

Note:

1. All the questions are compulsory.
2. Draw neat & suitable diagrams wherever necessary.
3. Figures to the right indicate full marks.

Q 1. A. Choose the correct option & rewrite the statements:**(10 Marks)**

1. Phaeophyta is commonly called as _____.
a. Green algae b. Brown algae c. Red algae d. Purple algae
2. *Anthoceros* is commonly known as _____.
a. Stoneworts b. Liverworts c. Hornworts d. Bladderworts
3. Plant body is differentiated into rhizoids, cauloids and phylloids in _____.
a. *Funaria* b. *Anthoceros* c. *Spirogyra* d. *Riccia*
4. Diadelphous stamen is found in the family _____.
a. Asteraceae b. Papilionaceae c. Arecaceae d. Caesalpiniaceae
5. Presence of odd sepal and petal is observed in family _____.
a. Mimosae b. Caesalpiniaceae c. Papilionaceae d. Fabaceae
6. In epigynous flower the ovary is _____.
a. superior b. inferior c. half inferior and superior d. semi-superior
7. Full form of TLC is _____.
a. Thick Layer Chromatography b. Thin Layer Chromatography c. Thin Layer Centrifugation d. Thin Line Chromatography
8. _____ is a technique where samples separate due to the presence of an electric field.
a. Chromatography b. Centrifugation c. Electrophoresis d. Colorimetry
9. _____ is/are commonly used preservatives/preservatives for plant sample preservation.
a. Formalin b. Alcohol c. Formalin-Alcohol d. All of the above
10. If the magnification of the eyepiece (lens) is 10x and that of the objective piece (lens) is 15x, what will be the magnification?
a. 100x b. 110x c. 115x d. 150x

Q 1. B Answer the following in one sentence**(10 Marks)**

- a. Define phycology
- b. Calyptra
- c. What is the latest code of Nomenclature of Algae, Fungi and Plants titled as?
- d. What is a drupe?
- e. What is Rf?

Q 2. Answer the following questions (Any two)**(20 Marks)**

- a. Describe the range of thallus structure in the members of Phaeophyta. Add a note on reserve food material in Phaeophyta.
- b. Give a general account of the class Anthocerotae.

- c. Describe the external morphology and V.S. of thallus in *Anthoceros*.
- d. Describe the sporophyte of *Funaria*.

Q 3. Answer the following questions (Any two)

(20 Marks)

- a. Write a note on the principles of International code of Nomenclature for Algae, Fungi and Plants. Explain each principle.
- b. Explain anatomy and ecology in relation to taxonomy
- c. Give the classification with reason, distinguishing characters and any two plants of economic importance of the family Arecaceae
- d. Give the classification with reason, distinguishing characters and any two plants of economic importance of the family Asteraceae

Q 4. Answer the following questions (Any two)

(20 Marks)

- a. Describe the method of Herbarium preparation.
- b. Enlist and explain the parts of the Electrophoretic unit/ apparatus.
- c. Give a detailed account on the process of Thin Layer Chromatography.
- d. Explain: Principle & working of electron microscope.

Q 5. Short Notes (Any four)

(20 Marks)

- a. T.S. of axis in *Sargassum*
- b. Vegetative reproduction in *Anthoceros*.
- c. Papilionaceous corolla
- d. Ray florets in Asteraceae
- e. Wet method of Plant preservation
- f. Paper Chromatography

-X-X-X-X-X-X-