



Time : 1 hour 15 Minute

STD 11 Science Biology
Chapter Based Test

Total Marks : 40

SECTION A*** Choose The Right Answer From The Given Options.[1 Marks Each] [5]**

- Which of the following is used in making litmus solution?
(A) Fungi. (B) Algae. (C) Lichen. (D) Bryophlta.
- Bryophytes are called amphibians of plant kingdom because:
(A) These plants live in soil and depend on marine organisms for asexual reproduction.
(B) These plants live in soil and depend on water for sexual reproduction.
(C) These plants live in water and depend on land animals for sexual reproduction.
(D) These plants live near water bodies.
- Moss peristome takes part in:
(A) Spore dispersal. (B) Photosynthesis.
(C) Protection. (D) Absorption.
- What is the similarity between gymnosperms and angiosperms?
(A) Origin of ovule and seed is similar in both.
(B) Endosperm is formed before fertilization in both.
(C) Both have leaves, stem and roots.
(D) Phloem of both have companion cells.
- Fusion of two motile gametes which are dissimilar in size is termed as:
(A) Oogamy. (B) Isogamy. (C) Anisogamy. (D) Zoogamy.

*** Answer The Following Questions In One Sentence.[1 Marks Each] [6]**

- How are plants placed in phylogenetic system of classification?
- Why does a Bryophyte supposed to be an amphibian of the plant kingdom?
- Why are most ferns confined to wet areas?
- When does meiosis occur in a diplontic life cycle?
- Which event in pteridophytes is considered an important step in the evolution of seed habit in plants?
- Why does green algae looks green?

SECTION B*** Given Section consists of questions of 2 marks each. [6]**

- Describe the structure of zoospores of Phaeophyceae.

2. Name the following:
 - a. The green algae which is used as protein-rich food by space travellers.
 - b. The gelatinous substance that covers the cell wall of phaeophyceae.
 - c. The leaf-like photosynthetic organ of phaeophyceae.
 - d. The structure that fixes the brown algae to the substratum.
3. Write the name of sex organs in pteridophytes and briefly describe them.

SECTION C

* Given Section consists of questions of 3 marks each. [9]

1. What are the main differences among Chlorophyceae, Phaeophyceae and Rhodophyceae?
2. Amrita while playing with her friend, near the pond noticed in the pond that a green colour covering is floating on the surface of the water. She discussed this with her friend and both got surprised. Next day in the school Amrita asked her teacher about the same. Teacher told her, that was nothing, but green algae which occur both in fresh and marine water habitats.
 - i. Mention the economic importance of algae.
 - ii. Why green algae are considered to be the ancestors of all land plants. Justify the statement by giving reasons.
 - iii. What values as a good biology student are reflected from Amrita's character.
3. Write short notes on:
 1. Importance of carbon fixation by algae.
 2. Importance of Gymnosperms.
 3. Importance of Angiosperms.
 4. Medicinal Use of Algae.

SECTION D

* Case study based questions [4]

1. Mention the ploidy of the following: protonemal cell of a moss; primary endosperm nucleus in dicot, leaf cell of a moss; prothallus cell of a fern; gemma cell in Marchantia; meristem cell of monocot, ovum of a liverwort, and zygote of a fern.

SECTION E

* Given Section consists of questions of 5 marks each. [10]

1. Match the following

	Column I		Column II
a.	Chlamydomonas	i.	Moss
b.	Cycas	ii.	Pteridophyte
c.	Selaginella	iii.	Algae
d.	Sphagnum	iv.	Gymnosperm

2. Describe classification of algae. Write main characters of every group in detail.
