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

#### B.Sc. DEGREE EXAMINATION - PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

FIRST SEMESTER - NOVEMBER 2015

#### PB 1509 - MYCOLOGY

Date: 06/11/2015	Dept. No.	Max.: 100 Marks
Time : 01.00 04.00		

#### PART – A

### Answer the following, each within 50 words only:

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

- 1. Define the term holocarpic.
- 2. Differentiate ascomycetes from basidiomycetes fungi.
- 3. What is a torula stage?
- 4. Mention the Symptoms and causal organism of white rust disease
- 5. Explain the term heteroecious fungi
- 6. What is a dolipore septum?
- 7. What is a soredia?
- 8. Expand VAM and give its application.
- 9. What are dermatophytic fungi?
- 10. Comment on Aflatoxins.

#### PART - B

## Answer the following, each answer within 500 words; Draw diagrams wherever necessary:

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

11. (a) Explain the phenomenon of parasexuality in fungi.

(OR)

- (b) What are the different types of aggregations and modifications of hyphae found in fungi?
- 12. (a) Describe the structure of *Peziza* apothecium.

(OR)

- (b) Explain the process of asexual reproduction in *Albugo*.
- 13. (a) Give an account on the different types of lichen thallus.

(OR)

- (b) Write briefly about the life cycle of *Colletotrichum*.
- 14. (a) Give the steps involved in penicillin production.

(OR)

- (b) Mention the structure and functions of YAC vector.
- 15. (a) Give an account on systemic mycoses.

(OR

(b) What are fungal toxins? Mention their toxic nature.

### PART - C

# Answer any THREE of the following, each within 1200 words; Draw diagrams wherever necessary:

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

- 16. Explain the nutritional types found in fungi.
- 17. Describe the different life cycle patterns of Saccharomyces.
- 18. Explain the process of reproduction in *Puccinia*.
- 19. List out the economic importance of fungi.
- 20. Write an account on the structure and reproduction of *Trichophyton* and mention its clinical significance.

\$\$\$\$\$\$\$