

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

P. Pages : 2

Time : Three Hours



GUG/S/25/11572

Max. Marks : 50

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

1. Write notes on.

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| a) Modification of Adventitious roots. | 5 |
| b) Types of leaf. | 5 |

OR

Write short notes on:

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|-------------------------------------|-----------|
| c) Pneumatophores | 2½ |
| d) Underground modification of stem | 2½ |
| e) Erect forms | 2½ |
| f) Branching Pattern. | 2½ |

2. Write notes on.

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|--|----------|
| a) Define inflorescence and its types. | 5 |
| b) Types of Aestivation. | 5 |

OR

Write short notes on:

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|----------------------------|-----------|
| c) Cyathium inflorescence. | 2½ |
| d) Aggregate fruit. | 2½ |
| e) Adhesion of stamens. | 2½ |
| f) Types of Placentation. | 2½ |

3. Write notes on.

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|-------------------------------|----------|
| a) Types of Vascular Bundles. | 5 |
| b) Tunica-Corpus theory. | 5 |

OR

Write short notes on:

- c) Hydathode 2½
- d) Structure of cambium. 2½
- e) Parenchyma tissue. 2½
- f) Laticiferous ducts. 2½

4. Write notes on.

- a) What is secondary growth? Explain secondary growth in *Dracaena* stem. 5
- b) Define anomalous secondary growth in *Borhaavia* stem. 5

OR

Write short notes on:

- c) Structure of monocot root (Diagram only). 2½
- d) Primary Structure in dicot stem (Diagram only). 2½
- e) Anomalous secondary growth in *Moringa* stem. 2½
- f) T. S. of Dicot Leaf (Diagram only). 2½

5. Write on the following in two or three line only **any ten** (Diagram not necessary) **10**

- a) Runner
- b) Napiform root
- c) Phylloclade
- d) Corymb
- e) Hypogyne
- f) Berry
- g) Digestive gland
- h) Companion cell
- i) Trichomes
- j) Lysigenous cavity
- k) Ray cambium
- l) Bulliform cells.
