

3. Give an account on :
- Reproduction in Ascolichens
  - Economic importance of lichens.
4. Write an account on Classification of Bacteria.
5. Write notes on :
- Classification of viruses
  - Structure of Bacteriophages.
6. Explain the life cycle patterns of Algae.
7. Discuss the following :
- Heterothallism in Fungi
  - Economic importance of Fungi.
8. Explain the following :
- Growth curve of Bacteria
  - Isolation and maintenance of pure culture of Bacteria.
- 

one copy

Reg. No. : .....

D 1102

Q.P. Code : [D 09 PBO 01]

(For the candidates admitted from 2009 onwards)

M.Sc. DEGREE EXAMINATION, DECEMBER 2013.

First Year

Botany

PHYCOLOGY, MYCOLOGY, BACTERIOLOGY AND  
VIROLOGY

Time : Three hours

Maximum : 100 marks

Draw labelled diagrams wherever necessary.

Answer any FIVE questions from the following.

All questions carry equal marks.

(5 × 20 = 100)

- Explain the following :
  - Range of structures in Algae
  - Economic importance of Algae.
- Describe the following :
  - Different types of Aswemp in Ascomycetes
  - Host-parasite interaction.

3. Explain the following:
- (a) Sorus evolution in pteridophytes
  - (b) Stelar evolution in pteridophytes.
4. Give an account on the external features and affinities of Pentoxylales.
5. Explain the following:
- (a) External features of Pteridospermales.
  - (b) Angiospermic characters of Gnetales.
6. Discuss the following:
- (a) Economic importance of Bryophytes.
  - (b) Sporocyp of Marchantiales.
7. Write notes on the following:
- (a) Heterospony and origin of seed habits is pteridophytes.
  - (b) Anatomical structure of ovule of Ephedra.
8. Write an account on the external feature and affinities of Bennettitales.

Reg. No. : .....

D 1103

Q.P. Code : [D 09 PBO 02]

(For the candidates admitted from 2009 onwards)

M.Sc. DEGREE EXAMINATION, DECEMBER 2013.

First Year

Botany

BRYOPHYTES, PTERIDOPHYTES AND  
GYMNOSPERMS

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions from the following.

Draw diagrams wherever necessary

All questions carry equal marks.

(5 × 20 = 100)

1. Explain the following:
  - (a) Fossil Bryophytes
  - (b) Classification of bryophytes by reimers.
2. Describe the following:
  - (a) Anatomical structure of stem of Selaginella.
  - (b) Structure of sporocarp in Salvinia.

3. Write an account on methods of plant breeding in self and cross fertilizer plants.
4. Write notes on:
  - (a) Threatened and Endangered plants.
  - (b) Patent and Intellectual properties rights.
5. Give an account on:
  - (a) Measures of central tendency
  - (b) Analysis of variance
6. Explain the following with a suitable example:
  - (a) Sex linked Inheritance
  - (b) Complementary Factor.
7. Discuss the following:
  - (a) Modern concept of genes
  - (b) Uniparental inheritance in chlamydomonas.
8. Explain the following:
  - (a) Probability of distribution
  - (b) Chi- square test.

Reg. No. : .....

D 1104

Q.P. Code : [D 09 PB 003]

(For the candidates admitted from 2009 onwards)

M.Sc. DEGREE EXAMINATION, DECEMBER 2013.

First Year

Part III — Botany

GENETICS, PLANT BREEDING AND  
BIostatISTICS

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions from the following.

All questions carry equal marks.

(5 × 20 = 100)

1. Explain the following:
  - (a) Sex determination in plants
  - (b) Quantitative Inheritance.
2. Describe the following:
  - (a) Is element – Transforms
  - (b) Male sterility
  - (c) Genetic drift.

3. Describe the nodal types and add a note on evolution.
4. Write an essay on ontogeny, structure and function of Secondary xylem.
5. Describe the structure and development of Anther and Pollen grains.
6. Write an essay on female gametophytes.
7. Explain the various stages of Dicot embryo development.
8. Write an essay on protoplast culture and add a note on somatic hybridization.

Reg. No. : .....

**D 1106**

**Q.P. Code : [D 09 PBO 05]**

(For the candidates admitted from 2009 onwards)

M.Sc. DEGREE EXAMINATION, DECEMBER 2013.

First Year

Botany

**ANATOMY, EMBRYOLOGY AND TISSUE CULTURE**

Time : Three hours

Maximum : 100 marks

Answer any FIVE questions.

All questions carry equal marks.

(5 × 20 = 100)

1. Write notes on the following :
  - (a) Meristems
  - (b) Role of cambium in wound healing.
2. Write notes on the following :
  - (a) Origin of cambium
  - (b) Function of cambium
  - (c) Structure of cambium.