2017

(CBCS)

(1st Semester)

BOTANY

FIRST PAPER

(Cryptogams)

Full Marks : 75

Time : 3 hours

(PART : B—DESCRIPTIVE)

(*Marks* : 50)

The figures in the margin indicate full marks for the questions

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. Write on the classification and distinguishing characteristics of algae. 10

2. Write notes on any *two* of the following : 5×2=10

(a) Characteristics of pteridophytes

(b) Classification of fungi

(c) Characteristics of bryophytes

UNIT—II

3. Compare the characteristics of Xanthophyceae and Rhodophyceae. 10

4. Write notes on any *two* of the following : 5×2=10

(a) Alternation of generation in *Ectocarpus*

(b) Reproduction in *Nostoc*

(c) Thallus structure of *Polysiphonia*

UNIT—III

5. Describe the life cycle of *Puccinia* on its primary host with labelled diagram. 10

6. Write notes on any *two* of the following : 5×2=10

(a) Characteristics of Deuteromycotina

(b) Sexual reproduction in *Rhizopus*

(c) Ascocarp of *Peziza*

UNIT—IV

7. Describe with labelled diagram the gametophyte of *Funaria*. 10

8. Write notes on any *two* of the following : 5×2=10

(a) General characteristics of Bryopsida

(b) Structure of mature sporophyte in *Marchantia*

(c) Capsule of *Anthoceros*

UNIT—V

9. Discuss the life cycle of *Selaginella* with suitable diagram. 10

10. Write notes on any *two* of the following : 5×2=10

(a) Heterospory

(b) General characteristics of Psilopsida

(c) Different types of protostele

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Subject Code : BOT/I/EC/01

Booklet No. A

Date Stamp .....

.....

To be filled in by the Candidate

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

Subject .....
Paper .....

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 1 (one) Hour of the commencement of the Examination.**
3. **While answering the questions of this booklet, any cutting, erasing, over-writing 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.**

To be filled in by the Candidate

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

Roll No. .....
Regn. No. .....

Subject .....
Paper .....

Descriptive Type
Booklet No. B .....

Signature of Scrutiniser(s) *Signature of Examiner(s)* *Signature of Invigilator(s)*

/21

BOT/I/EC/01

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(CBCS)

(1st Semester)

BOTANY

FIRST PAPER

(Cryptogams)

(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. The plants which are not differentiated into roots, stem and leaves are grouped under

(a) gymnosperms ( )

(b) pteridophytes ( )

(c) thallophytes ( )

(d) spermatophytes ( )

2. Which of the following is the amphibian of the plant kingdom?

(a) Pteridophytes ( )

(b) Bryophytes ( )

(c) Gymnosperms ( )

(d) Angiosperms ( )

3. Fungi usually store the reserve food material in the form of

(a) starch ( )

(b) glycerol ( )

(c) lipid ( )

(d) glycogen ( )

4. The leaves which bear the sporangia are called

(a) sporophyll ( )

(b) bract ( )

(c) cone ( )

(d) strobilus ( )

5. A specialized organ of the sporophyte for the attachment to the gametophyte is called

(a) stalk ( )

(b) foot ( )

(c) apophysis ( )

(d) root ( )

6. Nannandrium of *Oedogonium* is a

(a) giant male ( )

(b) normal male ( )

(c) normal female ( )

(d) dwarf female ( )

7. Clamp connection is found in

(a) Mastigomycotina ( )

(b) Deuteromycotina ( )

(c) Ascomycotina ( )

(d) Basidiomycotina ( )

8. Which of the following is fern?

(a) Psilopsida ( )

(b) Pteropsida ( )

(c) Lycopsida ( )

(d) Sphenopsida ( )

9. Ability to fix atmospheric nitrogen is found in

(a) leaves of some crop plants ( )

(b) Chlorella ( )

(c) some marine algae ( )

(d) some blue-green algae ( )

10. Fungal hyphae without septation is called

(a) eucarpic ( )

(b) holocarpic ( )

(c) coenocytic ( )

(d) rhizomorph ( )

SECTION—B

(*Marks* : 15)

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

1. Difference between Pteridophytes and Bryophytes

OR

Difference between Algae and Fungi

2. The role of heterocyst in *Nostoc*

OR

Cell division in *Oedogonium*

3. Heterothallism in Fungi

OR

Zoospore

4. Gemma cup of *Marchantia*

OR

Vegetative reproduction in Anthoceros

5. Morphology of *Psilotum*

OR

General characteristic of *Lycopsida*

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