

2014

(5th Semester)

BOTANY

SIXTH PAPER

(Algae, Lichens, Bryophytes)

Full Marks : 55

Time : 2 hours

(PART : B—DESCRIPTIVE)

(Marks : 35)

*The figures in the margin indicate full marks
for the questions*

1. Describe in brief general characteristics of Rhodophyceae and Cyanophyceae. $3\frac{1}{2}+3\frac{1}{2}=7$

Or

Describe with necessary diagrams, structure and types of algal flagella studied by you. Give examples.

7

2. What do you mean by diplohaplontic life cycle? Describe in brief asexual reproduction in phaeophyceae with examples. $2+5=7$

G15—350/155a

(Turn Over)

Or

Describe different modes of reproduction met with in the Cyanophyceae.

7

3. What do you mean by saxicole and corticolous lichens? Describe any two types of ascolichens with examples and diagrams.

$$2+2\frac{1}{2}+2\frac{1}{2}=7$$

Or

Describe asexual and sexual reproduction in lichens.

7

4. Compare the sporophyte of *Pellia* with that of *Sphagnum* with neat labelled diagrams.

$$3\frac{1}{2}+3\frac{1}{2}=7$$

Or

Describe with neat labelled diagrams, the life history of *Riccia*.

7

5. Describe comparative structure of antheridia of bryophytes studied by you with labelled diagrams.

7

Or

Write short notes on the following : $3\frac{1}{2}+3\frac{1}{2}=7$

(a) Archegoniophore

(b) Thalloid protonema of *Sphagnum*

G15—350/155a

V/BOT (vi)

2014

(5th Semester)

BOTANY

SIXTH PAPER

(Algae, Lichens, Bryophytes)

(PART : A—OBJECTIVE)

(Marks : 20)

The figures in the margin indicate full marks for the questions

SECTION—A

(Marks : 5)

Put a Tick (✓) mark against the correct answer in the
brackets provided : $1 \times 5 = 5$

1. F. E. Fritsch classifies algae into

(a) 10 classes ()

(b) 12 classes ()

(c) 8 classes ()

(d) 11 classes ()

2. Which of the following algal species have a high value of iodine?

(a) *Laminaria* sp. ()

(b) *Nostoc* sp. ()

(c) *Trentepohlia* sp. ()

(d) *Polysiphonia* sp. ()

3. Which of the following is a means for vegetative reproduction in lichen?

(a) Spermogonium ()

(b) Ascogonium ()

(c) Isidia ()

(d) All of the above ()

4. Initial plant body of bryophytic plant is

(a) gametophyte ()

(b) sporophyte ()

(c) Both (a) and (b) ()

(d) None of the above ()

5. Antithetic (intercalation) theory of origin of sporophyte in bryophytes is proposed by
- (a) Anderson ()
 - (b) Zimmerman ()
 - (c) Von Wettstein ()
 - (d) Prof. Walton ()

(4)

SECTION—B

(Marks : 15)

Write notes on the following : $3 \times 5 = 15$

1. Aplanospore

2. Agar-agar ~~intercalation theory of cellulose polymerization in
biopolymers is proposed by~~

- (a) Anderson
- (b) Zimmerman
- (c) Von Wettstein
- (d) Prof. Walton

(6)

3. Fruticose lichen

SectioN - 3

155-156A . 2

(Marks : 15)

Write notes on the following :

1. Aplanospore

V/BOT (vi) / 155

4. Gametophore of *Sphagnum*

(See Sample)

ROTARY**SIXTH PAPER**

(Algae, Mollusca, Bryophytes)

(Part - A—descriptive)

(Marks : 20)

The figures in the margin indicate full marks for the questions.

Section-A

(Marks : 5)

A 'mark' is given against the correct answer in the brackets provided.

1. a. French classifies algae into

i. 12 classes (*)

ii. 10 classes (*)

iii. 8 classes (*)

iv. 11 classes (* *)

5. Peristome

the following algaes? In encysted condition

(a) *Laminaria* sp.

(b) *Reticularia* sp.

(c) *Trichoplax* sp.

(d) *Polysiphonia* sp.

6. Which of the following is a means for vegetative reproduction in lichen?

(a) Spermatization

(b) Ascospores

(c) Isidia

(d) All of the above

8. Initial plant body of homophytic plants is

(a) gamophyte

(b) sporophyte

(c) Both (a) and (b)

(d) None of the above ★★★