

NOTE: 1. All questions are compulsory.

2. Figures to the right indicate full marks.

3. Draw diagrams wherever necessary.

Q.1. (A) Select the correct answer. (any three)

(3)

1. Mimosa is a sub-family of family _____.
 a. Leguminosae b. Solanaeae c. Malvaceae
2. Family Malvaceae have _____ anthers.
 a. Versatile b. Reniform c. Sagitate
3. In Nephrolepis brown scale like epidermal outgrowths are called _____.
 a. Ramenta b. Hairs c. Scales
4. When water is given out from hydathodes, the process is known as _____.
 a. Respiration b. Transpiration c. Guttation
5. The unicellular & multicellular appendages of plant parts are called _____.
 a. Chalk glands b. Trichomes c. Trichoblasts
6. Branched star shaped hair are called _____.
 a. Stellate hair b. Uniseriate hair c. Ramenta

(B) Define. (any three)

(3)

1. Pappus calyx.
2. Versatile anthers.
3. Fossils.
4. Impression.
5. Amphistomatic stomata
6. Vascular bundles

(C) Write short notes on. (any three)

(9)

1. Types of leaf margins
2. Types of roots.
3. Prothallus of Nephrolepis.
4. Ramentum.
5. Protein
6. Carbohydrate

Q.2. Answer the following.

(A) With reference to the family Compositae give classification, distinguishing characters, floral formula and two plants of economic importance. (8)

(OR)

(A) Describe the sub-families of Leguminosae. (8)

(B) Describe the family Malvaceae. (7)

(OR)

(B) Describe the family Solanaceae. (7)

Q.3. Answer the following.

(A) Explain in detail with diagram the types of Protosteles. (8)

(OR)

(A) Give economic importance of Gymnosperms. (8)

(B) Explain the structure of Antheridia and Archigonia with diagram in Nephrolepis. (7)

(OR)

(B) Describe the structure of megasporophyll and microsporophyll in Cycas. (7)

Q.4. Answer the following.

(A) Explain in general the primary body (8)

(OR)

(A) Explain in comparison dicot & monocot root with diagram. (8)

(B) Diagrammatically explain Transverse section of monocot stem. (7)

(OR)

(B) Diagrammatically explain Transverse section of Dicot stem (7)