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(CBCS)

(5th Semester)

BOTANY

SIXTH PAPER

(Algae, Lichens, Bryophytes)

Full Marks : 75

Time : 3 hours

(PART : A—OBJECTIVE)

(*Marks : 25*)

The figures in the margin indicate full marks for the questions

SECTION—A

(*Marks : 10*)

Tick (✓) the correct answer in the brackets provided :

1×10=10

1. In algae, unicellular thallus is found in

- (a) *Chlamydomonas* ()
- (b) *Nostoc* ()
- (c) *Vaucheria* ()
- (d) None of the above ()

2. Hormogonia are found in

- (a) Chlorophyceae ()
- (b) Phaeophyceae ()
- (c) Cyanophyceae ()
- (d) Rhodophyceae ()

3. Which of the following exhibits diplontic life cycle?

- (a) *Polysiphonia* ()
- (b) *Ectocarpus* ()
- (c) *Chara* ()
- (d) *Nostoc* ()

4. In lichens, soredia is a means of

- (a) vegetative reproduction ()
- (b) asexual reproduction ()
- (c) sexual reproduction ()
- (d) None of the above ()

5. Agar-agar is derived from

- (a) fungi ()
- (b) algae ()
- (c) lichens ()
- (d) None of the above ()

6. Lichens growing on the bark of tree is called

- (a) saxicoles ()
- (b) corticoles ()
- (c) sandicoles ()
- (d) None of the above ()

7. Epiphragm is seen in

- (a) archegonium ()
- (b) antheridium ()
- (c) capsule ()
- (d) gametophyte ()

8. Trabeculae and airchamber in sporophyte are the characters of

- (a) *Riccia* ()
- (b) *Pellia* ()
- (c) *Polytrichum* ()
- (d) *Sphagnum* ()

9. The theory of progressive evolution of sporophytes in bryophytes was proposed by
- (a) Evans (1939) ()
 - (b) Goebel (1930) ()
 - (c) Bower (1908) ()
 - (d) Kashyap (1919) ()
10. Pseudopodium in sporophyte is a characteristic feature of
- (a) *Riccia* ()
 - (b) *Pellia* ()
 - (c) *Sphagnum* ()
 - (d) *Polytrichum* ()

SECTION—B

(Marks : 15)

Write notes on the following in brief :

3×5=15

1. Palmelloid thallus

OR

Coccoid thallus

2. Isomorphic alternation of generation

OR

Heteromorphic alternation of generation

3. Isidia

OR

Cephalodia

4. Pseudoelater

OR

Elaterophore

5. Peristome

OR

Annulus

(PART : B—DESCRIPTIVE)

(Marks : 50)

The figures in the margin indicate full marks for the questions

1. Describe the characteristic features of Phaeophyceae. 10

OR

Describe the characteristic features of Rhodophyceae. 10

2. Give an account of mode of reproduction in Chlorophyceae. 10

OR

Describe briefly the following : 5+5=10

(a) Heterocyst

(b) Hormospores

3. Describe in brief the methods of reproduction in lichens. 10

OR

Describe the distribution and general characteristic features of lichens. 10

4. What are bryophytes? Write a note on the general features of bryophytes with suitable examples. 2+8=10

OR

Write a comparative account on the sporophyte of *Pellia* and *Polytrichum* with suitable diagrams. 5+5=10

5. What is antheridium? Give a comparative account of antheridium of *Pellia* and *Sphagnum*. 2+4+4=10

OR

Describe with suitable diagrams of archegonium of *Polytrichum* and *Riccia*. 5+5=10

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