LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – NOVEMBER 2022

UPB 3501 – FUNGI

Date: 24-11-2022 Dept. No. Time: 09:00 AM - 12:00 NOON

PART - A

Answer the following, each in about 50 words

- 1. What are heterotrophs?
- 2. Name any 2 vegetative modes of reproduction in fungi.
- 3. Write notes on macroconidia and microconidia.
- 4. Draw and label the thallus of *Rhizopus*.
- 5. What is an ascus?
- 6. Write notes on acervulus.
- 7. List any 4 benefits of mycorrhiza.
- 8. Write notes on baker's yeast.
- 9. What are lichens? Give examples.
- 10. Mention any 4 uses of lichens.

PART – B

Answer the following, each in about 500 words. Draw diagrams/ flowcharts wherever necessary.

11. (a) Give a brief account on the salient features of fungi.

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(b) Write briefly on the types of asexual reproduction in fungi.

Or

12. (a) Discuss briefly on the sexual reproduction in Aspergillus.

(b) Write short notes on the lifecycle of *Albugo*.

13. (a) Describe the internal structure of the basiodiocarp of *Polyporus*.

- Or
- (b) Write notes on the lifecycle of *Peziza*.
- 14. (a) Discuss the economic importance of fungi, giving suitable examples.
 - Or
 - (b) Give an account on YAC vector.

15. (a) Explain in detail about the vegetative reproduction in lichens.

Or

(b) Enumerate the economic importance of lichens.

(10x2 = 20 Marks)

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

Max.: 100 Marks

PART – C

Answer <u>ANY THREE</u> of the following, each in about 1200 words. Draw diagrams/ flowcharts wherever necessary. (3 x 15 = 45 Marks)

- 16. Give an account on classification of fungi according to Alexopolous.
- 17. Discuss in detail on the types of sexual reproduction in yeast.
- 18. Draw and explain the lifecycle of *Puccinia*.
- 19. Discuss in detail on the industrial production of penicillin.
- 20. Explain in detail on the types and structural features of lichens.

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