

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

FIFTH SEMESTER – APRIL 2023

UPB 5503 – PLANT DISEASES AND MANAGEMENT

Date: 05-05-2023

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

PART-A

Answer the following, each within 50 words:

(10 x 2 = 20 marks)

1. What are Epiphytotic Diseases.
2. Define Endotoxin
3. Explain Pathogenesis.
4. Comment on Phytoalexins.
5. Write a note on Mildew.
6. Mention any two symptoms of smut of sorghum.
7. How are root knots formed?
8. Comment on nematode diseases with example.
9. What is Exclusion?
10. Mention the importance of disease forecasting.

PART-B

Answer the following, each within 500 words. Draw diagrams and flowcharts wherever necessary:

(5 x 7 = 35 marks)

11.a Give a short account on the classification of plant diseases.

(or)

b Write briefly about the biochemical weapons such as enzymes and toxins of pathogen.

12.a Describe the disease triangle and the influence of its components towards disease development.

(or)

b Explain the concepts of cross protection and induced resistance.

13. a Elaborate on Tikka disease of groundnut.

(or)

b Describe the pathogen, symptoms and control of club root disease of cabbage.

14.a Briefly describe the canker disease in citrus plant.

(or)

b Write short notes on parasitic diseases of plants.

15.a Write notes on the physical methods for plant disease management.

(or)

b Highlight on microbial antagonists as a strategy for disease management.

PART- C

Answer any three of the following, each answer within 1200 words. Draw diagrams and flowcharts wherever necessary

(3 x 15 =45 marks)

16. Enumerate the various changes in host due to host pathogen interaction.
17. Explain the morphological and biochemical defense mechanisms found in plants against pathogens.
18. Mention the pathogen, symptoms, epidemiology and control of rust of wheat.
19. Describe the pathogen, symptoms, epidemiology and control of galls.
20. Write an essay on plant disease management by chemical methods.
