

Sr. No. of Question Paper: 5872

Unique Paper Code : 2162582401

Name of the Paper : Plant Pathology

Name of the Course : B.Sc. (P) Applied Life Science with Agrochemicals
and Pest Management

Semester : IV

Duration: 2 Hours

Maximum Marks: 60

Instructions for Candidates

1. Write your **Roll No.** on the top immediately after receiving the question paper.
2. Attempt **Four questions** in all, including **Question No.1** which is compulsory.
3. **All** questions carry equal marks.
4. **All** parts of a question must be answered together.

Q 1. (a) Define the following (**any five**):

(1x5=5)

- a) Systemic Infection
- b) Pandemic disease
- c) Pathogenicity
- d) Symptoms
- e) Prophylaxis
- f) Epidemiology

(b) Match the following:

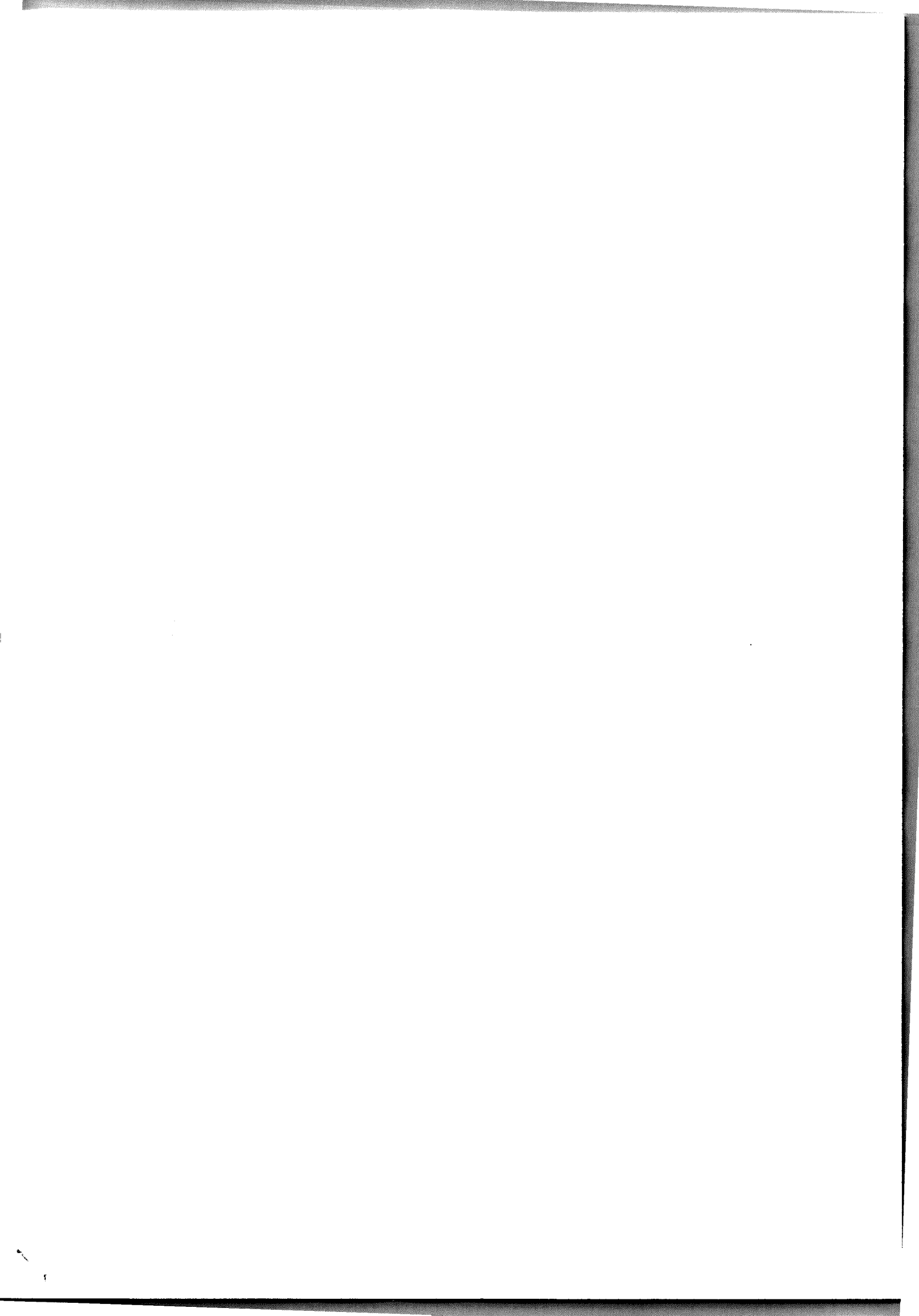
(1x5=5)

- | | |
|---------------------------------|-------------------------------------|
| i) White rust of crucifers | a) <i>Tobacco mosaic virus</i> |
| ii) Angular leaf spot of cotton | b) <i>Ustilago hordei</i> |
| iii) Black stem rust of wheat | c) <i>Albugo candida</i> |
| iv) Covered smut of Barley | d) <i>Xanthomonas citri</i> |
| v) Tobacco mosaic disease | e) <i>Puccinia graminis tritici</i> |

(c) Fill in the blanks (**Any five**):

(1x5=5)

- a) A plant's natural ability to resist disease is called _____.
- b) The stage in a disease cycle when pathogen is active and causing symptoms is the.....stage.



- c) In which disease of plant white mildew appears typically on underside of leaves.....
- d) Indiseases of plant chlorophyll of the leaves get destroyed and leaves get shrunked.
- e) Cultural control methods include practices like.....
- f) A well-known viral disease of plants is.....which affects tobacco and tomato plants.
- g)is known as father of plant pathology in India.

Q 2. Write short note on the following (**Any three**):

(3x5=15)

- a) Classification of disease
- b) Disease cycle
- c) General symptoms caused by viral disease
- d) Antibiosis
- e) Koch's postulates

Q 3. Differentiate between the following (**Any three**)

(3x5=15)

- a) Monocyclic and Polycyclic disease
- b) Loose smut and covered smut
- c) Hypertrophy and Hypotrophy
- d) Structural and Biochemical defense mechanism

Q 4. Draw well labelled diagram (**Any three**)

(3x5=15)

- a) Graphic representation of life cycle of Puccinia
- b) T.S. of wheat leaf through teleutospore
- c) Disease cycle of white rust of crucifers
- d) V.S. of leaf affected by powdery mildew of pea

Q 5. Answer the following (**Any two**)

(2x7.5=15)

- a) What are the causal organisms, symptoms and control measures of plant disease citrus canker.
- b) Describe the host-pathogen interaction.
- c) Discuss the role of fungi in biological control.