

Chapter – 3 | Plant Kingdom

QUIZ PART-03

1. Chlorophyceae are commonly known as:

- A. Red algae
- B. Brown algae
- C. Green algae
- D. Blue-green algae (C)

Explanation : Chlorophyceae are green algae.

2. Dominant pigments in Chlorophyceae are:

- A. Chlorophyll a and b
- B. Chlorophyll a and c
- C. Chlorophyll a and d
- D. Fucoxanthin only (A)

Explanation : Chlorophyceae have chlorophyll a and b as dominant pigments.

3. Pyrenoids in Chlorophyceae contain:

- A. Only cellulose
- B. Protein besides oil droplets and starch
- C. Only lignin
- D. Only algin (B)

Explanation : Pyrenoids contain protein along with oil droplets and starch.

4. In Chlorophyceae, the inner and outer cell wall layers are made of:

- A. Algin and cellulose
- B. Cellulose and pectose
- C. Chitin and lignin
- D. Floridian starch and pectose (B)

Explanation : The inner layer is made of cellulose and the outer layer is made of pectose.

5. Which pigment is not present in Phaeophyceae according to the given content?

- A. Chlorophyll a
- B. Chlorophyll c
- C. Chlorophyll b
- D. Xanthophyll (C)

Explanation : Phaeophyceae contain chlorophyll a, c, carotenoids and xanthophylls, but not chlorophyll b.

6. Food in Phaeophyceae is stored as:

- A. Starch and oil
- B. Floridian starch
- C. Laminarin and mannitol
- D. Protein and cellulose (C)

Explanation : Brown algae store food as laminarin and mannitol.

7. The plant body of brown algae is attached to the substratum by:

- A. Frond
- B. Holdfast
- C. Capsule
- D. Protonema (B)

Explanation : In Phaeophyceae, the body is attached by a holdfast.

8. Asexual reproduction in Phaeophyceae occurs through:

- A. Non-motile spores
- B. Pear-shaped biflagellated zoospores
- C. Gemmae
- D. Seeds (B)

Explanation : Phaeophyceae reproduce asexually through pear-shaped biflagellated zoospores.

9. Rhodophyceae appear red because of:

- A. Fucoxanthin
- B. Pectose
- C. Phycoerythrin
- D. Mannitol (C)

Explanation : Red colour in Rhodophyceae is due to phycoerythrin.

10. Stored food in Rhodophyceae is:

- A. Floridian starch
- B. Laminarin
- C. Mannitol
- D. Glycogen only (A)

Explanation : Red algae store food as Floridian starch.