

NOVEMBER/DECEMBER 2018

**BBT31 — MICROBIOLOGY**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is biogenesis?
2. What is Germ theory? Who proposed it?
3. Comment on the morphology of *Staphylococcus aureus*.
4. List the types of flagella found in bacteria.
5. What are psychrophiles?
6. Define synchronous culture.
7. Mention any two properties of virus.
8. Why is yeast classified under eukaryotes?
9. What are acid fast organism?
10. Define chromophores. Give an example.



SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Write notes on the contributions of Spallanzani.

Or

- (b) Highlight the scope of microbiology.

12. (a) Differentiate Gram positive bacteria from Gram negative bacteria.

Or

- (b) Comment on the pathogenicity and disease caused by Haemophilus influenza.

13. (a) How is the growth of bacteria measured using growth curve?

Or

- (b) Give an account on the grouping of microorganisms based on their mode of nutrition.

14. (a) With a neat labelled diagram explain the structure of bacteriophage.

Or

- (b) State the general characteristic features of fungi.

15. (a) Define the following terms :

(i) Disinfection

(ii) Antisepsis.

Or

- (b) Explain the mechanism of capsule staining.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Highlight the Contributions of Louis Pasteur and Joseph Lister in the field of microbiology.

17. Describe the cultural characteristics, biochemical reactions and pathogenicity of E.coli.

18. Explain the different types of culture media.

19. Discuss the general classification and properties of algae.

20. Discuss the various physical methods of sterilization.

