

S.No. 2550

P 16 BCE 2

(For candidates admitted from 2016–2017 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Biochemistry — Elective

MICROBIOLOGY

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20)

Answer ALL the questions.

1. What is blue green algae? Give examples.
2. Define peptidoglycan.
3. How does synchronous growth occur?
4. Define nitrate oxidizing bacteria? Give an example.
5. What is Staining? Types of staining.
6. What is Enrichment media? Give example.
7. Write Types of NA.
8. What is Prions?

9. Symptoms of pneumonia.

10. What is meant by Lantibiotics?

PART B — ($5 \times 5 = 25$)

Answer ALL questions, choosing either (a) or (b).

11. (a) Illustrate the ultra structure of fungi.

Or

(b) Write short note on role of lactic acid and Propionic acid bacteria.

12. (a) Narrate the biological functions of carotenoids.

Or

(b) Illustrate - N_2 fixation.

13. (a) Brief on the chemical methods of sterilization.

Or

(b) Compare the products of dissimilatory sulfate reduction those of dissimilatory nitrate reduction.

14. (a) Differentiate the lytic and lysogenic cycle.

Or

(b) Brief on the replication of Adenovirus.

15. (a) Illustrate how viruses cause respiratory infection.

Or

(b) Brief on industrial production of penicillin.

PART C — ($3 \times 10 = 30$)

Answer any THREE questions.

16. Discuss on Gram positive and Gram negative cell wall differentiation.

17. How does continuous culture system differ from closed culture system.

18. Briefly explain the what are the methods available In Identification of microbes

19. Illustrate the double strand RNA viruses.

20. Describe the vector borne disease.