

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



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

**THIRD SEMESTER – NOVEMBER 2023**

**UPB 3501 – FUNGI**

Date: 31-10-2023

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

**Part A**

**Answer the following, each within 50 words**

**(10 x 2 =20 marks)**

1. What are heterotrophs?
2. List any 3 types of fruiting bodies.
3. Draw and label the thallus of *Rhizopus*.
4. Write a note on crozier formation.
5. What is heteroecious lifecycle?
6. Draw and label the structure of acervulus.
7. Write a note on Hartig's net.
8. List any 2 uses of Baker's yeast.
9. What are lichens?
10. Mention any 2 uses of lichens.

**PART B**

**Answer the following, each within 500 words. Draw diagrams and flowcharts wherever necessary.**

**( 5 x 7 = 35**

**marks)**

- 11 a. List out the general characters of fungi.  
or  
b. Write notes on parasexual reproduction.
12. a. Explain the process of sexual reproduction in *Rhizopus*.  
or  
b. Draw and describe the lifecycle of *Albugo*.
- 13a. Explain the lifecycle of *Peziza*.  
or  
b. Describe the internal structure of basidiocarp of *Polyporus*.
- 14a. Draw and describe the YAC vector.  
or  
b. Give an account on the economic importance of fungi.
- 15a. Draw and describe the types of vegetative reproduction of lichens.  
or  
b. Give an account on the different structures present on the upper/lower surface of lichens.

### PART C

Answer any three of the following, each within 1200 words. Draw diagrams and flowcharts wherever necessary. (3 x15 = 45 marks)

16. Chart out the classification of fungi according to Alexopoulos.
17. Give an account on the lifecycle of *Aspergillus*.
18. Discuss in detail the lifecycle of *Puccinia* with suitable diagrams.
19. Give a detailed account on industrial production of penicillin.
20. Explain the details on the internal structure of lichen thallus. Add a note on the different types of lichens.

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