

APRIL/MAY 2019

BBT31 — MICROBIOLOGY

Time : Three hours

Maximum : 75 marks



SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is Tyndallisation?
2. Comment few lines about protists.
3. Write the structural components of peptidoglycan.
4. Name the disease caused by *Vibrio cholera*.
5. Define doubling time.
6. What are photoautotrophs?
7. What are Capsomeres?
8. What is responsible for the red colour in Rhodophyta?
9. State the application of dry heat method.
10. Define auxochrome.

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Highlight on the contributions of Robert Koch and his postulates.

Or

- (b) How did Fleming discovered penicillin?

12. (a) Give an account on the antigenic properties of *Salmonella typhi*.

Or

- (b) Tabulate the biochemical reactions of *Streptococcus pneumoniae*.

13. (a) Write an account on the nutritional requirements of bacteria.

Or

- (b) Explain chemostat with reference to Continuous culture.

14. (a) State the economic importance of algae.

Or

- (b) Discuss the structure and functions of yeast.

15. (a) How is sterilisation carried out with the help of radiations?

Or

- (b) What are endospores? Explain the staining technique employed to identify endospores.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain the three kingdom and five kingdom classification of microbes.

17. Discuss the fine structure of gram negative bacteria with a neatly labelled diagram.

18. List the various factors that affect bacterial growth and brief about them.

19. Explain the mechanism by which virus interacts with the host,

20. Describe the principle, procedure employed in Gram staining.

