LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIFTH SEMESTER - APRIL 2022

16/17/18UPB6MC01/ UPB 5503 - PLANT DISEASES AND MANAGEMENT

Date: 17-06-2022	Dept. No.	Max.: 100 Marks

Time: 09:00 AM - 12:00 NOON

PART - A

Answer the following, each within 50 words.

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

- 1. Give pathological reasons for Bengal famine.
- 2. Define systemic infection.
- 3. Mention the cause of epiphytotics.
- 4. Comment on hypersensitivity reactions in plants.
- 5. Write note on damping off disease.
- 6. What is meant by elephant toe disease?
- 7. Cite the angiosperm parasite and its systematic position.
- 8. List the uses of amylase.
- 9. Brief note on bio-flocculation.
- 10. Enumerate the types of biofuels.

PART - B

Answer the following, each within 500 words. Draw diagrams / flow charts wherever necessary.

 $(5 \times 7 = 35 \text{ Marks})$

- 11. a. Outline the classification of plant diseases. Mention the salient features.
 - (or)
 - b. Explain about the environmental factors that induce diseases in plants.
- 12. a. Describe the various morphological and anatomical features that prevent diseases.

(or)

- b. Write short notes on the phytoalexins.
- 13. a. Elaborate on the pathogen, symptoms, and control of ergot of rye.

(or)

- b. Briefly explain about the pathogen, symptoms and control of tikka in ground nut.
- 14. a. Mention the pathogen, symptoms and control of bunchy top of banana.

(or)

- b. Give details on the disease caused by phytoplasma.
- 15. a. Narrate the principles followed in plant quarantine.

(or)

b. High light the agronomic practices followed to eradicate diseases in crops.

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PART - C

Answer any three of the following, each within 1200 words. Draw diagrams / flow charts wherever necessary.

 $(3 \times 15 = 45 \text{ Marks})$

- 16. Explain in detail about host-pathogen interaction during pathogenesis.
- 17. Give a detailed account on the innate and induced biochemicals in disease resistance in crops.
- 18. Describe the pathogen, symptoms, disease cycle and control of red rust in wheat.
- 19. Write detailed notes on the types of galls produced in plants.
- 20. Explain in detail about the biological antagonists in crop protection.