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(Pages : 2)

Name.....

Reg. No.....

**FOURTH SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)  
EXAMINATION, APRIL 2025**

(CBCSS)

Botany

BOT 4E02 2—PATHOLOGY OF PLANTATION CROPS AND SPICES

(2019 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

**Section A (Short Answer Type Questions)***Answer any **four** questions.**Each question carries 2 weightage.*

1. What are the common diseases affecting black pepper plants, and what are their corresponding symptoms ?
2. What are the major pathogens that affect crop plants ? Briefly explain two.
3. What are the symptoms observed in abnormal leaf fall of rubber ?
4. What are the primary pathogens responsible for causing bud rot disease in coconut palms, and what are the symptoms of this disease ?
5. Comment on neem oil as a botanical pesticide.
6. What is the major pest that affects arecanut trees ? What is its control measure ?
7. How do bio control agents work to control plant diseases ?

(4 × 2 = 8 weightage)

**Section B (Short Essay Type Questions)***Answer any **four** questions.**Each question carries 3 weightage.*

8. Discuss the symptoms and control measures for stem bleeding disease of coconut.
9. Describe the chemistry and mode of action of pesticides with suitable examples.
10. Describe different methods of applying botanicals as plant protectants against pests.

**Turn over**

11. Describe the principles of plant pathology.
12. Describe pod rot of cocoa and its effective control measures.
13. Discuss the potential side effects of pesticides on non-target organisms in plantation ecosystems.
14. Explain crop rotation and sanitation in disease management.

(4 × 3 = 12 weightage)

### Section C (Long Essay Type Questions)

*Answer any **two** questions.*

*Each question carries 5 weightage.*

15. Discuss the significance of integrated pest and disease management (IPDM).
16. Explain the chemistry of bactericides used in plant pathology. Discuss their mode of application and mode of action against bacterial pathogens.
17. Discuss rhizome rot of cardamom, its etiology, symptoms, and effective control measures in plantations.
18. Explain the chemistry, mode of application, mode of action and side effects of semi-systemic and systemic fungicides.

(2 × 5 = 10 weightage)