

Or

Late blight of potato. 15

Unit IV

8. Discuss in brief the structural defense mechanisms in plants against infection. 15
9. Describe the application of molecular biology in plant disease control strategies. 15

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Roll No.

(07/21-II)

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M. Sc. EXAMINATION

(For Batch 2017 & Onwards)

(Second Semester)

BOTANY

BOT-204A

Principles of Plant Pathology

Time : *Three Hours*

Maximum Marks : 70

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. Attempt *four* more questions, selecting *one* question from each Unit.

(Compulsory Question)

1. Answer in brief :

2×5=10

(a) Downy mildews

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- (b) Viroids or Mycoplasmas
- (c) Pathogenesis
- (d) Hypersensitivity reaction
- (e) Epidemiology.

Unit I

2. Write notes on the following : $2 \times 7\frac{1}{2} = 15$
 - (a) Various levels of parasitism
 - (b) How are the plant diseases classified ?

Or

Name the person who introduced plant pathology in India with his major contributions.

15

3. Write notes on the following : $2 \times 7\frac{1}{2} = 15$
 - (a) Penetration mode/entry of plant pathogens through wounds
 - (b) Permeability changes in diseased plants.

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Unit II

4. What are viroids ? How do they differ from viruses ? What are the major symptoms of diseases caused by viruses in plants ?

$2+3+10=15$

5. Write notes on any two of the following :
 - (a) Pectolytic enzymes and their role in plant diseases
 - (b) Lycomarasin
 - (c) How fungal plant pathogens are characterized ? $2 \times 7\frac{1}{2} = 15$

Unit III

6. Write brief notes on the following : $2 \times 7\frac{1}{2} = 15$
 - (a) Red rot of sugarcane
 - (b) How downy and powdery mildews of grapes are caused ? How are these diseases controlled ?

7. Write brief notes on the following : $2 \times 7\frac{1}{2} = 15$
 - (a) Ergot of syc
 - (b) Apple scale.

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