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20/8/24
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[This question paper contains 2 printed pages.]

Your Roll No

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Sr. No. of Question Paper :
Unique Paper Code : 2162582401
Name of the Paper : Plant Pathology
Name of the Course : B. Sc. ALS with Agrochemical and Pest Management
Semester : IV

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates:

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Question No. 1 is compulsory.
3. Attempt Four questions in all including Question No. 1.
4. All questions carry equal marks.
5. Attempt all parts of the question together.
6. Draw well labelled diagrams wherever necessary.

1. (a) Define any five of the following:

5x1=5

- (i) Sporadic disease.
- (ii) Pathogen.
- (iii) Resting spores.
- (iv) Virulence.
- (v) Saprophytes.
- (vi) Etiology.
- (vii) Symbiosis.

(b) Match the following:

5x1=5

Column A

- (i) Powdery mildew of pea
- (ii) Citrus Canker
- (iii) Late blight of potato
- (iv) Loose smut of barley
- (v) White rust of crucifers

Column B

- Ustilago nuda*
Erysiphe pisi
Albugo candida
Phytophthora infestans
Xanthomonas citri

(c) Fill in the blanks (any five):

5x1=5

- (i) Casual organism of vein clearing of Bhindi is.....
- (ii) A is a plant pathogen that consists of a single strand of genetic material surrounded by a protein coat.
- (iii)are small, circular, discolored areas on plant leaves or other tissues caused by disease or injury.
- (iv) A polycyclic disease is characterized by completing..... life cycles within a single year.
- (v) Premature death of the cells or tissues within a living organism is referred as.....
- (vi) Disease causing microorganism is known as.....
- (vii)is known as father of Plant Pathology.

2. Write short notes on any three of the following:

3x5=15

- i) General symptoms caused by bacterial disease.
- ii) Disease cycle.
- iii) Control methods used to manage Covered Smut of Barley.
- iv) Wilting.

3. Differentiate between any three of the following:

3x5=15

- i) Biotrophs and Necrotrophs.
- ii) Smut and Rust.
- iii) Hypertrophy and Hyperplasia.
- iv) Localized and Systemic disease.
- v) Obligate and facultative parasite.

4. Draw well labelled diagram of any three of the following:

3x5=15

- i) V.S. of a leaf affected by late blight disease in potato.
- ii) Graphic representation of life cycle of *Albugo*.
- iii) Disease cycle of powdery mildew of pea.
- iv) T. S. wheat leaf through a uredinium.

5. Answer any two of the following:

2x7.5=15

- (a) Discuss the major criteria used for classifying plant diseases.
- (b) Write the symptoms, causal organism and control measures of Tobacco Mosaic disease.
- (c) Describe various types of symptoms of plant diseases.