

Saint Xavier's College Jaipur

Department of Science

Question Bank: Botany

Class: B.Sc SEM 1

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Paper code: BOT-UG-CC01

Diversity of Plant Kingdom

Unit-1 (Algae, Fungi, Lichen)

Short note on

1. Habitat of Algae
2. Cyanophyta
3. Reserve food and pigments of algae.
4. Thallus organization in algae
5. Plastid types in algae
6. Cystocarp of *Polysiphonia*
7. Structure of *Polysiphonia*
8. Globule and Nucule
9. Economic importance of fungi
10. Economic importance of algae
11. Parasexuality
12. Different types of fruting bodies in fungi
13. Cell wall in fungi

Answer the following questions:

1. Describe life cycle of *Rhizopus/Agaricus* (with diagrams)
2. Comment on Classification of Fungi by Alexopoulos.
3. Comment on structure and reproduction of lichen.
4. Comment on structure and types of lichens.
5. Comment on classification of Lichen.
6. Comment on classification of algae by Frisch.
7. Comment on sexual reproduction in algae.
8. Comment on life cycle patterns in algae.
9. Comment on asexual reproduction in algae.
10. Describe *Chara* with suitable illustration.
11. Describe sexual reproduction in *Chara* with suitable illustration.
12. Comment on *Polysiphonia* with illustrations.
13. Thallus structure and Sexual reproduction in *Polysiphonia*.

Unit-II (Bryophyta)

1. Economic importance of Bryophyta.
2. General features of Bryophyta.
3. Alternation of generation in bryophyte.
4. Thallus structure of Bryophyta.
5. Vegetative and sexual reproduction in Bryophyta.
6. Gemma of Bryophyta.
7. Classification of Bryophyta with features.
8. Describe *Marchantia* and *Funaria* with suitable illustrations.
9. Sporophyte of *Funaria*

10. Origin and evolution in Bryophyta (Algal and Pteridophytean).
11. Classification of Bryophyta.

Unit-III (Pteridophyta)

1. Comment on classification of pteridophytes with features of all groups.
2. Describe *Rhynia* with proper illustrations.
3. General features of Pteridophytes.
4. Affinities and differences of pteridophytes with bryophytes and gymnosperm.
5. Comment on economic importance of pteridophytes.
6. Describe the general features, morphology, anatomy and reproductive structures in Pteridophyta.
7. Comment on primitive features of *Rhynia*.
8. Comment on heterospory and seed habit.
9. Write a note on *Selaginella* with illustrations.
10. Write a note on *Marsilea* with illustrations.
11. Write a note on stellar system in pteridophytes.

Unit-IV (Gymnosperm and Angiosperm)

1. How angiosperms differ from Gymnosperm.
2. Comment on difference between monocot and dicot.
3. With illustration comment on life cycle of angiosperm.
4. Comment on classification and general features of gymnosperm.
5. Write a short note on economic importance of gymnosperm.
6. With illustration comment on life cycle of *Cycas* and *Ephedra*.