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

### DEGREE EXAMINATION – **PLANT BIOLOGY AND PLANT BIOTECHNOLOGY**

FIFTH& SIXTH SEMESTER - APRIL 2017

### PB 5523 / PB 6608 - PLANT DISEASES & MANAGEMENT

Date: 28-04-2017 01:00-04:00 Dept. No.

Max.: 100 Marks

PART – A

Answer the following, each within 50 words.

 $(10 \times 2 = 20 \text{ marks})$ 

- 1. Comment on inoculum potential.
- 2. What are phytoalexins?
- 3. List the role of abscission in protection against disease.
- 4. What is induced resistance?
- 5. Mention the symptoms of damping off?
- 6. What is club root?
- 7. What is tungro?
- 8. Little leaf of brinjal?
- 9. What is plant quarantine?
- 10. What is alternate host? Give example.

#### Part - b

# Answer the following, each within 500 words. Draw diagrams and flow charts wherever necessary. (5 $\times$ 7 = 35 marks)

11.a. Describe Koch's postulates.

### [OR]

- b. Write about the various methods of entry of fungi into plants.
- 12a. Write an account on cross protection.

[OR]

b. Explain the role of environmental factors on disease development.

13a. Write an account on tikka disease.

### [OR]

- b. Describe the symptoms and control measures of red rot of sugarcane.
- 14a. Write an account on insect galls.

[OR]

b. Write about any one nematode disease.

15a. Describe the importance of disease forecasting in plant disease management.

[OR]

b. Describe the various methods of seed treatment.

### PART - C

# Answer any three of the following, each within 1200 words. Draw diagrams and flow charts wherever necessary. (3 x 15=45 marks)

- 16. Describe briefly about the structural defense mechanisms adopted by plants against pathogens.
- 17. Describe the role of suberin, lignin, phenols and gums in disease development.
- 18. Describe the disease cycle of paddy blast.
- 19. Write an essay on any two bacterial diseases in plants.
- 20. Write an essay on integrated pest and disease management in agriculture.

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