

- NOTE:** 1. All questions are compulsory.  
2. Figures to right indicate marks.  
3. Draw labelled diagrams wherever necessary.

**Q I Answer the following (Any Two) (20)**

- 1) Give a detailed account on distribution and reproduction of Phaeophyta.
- 2) Which various pigments are present in algae? Explain in detail.
- 3) Explain the alternation of generations in the life cycle of *Sargassum*.
- 4) By drawing neat labeled diagram, explain sexual reproduction in *Dictyota*.

**Q II Answer the following (Any Two) (20)**

- 1) Explain internal structure of gametophyte of class Anthocerotae. Give the systematic position of *Anthoceros*.
- 2) Explain the alternation of generations in *Anthoceros* life cycle.
- 3) Describe the anatomy of *Funaria* sporogonium.
- 4) Write about the morphology of gametophyte of class Musci and give the systematic position of *Funaria*.

**Q III Answer the following (Any Two) (20)**

- 1) Give systematic position, distinguishing characters, floral formula and two plants of economic importance of family Magnoliaceae.
- 2) Give systematic position, distinguishing characters, floral formula and two plants of economic importance of family Asteraceae.
- 3) Give systematic position, distinguishing characters, floral formula and two plants of economic importance of family Palmae.
- 4) Give a detailed account on union of stamens.

**Q IV Answer the following (Any Three) (15)**

- 1) Asexual reproduction in *Dictyota*
- 2) External structure of the thallus of *Sargassum*
- 3) Economic importance of class Musci
- 4) Internal morphology of phylloid of *Funaria*
- 5) Types of placentations
- 6) Forms of polypetalous corolla

— The End —