotaxy 1
- d) Neuter Flower 1
- e) Legume 1
- f) Basal placentation. 1
- g) Laticiferous tissue 1
- h) Bicollateral bundle 1
- i) Companion cell 1
- j) Polyarch 1
- k) Bulliform Cell 1
- l) Epiblema 1

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