

**Practice Set**

**End Semester (II<sup>nd</sup> Semester) Examination, May 2026**

**Program: B. Sc. (Hons.) Agriculture**

**Semester: II<sup>nd</sup>**

**Course: Fundamentals of Plant Pathology**

**Course Code: PP 121**

**Course objective**

**At the end of the course the student will be able to:**

**CO1** Gain a clear understanding of the concept of disease in plants and the terminology commonly used in plant pathology.

**CO2:** Acquaint with the role of different microorganisms in the development of plant disease.

**CO3:** Understand the principles and practices of plant disease management including Chemical, cultural, biological, and host resistance methods.

**Unit / Module-1**

**Section: I (5 Marks questions, only Lower order Thinking -LOT)**

| Sl. No. | Practice Questions  | Bloom Taxonomy | CO  |
|---------|---|----------------|-----|
| 1.      | Define plant pathology and state its importance in agriculture.             | Remember       | CO1 |
| 2.      | Define the following terms: pathogen, host, disease, pandemic, and symptom. | Remember       | CO1 |
| 3.      | Differentiate between plant disease and physiological disorder.             | Understand     | CO1 |
| 4.      | Briefly describe the history of plant pathology.                            | Remember       | CO1 |
| 5.      | Explain the concept of the disease triangle in plant pathology.             | Understand     | CO1 |

**Section: II (10 Marks questions, only Higher Order Thinking)**

| Sl. No. | Practice Questions  | Bloom Taxonomy | CO  |
|---------|---|----------------|-----|
| 6.      | Apply the concept of the disease triangle to explain why a disease outbreak occurs suddenly under favorable environmental conditions. | Apply          | CO1 |

|     |  |          |     |
|-----|--|----------|-----|
| 7.  | Analyze the evolution of plant pathology as a science and evaluate its significance in modern crop protection.                     | Analyze  | CO1 |
| 8.  | Discuss the contributions of key scientists in plant pathology and evaluate their role in the development of the subject in India. | Evaluate | CO1 |
| 9.  | Breakdown the importance of standard terminology in plant pathology and its role in diagnosis and communication.                   | Analyze  | CO1 |
| 10. | Compare and evaluate biotic and abiotic plant diseases and their management implications.  | Evaluate | CO1 |

## Unit / Module-2

### Section: I (5 Marks questions, only Lower order Thinking -LOT)

| Sl. No. | Practice Questions  | Bloom Taxonomy | CO  |
|---------|---|----------------|-----|
| 11.     | Differentiate between animate and inanimate causes of plant diseases with examples. | Understand     | CO2 |
| 12.     | Classify plant diseases based on their causes with examples.                        | Remember       | CO2 |
| 13.     | Define parasitism and explain different types of parasites in plants.               | Understand     | CO2 |
| 14.     | Define pathogenesis and describe its importance in disease development.             | Understand     | CO2 |
| 15.     | Explain the obligate and facultative parasites with examples.                       | Remember       | CO2 |

### Section: II (10 Marks questions, only Higher Order Thinking)

| Sl. No. | Practice Questions   | Bloom Taxonomy | CO  |
|---------|--|----------------|-----|
| 16.     | Analyze the concept of parasitism and evaluate different types of host parasite interactions in plant diseases.                      | Analyze        | CO2 |
| 17.     | A crop shows uniform chlorosis across the field. Analyze whether the cause is animate or inanimate and justify your answer.          | Analyze        | CO2 |
| 18.     | Evaluate the role of each component of the disease triangle in the rapid outbreak of fungal diseases under high humidity conditions. | Evaluate       | CO2 |
| 19.     | Evaluate the different types of parasitism and explain how their characteristics influence host-pathogen interactions.               | Evaluate       | CO2 |
| 20.     | Analyze the process of disease development in plants. Explain how the disease triangle supports and influences disease development.  | Analyze        | CO2 |

### Unit / Module-3

#### **Section: I (5 Marks questions, only Lower order Thinking -LOT)**

| Sl. No. | Practice Questions  | Bloom Taxonomy | CO  |
|---------|---|----------------|-----|
| 21.     | Describe the general characteristics of fungi causing plant diseases. | Understand     | CO2 |
| 22.     | Classify fungi based on their reproductive structures with examples.  | Remember       | CO2 |
| 23.     | Explain the morphology of phytopathogenic bacteria.                   | Remember       | CO2 |
| 24.     | Explain the characteristics of fastidious vascular bacteria.          | Understand     | CO2 |
| 25.     | Describe the general characteristics of plant viruses.                | Understand     | CO2 |

#### **Section: II (10 Marks questions, only Higher Order Thinking)**

| Sl. No. | Practice Questions   | Bloom Taxonomy | CO  |
|---------|--|----------------|-----|
| 26.     | Analyze the morphology, reproduction, and classification of fungi and evaluate their role in plant disease development.          | Analyze        | CO2 |
| 27.     | Analyze the morphology, reproduction, and classification of plant pathogenic bacteria and evaluate their role in plant diseases. | Evaluate       | CO2 |
| 28.     | Create a chart showing fungal classification up to class level with key characteristics and examples.                            | Create         | CO2 |
| 29.     | Organize the phases in sexual reproduction of fungi and explain five methods of sexual reproduction.                             | Analyze        | CO2 |
| 30.     | Illustrate and breakdown the structure of bacteria with a labeled diagram.   | Analyze        | CO2 |

### Unit / Module-4

#### **Section: I (5 Marks questions, only Lower order Thinking -LOT)**

| Sl. No. | Practice Questions   | Bloom Taxonomy | CO  |
|---------|--|----------------|-----|
| 31.     | Explain the basic principles of plant disease management and describe different approaches used to control plant diseases. | Understand     | CO3 |

|     |  |            |     |
|-----|--|------------|-----|
| 32. | Discuss cultural methods used in plant disease management and how they help in reducing disease incidence. | Understand | CO3 |
| 33. | Define Integrated Disease Management (IDM) and list its key components used in plant disease control.      | Remember   | CO3 |
| 34. | Explain the concept of biological control and name some common biocontrol agents.                          | Remember   | CO3 |
| 35. | List the advantages of Integrated Disease Management over chemical control alone.                          | Understand | CO3 |

**Section: II (10 Marks questions, only Higher Order Thinking)**

| Sl. No. | Practice Questions   | Bloom Taxonomy | CO  |
|---------|--|----------------|-----|
| 36.     | Design an Integrated Disease Management (IDM) strategy for a major crop disease, incorporating chemical, biological, cultural, and host resistance methods. Justify your approach. | Create         | CO3 |
| 37.     | Assess the role of host resistance in plant disease management and discuss its advantages and limitations compared to other control methods.                                       | Evaluate       | CO3 |
| 38.     | Develop a comprehensive disease management plan for a specific crop, integrating different control strategies and explaining their interactions.                                   | Create         | CO3 |
| 39.     | Analyze the components of Integrated Disease Management (IDM) and explain how their integration leads to effective and sustainable disease control.                                | Analyze        | CO3 |
| 40.     | Evaluate the role of cultural practices in disease management and discuss how they can be integrated with other methods for improved effectiveness.                                | Evaluate       | CO3 |

**CO- Wise**

| CO    | Q.No. | Marks |
|-------|-------|-------|
| CO1   | 1-10  | 75    |
| CO2   | 11-30 | 150   |
| CO3   | 31-40 | 75    |
| Total |       | 300   |

**Unit-wise**

| <b>Unit</b> | <b>Q.No.</b> | <b>Marks</b> |
|-------------|--------------|--------------|
| 1           | 1-10         | 75           |
| 2           | 11-20        | 75           |
| 3           | 21-30        | 75           |
| 4           | 31-40        | 75           |
| Total       |              | 300          |

**BTL- wise**

| <b>BTL</b> | <b>Q.No.</b> | <b>Marks</b> |
|------------|--------------|--------------|
| LOT        | 20           | 100          |
| HOT        | 20           | 200          |
| Total      |              | 300          |

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**Disclaimer:** - This is a Practice Set. The Question in End semester examination will differ from the Practice Set. This Practice Set is meant for practice only.