

2017

( 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. Write an account on the classification of Algae. 7

Or

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

- (a) Characteristics of pteridophytes  
(b) Characteristics of bryophytes  
(c) Comparative account on algae and fungi

2. Describe the sexual reproduction of *Polysiphonia* with a labelled diagram. 7

Or

Write brief accounts on any two of the following : 3½×2=7

- (a) Reproduction in Chlorophyceae  
(b) Alternation of generation in *Ectocarpus*  
(c) Cell division in *Oedogonium*

3. Describe the life cycle of *Alternaria* with a labelled diagram. 7

Or

Write brief accounts on any two of the following : 3½×2=7

- (a) Uredinial and telial stages of *Puccinia*  
(b) Main characteristics of *Mastigomycotina*  
(c) Main characteristics of *Ascomycotina*

4. Describe the life cycle of *Marchantia* with a labelled diagram. 7

Or

Describe in brief any two of the following :  
3½×2=7

- (a) Reproduction in *Funaria*  
(b) Sporophyte of *Anthoceros*  
(c) Gemma cup in *Marchantia*

( 3 )

5. Describe the life cycle of *Pteris* with a labelled diagram. 7

Or

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

- (a) Strobilus of *Selaginella*
- (b) Characteristics of Sphenopsida
- (c) Stellar system in Pteridophyte

★ ★ ★

Subject Code : BOT/I/01

Booklet No. **A**

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Date Stamp .....

**To be filled in by the Candidate**

DEGREE 1st Semester  
(Arts / Science / Commerce /  
..... ) Exam., **2017**  
Subject .....  
Paper .....

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**To be filled in by the Candidate**

DEGREE 1st Semester  
(Arts / Science / Commerce /  
..... ) Exam., **2017**

Roll No. ....

Regn. No. ....

Subject .....

Paper .....

Descriptive Type

Booklet No. B .....

**INSTRUCTIONS TO CANDIDATES**

- 1. The Booklet No. of this script should be quoted in the answer script meant for descriptive type questions and vice versa.**
- 2. This paper should be ANSWERED FIRST and submitted within 45 minutes of the commencement of the Examination.**
- 3. While answering the questions of this booklet, any cutting, erasing, overwriting or furnishing more than one answer is prohibited. Any rough work, if required, should be done only on the main Answer Book. Instructions given in each question should be followed for answering that question only.**

Signature of  
Scrutiniser(s)

Signature of  
Examiner(s)

Signature of  
Invigilator(s)

**BOT/I/01**

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( 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.** Coenobium is the characteristic feature of

(a) *Ectocarpus* ( )

(b) *Volvox* ( )

(c) *Polysiphonia* ( )

(d) *Nostoc* ( )

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( 2 )

2. Which one of the following algae serves as a biofertilizer in rice fields?

(a) *Chlamydomonas* ( )

(b) *Volvox* ( )

(c) *Nostoc* ( )

(d) *Chara* ( )

3. The protonema is a stage in the life cycle of

(a) *Riccia* ( )

(b) *Anthoceros* ( )

(c) *Funaria* ( )

(d) all bryophytes ( )

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( 3 )

4. Mature fruiting body in *Peziza* is

(a) sporophore ( )

(b) rhizomorph ( )

(c) apothecium ( )

(d) gill ( )

5. Which one of the following is rootless pteridophyte?

(a) *Psilotum* ( )

(b) *Selaginella* ( )

(c) *Lycopodium* ( )

(d) None of the above ( )

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( 4 )

SECTION—II

( Marks : 15 )

Write notes on the following in brief :

3×5=15

1. General characteristics of hepaticopsida

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( 5 )

2. Heterocyst

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( 6 )

**3.** Sexual reproduction in *Rhizopus*

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( 7 )

4. Zygosporc

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( 8 )

5. Prothallus of *Psilotum*

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