



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

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

**FIFTH SEMESTER – NOVEMBER 2014**

**PB 5523 - PLANT DISEASES & MANAGEMENT**

Date : 05/11/2014

Dept. No.

Max. : 100 Marks

Time : 09:00-12:00

**PART – A**

**(10 x 2 = 20)**

**ANSWER THE FOLLOWING, EACH WITHIN 50 WORDS:**

1. What is disease triangle?
2. What is an appressorium?
3. Distinguish between hypertrophy and hyperplasia.
4. What are phytoalexins?
5. Name the causal organism for Ergot of rye and Club root of cabbage.
6. Give a brief account of symptoms of Red-rot of sugar-cane.
7. Describe the symptoms of Little leaf of Brinjal.
8. Write any two parasitic angiosperms.
9. Define prophylaxis.
10. What is antagonism?

**PART – B**

**(5 x 7 = 35)**

**ANSWER THE FOLLOWING, EACH ANSWER WITHIN 500 WORDS;  
DRAW DIAGRAMS WHEREVER NECESSARY:**

11. a) Explain Koch's postulates.  
(Or)  
b) Discuss the methods of infection by plant pathogens.
12. a) Give an account of the dispersal of plant pathogens.  
(Or)  
b) Discuss the effect of rainfall and temperature in disease development.
13. a) Name the pathogen, describe the symptoms and control measures of Blast of rice.  
(Or)  
b) Describe the causal organism, symptom and control measures of powdery mildew of cucurbits.
14. a) Write short notes on Tobacco mosaic virus.  
(Or)  
b) Write short notes on plant galls.
15. a) Write short notes on: (1) Plant quarantine (2) Disease forecasting.  
(Or)  
b) Discuss the importance of crop – rotation and soil treatment in eradication of plant diseases.

**PART – C**

**(3 x 15 = 45)**

**ANSWER ANY THREE OF THE FOLLOWING, EACH WITHIN 1200 WORDS;  
DRAW DIAGRAMS WHEREVER NECESSARY:**

16. Describe in detail the structural defense mechanism in plants.
17. Give an account of induced biochemical defense in plants.
18. Describe the causal organism, symptom, disease cycle and control measures of Rust of wheat.
19. Describe the causal organism, symptom, disease cycle and control measures of Citrus Canker disease.
20. Discuss in detail the biological control of plant pathogens.

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