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**SECTION 'C'** **12×4=48**  
(Long Answer Type Questions)

**Note** : Answer the following questions in 500 words.

1. Give a detailed classification of plant disease.

Or

Explain the heterotrophic behaviour and parasitic ability of viral pathogens with suitable examples.

2. Describe seed as a source of infection.

Or

Give detailed account of dissemination of plant pathogens.

3. Explain the predisposing factors for disease development in plants.

Or

Discuss the role enzymes and growth regulators in disease development.

4. Explain the techniques required in introductory bacteriology.

Or

Give macroscopic and microscopic study details of studying plant diseases.

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Roll No.....

**M.Sc. III Semester Examination, April-2021**

**BOTANY**

**Paper IV**

(Molecular Plant Pathology-I)

Time : 3 Hours ]

[Maximum Marks : 80

**Note** : All questions are compulsory. Question Paper comprises of 3 sections. **Section A** is objective type/Multiple Choice questions with no internal choice. **Section B** is short answer type with internal choice. **Section C** is long answer type with internal choice.

**SECTION 'A'** **1×8=8**

(Multiple Type Questions)

Choose the correct answer :

1. First plant parasitic nematode discovered was :  
(a) Meloidogyne (b) Heterodera  
(c) Globodera (d) Anguina
2. The mature particle of a plant virus is generally known as :  
(a) Capsid (b) Viroid  
(c) Virion (d) Nucleocapsid

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3. Which disease of plant is known as ring disease :
- (a) Citrus canker                      (c) Black arm of cotton
- (c) Wilt of potato                      (d) None of above
4. Bunchy top of banana plant disease is caused due to :
- (a) Bacteria                              (b) Fungus
- (c) Virus                                  (d) All of above
5. An organism that lives on or within another organism of which it is metabolically dependent is called a :
- (a) Host                                  (b) Parasite
- (c) Pathogen                              (d) Commensal
6. Important classes of enzymes involved in pathogenesis are :
- (a) Cutinases                              (b) Cellulases
- (c) Proteinases                              (d) All of above
7. Koch postulate contain..... basic rules.
- (a) One                                      (b) Two
- (c) Four                                      (d) Six
8. Which of the following method can be used to determine the number of bacteria quantitatively ?
- (a) Streak plate                              (b) Spread plate
- (c) Pour plate
- (d) Pour plate and spread plate both

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**SECTION 'B'**

**4×6=24**

*(Short Answer Type Questions)*

**Note :** Answer the following questions in 250 words.

1. Define plant pathology and give its historical background in brief.

Or

Write short notes on structure and life cycle of Mycoplasma.

2. Write about inoculum potential of a plant pathogen.

Or

Make a list of symptoms caused by fungal pathogens on their host.

3. Write short notes on mechanism of infection in host parasite relationship.

Or

Explain role of toxins in pathogenesis.

4. Write short notes on media preparation for study of plant pathogens.

Or

Write short notes on parasitism of obligate parasites.

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P. T. O.