

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



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

FIFTH SEMESTER – NOVEMBER 2017

PB 5523 – PLANT DISEASES & MANAGEMENT

Date: 06-11-2017

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

PART – A

ANSWER THE FOLLOWING, EACH WITHIN 50 WORDS.

(10 x 2 = 20 Marks)

1. What is epidemic?
2. What is vivotoxin?
3. List the structural barriers of plants against pathogens.
4. What is cross protection?
5. What are the symptoms of club root of cabbage?
6. What is tikka?
7. What are the symptoms of citrus canker?
8. Write the causal organism and symptom of tungro disease.
9. What is quarantine?
10. What is crop rotation?

PART – B

ANSWER THE FOLLOWING, EACH WITHIN 500 WORDS. DRAW DIAGRAMS AND FLOWCHARTS WHEREVER NECESSARY.

(5 x 7 = 35 Marks)

- 11.a. Write an account on toxins involved in plant disease development.
[OR]
b. State and explain Koch's postulates.
- 12.a. Explain the effects of environmental factors on disease development.
[OR]
b. Explain the basic concepts of cross protection and induced resistance.
- 13.a. Write about the symptom and control measures of smut of sorghum.
[OR]
b. Write an account on red rot of sugarcane.
- 14.a. Describe the symptoms of mycoplasmal disease and their control measures.
[OR]
b. Write a detailed account on galls.
- 15.a. Describe the importance of disease forecasting in agriculture.
[OR]
b. Write an account on soil treatment and seed treatment.

PART – C

ANSWER ANY THREE OF THE FOLLOWING, EACH WITHIN IN 1200 WORDS. DRAW DIAGRAMS AND FLOWCHARTS WHEREVER NECESSARY. (3 x 15 = 45 Marks)

16. Give a detailed account on methods of infection and host defense mechanism.
17. Write about the anatomical and biochemical structures that help in defense against pathogen.
18. Write about the causal organism, symptoms and control measures of wheat rust.
19. Write an essay on any two bacterial diseases studied by you.
20. Describe the biological methods to control viral and bacterial pathogens.
