

2016

( 6th Semester )

BOTANY

NINTH PAPER

( **Pteridophyta, Gymnosperm, Paleobotany  
and Palynology** )

Full Marks : 55

Time : 2½ hours

( PART : B—DESCRIPTIVE )

( Marks : 35 )

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

1. Give accounts on the following :  $3\frac{1}{2}+3\frac{1}{2}=7$
- (a) Seed habit in pteridophyte
- (b) Concept of the telome theory by Zimmerman

Or

What is stele? Explain the stelar evolution in pteridophyte. 7

2. Discuss the characteristics and distribution of *Lepidodendron*. 7

Or

Write a note on the morphology and reproduction of *Adiantum*. 7

3. Describe the structure of male and female strobili of *Taxus*. 7

Or

Write a note on the reproduction of *Ginkgo*. 7

4. Give an account on the distribution of living gymnosperms in India. 7

Or

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

- (a) General account of archegonia
- (b) Structure of ovule in gymnosperm

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

- (a) Formation and types of fossils
- (b) Pollen allergy
- (c) Features of *Lyginopteris*

★★★

Subject Code : BOT/VI/09

Booklet No. **A**

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Date Stamp .....

**To be filled in by the Candidate**

DEGREE 6th Semester  
(Arts / Science / Commerce /  
..... ) Exam., **2016**  
Subject .....  
Paper .....

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**To be filled in by the Candidate**

DEGREE 6th Semester  
(Arts / Science / Commerce /  
..... ) Exam., **2016**

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)

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( 6th Semester )

**BOTANY**

NINTH PAPER

**( Pteridophyta, Gymnosperm, Paleobotany  
and Palynology )**

( PART : A—OBJECTIVE )

( Marks : 20 )

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

SECTION—A

( Marks : 5 )

1. Put a Tick (✓) mark against the correct answer in the brackets provided : 1×5=5

(a) The simplest and most primitive type of protostele is

(i) haplostele ( )

(ii) actinostele ( )

(iii) plectostele ( )

(iv) mixed protostele ( )

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( 2 )

(b) *Ophioglossum* belongs to class

(i) Pteropsida ( )

(ii) Lycopsida ( )

(iii) Sphenopsida ( )

(iv) Psilopsida ( )

(c) Which one of the following is called maiden hair tree?

(i) *Ginkgo* ( )

(ii) *Taxus* ( )

(iii) *Ephedra* ( )

(iv) None of the above ( )

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( 3 )

(d) All the members of gymnosperms are

(i) heterosporous ( )

(ii) homosporous ( )

(iii) Both (i) and (ii) ( )

(iv) None of the above ( )

(e) The age of angiosperm is

(i) Mesozoic Era ( )

(ii) Cenozoic Era ( )

(iii) Palaeozoic Era ( )

(iv) Proterozoic Era ( )

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SECTION—B

( Marks : 15 )

2. Write notes on the following :

3×5=15

(a) Distribution of *Rhynia*

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( 5 )

(b) Characteristics of *Calamites*

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( 6 )

(c) Morphology of *Ephedra*

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( 7 )

(d) Differentiation between eusporangiate and leptosporangiate

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(e) Economic importance of gymnosperm

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