B.Sc. CBCS Pattern Semester-II

012A - Botany Paper-I : Morphology and Anatomy of Angiosperms

P. Pages : 2 **GUG/W/23/11572**

Time : Three Hours * 6 5 5 3 * Max. Marks : 50

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

1. a) Define root and mention different modifications in Angiosperm root w.r.t. food storage. **5**

b) Define phyllotaxy. Describe different types of phyllotaxy. **5**

OR

Write note on:

c) Forms of plant habit. **2½**

d) Sub-aerial modifications of stem. **2½**

e) Parts of foliage leaves. **2½**

f) Insect catching leaf. **2½**

2. a) Define inflorescence. Describe different types of Cymose inflorescence citing suitable examples. **5**

b) Define Aestivation. Explain different types of aestivation citing suitable examples. **5**

OR

Write note on:

c) Parts of Typical flower. **2½**

d) Cohesions of stamens. **2½**

e) Types of fleshy fruits. **2½**

f) Types of Placentation. **2½**

3. a) Describe different types of Meristem based on its origin and position. **5**

b) Define Tissue. Describe different types of secretory tissues. **5**

OR

Write note on:

c) Structure and function of Cambium. **2½**

d) Structure and function of periderm. **2½**

e) Conjoint vascular Bundle. **2½**

f) Fundamental Tissue system. **2½**

4. a) Compare primary structures of Dicot and Monocot Roots. **5**

b) Describe Anomalous secondary structure in Boerhaavia stem. **5**

OR

Write note on:

c) Secondary structure in Moringa stem. **2½**

d) Primary structure of Dicot Leaf. **2½**

e) Primary structure of Monocot Leaf. **2½**

f) Anomalous Secondary structure in Beet Root. **2½**

5. Write **any ten** questions in one or two lines only.
(Diagrams are NOT necessary).

a) Root Nodules. **1**

b) Stem tendril. **1**

c) Decompound leaf. **1**

d) Cyathium. **1**

e) Perigynous flower. **1**

f) Syncarpous Gynoecium. **1**

g) Gland. **1**

h) Radial vascular bundle. **1**

i) Plerome. **1**

j) Medullary rays. **1**

k) Transfusion tissue. **1**

l) Lenticels. **1**

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