Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD)
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment- II ctober 2024

V Semester

Class- III UG **Time- 2 hrs**

Branch: BOTANY **Max. Marks- 60**

21BBOC15 – Plant Pathology

Course Outcomes:

CO 1: Enrich the knowledge on identifying different types of infectious and non -infectious agents
CO 2: Acquire knowledge on various types of symptoms and their classification
CO 3: Understand plant diseases and its control measures
CO 4: Expertise in identification of causal organisms based on their symptoms
CO 5: Gain knowledge on quarantine organizations and its laws, different control measures and disease resistant host

Part A **1x6=06**

Choose the correct answer

1. What is the primary pathogen responsible for Leaf Roll Disease in potatoes? CO1 K1
   a) Fungus b) Bacterium c) Virus d) Nematode

2 Based on the pattern of infection, how does the Red Rot of Sugarcane typically spread through a field? CO4 K3
   a) Through contaminated water b) Via infected plant cuttings
   c) By airborne fungal spores d) By insect vectors

3 What is a visible symptom of Sandal Spike disease? CO4 K2
   a) Formation of warts on leaves b) Abnormal elongation of internodes and spikes on the plant
   c) Rotting of the root system d) Formation of yellow spots on leaves

4 Which pathogen causes Wilt Disease of Gram? CO1 K2
   a) *Fusarium oxysporum* b) *Xanthomonas campestris*
   c) *Pythium* spp. d) *Ustilago nuda*

5 Which method is primarily used for treating seeds to eradicate pathogens before planting? CO5 K3
   a) Irrigation b) Seed sterilization
   c) Mulching d) Composting

6 Which of the following strategies could integrate multiple approaches to eliminate pathogens from a field? CO5 K4
   a) Sole use of chemical treatments
   b) Use of resistant varieties combined with crop rotation
   c) Planting susceptible varieties
   d) Reliance on plant quarantine measures

Part B **3 x 6 = 18**

Answer the questions

Each answer should not exceed 400 words or two pages

7 a. What are the primary symptoms of leaf roll disease in potatoes? CO 4 K1

(or)

b. Elucidate the control measures of red rod of sugarcane CO 3 K2

8 a. Describe how the leaf curl virus affects the growth of papaya plants. CO 4 K2

(or)

b. Evaluate the life cycle of the yellow vein mosaic virus in bhendi and how it affects the plant CO 4 K4

9 a. Explain the concept of pathogen avoidance and how it helps in disease management. CO 5 K2

(or)

b. Propose a multi-step protocol for eliminating pathogens from vegetable crops field CO 5 K5

Part C **3 x 12 = 36**

Answer ALL questions

Each answer should not exceed 800 words or four pages

10 a. Explain the life cycle of the yellow vein mosaic virus in bhendi and Leaf cure of papaya. CO 3 K 3

(or)

b. Discuss the symptoms, causal agent, disease cycle of leaf spot of cucumber CO 4 K 2

11 a. Evaluate the symptoms and control measure of crucifer plant diseases CO 4 K 3

(or)

b. Explain the life cycle of the wart disease pathogen and its impact on potato crops CO 4 K3

12 a. How can plant quarantine measures be applied at a national and local level to control invasive pathogens? CO 5 K 4

(or)

b. Design an efficient pest and disease management program for a farm, incorporating both spraying and dusting techniques CO 5 K 5

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No of copies: 27 **Staff In-charge** : Dr. R. Karthiyayini