

3. Differentiate between teleutospores and basidiospores of *Puccinia*.

Write or Answer the following in brief : 3x5=15

1. Distinguishing characters of Algae and Fungi

4. Thallus characters of Anthoceros

(1st Semester)

BOTANY

FIRST PAPER

(Cryptogamia)

(PART : A—OBJECTIVE)

(Marks : 20)

The figures in the margin indicate full marks for the questions

SECTION—I

(Marks : 5)

Tick off the correct answer in the brackets provided : (1×5=5)

1. Which one of the following cryptogama is devoid of chlorophyll?

(a) Algae ()

(b) Fungi ()

(c) Bryophytes ()

(d) Pteridophytes (***)

5. Meristele

- (a) Chlorophyceae
- (b) Rhodophyceae
- (c) Cyanophyceae
- (d) None of the above

3. Ascomycetes are found in

- (a) Rhizopus
- (b) Fusaria
- (c) Alternaria
- (d) Penicillium

2015

(1st Semester)

BOTANY

FIRST PAPER

(Cryptogams)

Full Marks : 55

Time : 2½ hours

(PART : B—DESCRIPTIVE)

(Marks : 35)

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

1. Give an account of the classification of Algae. 7

Or

Write in detail the distinguishing characters
of Pteridophytes. 7

G16/26a

(Turn Over)

2. Give a brief account of any *two* of the following : $3\frac{1}{2}\times 2=7$

- (a) Distinguishing characters of Cyanophyceae
- (b) Coenobium of *Volvox*
- (c) Sexual reproduction in macrandrous species of *Oedogonium*

Or

Describe briefly the sexual reproduction in *Polysiphonia*. 7

3. Write short notes on any *two* of the following : $3\frac{1}{2}\times 2=7$

- (a) Characteristics of Zygomycotina
- (b) Apothecium of *Peziza*
- (c) Pycnial stage of *Puccinia*

Or

Describe with suitable diagrams the vegetative structure and reproduction in *Rhizopus*. 7

4. Describe the life cycle of *Marchantia* with the help of illustrated diagrams. 7

Or

Describe with suitable diagrams the gametophytic generation of *Funaria*. 7

5. Write notes on any two of the following :
3½×2=7

- (a) Prothallus of *Psilotum*
- (b) Male prothallus of *Selaginella*
- (c) Characteristics of Sphenopsida

Or

Describe the reproduction and life history of *Pteris* with suitable illustrations. 7

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2015

(1st Semester)

BOTANY

FIRST PAPER

(**Cryptogams**)

(PART : A—OBJECTIVE)

(Marks : 20)

The figures in the margin indicate full marks for the questions

SECTION—I

(Marks : 5)

Tick (✓) the correct answer in the brackets provided : 1×5=5

1. Which one of the following cryptogams is devoid of chlorophyll?

- (a) Algae ()
- (b) Fungi ()
- (c) Bryophytes ()
- (d) Pteridophytes ()

2. Heterocysts are found in

(a) Chlorophyceae ()

(b) Rhodophyceae ()

(c) Cyanophyceae ()

(d) None of the above ()

3. Ascospores are found in

(a) *Rhizopus* ()

(b) *Puccinia* ()

(c) *Alternaria* ()

(d) *Peziza* ()

4. In which of the following classes, columella, the sterile tissue is absent in their sporogonium?

(a) Hepaticopsida ()

(b) Anthocerotopsida ()

(c) Bryopsida ()

(d) All of the above ()

5. In which of the following pteridophytes, the prothallus is non-green in colour and filled with a symbiotic fungus?

(a) *Selaginella* sp. ()

(b) *Pteris* sp. ()

(c) *Psilotum* sp. ()

(d) All of the above ()

SECTION—II

(Marks : 15)

Write on/Answer the following in brief : 3×5=15

1. Distinguishing characters of Algae and Fungi

2. What is carpogonium?

(a) Hepaticopsida

(b) Anisocarpopsida

(c) Bryopsida

(d) All of the above

5. In which of the following peridophytes, the prothallus is non-green in colour and filled with a symbiotic fungus?

(a) Selaginella sp.

(b) Peziza sp.

(c) Asclerium sp.

(d) All of the above