

NOVEMBER/DECEMBER 2018

**BMB11 — FUNDAMENTALS OF  
MICROBIOLOGY**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

Each answer not to exceed 50 words.

Define / Short note of the following :

1. Abiogenesis
2. Tyndallization
3. Resolving power
4. Metal shadowing
5. Diversity
6. Nomenclature
7. Endospore
8. Cilia
9. Disinfection
10. Disc diffusion test.

SECTION B — ( $5 \times 5 = 25$  marks)

Answer ALL questions.

Each answer not to exceed 200 words.

11. (a) Write the scope of microbiology.

Or

- (b) Explain the theory of spontaneous generation.

12. (a) Explain the principle, mode of operation and its application of compound microscope.

Or

- (b) Draw a diagram of fluorescent microscope and explain its parts.

13. (a) Write a note on Microbial Evolution.

Or

- (b) Comment on Endosymbiotic theory.

14. (a) Write an account on cytoplasmic inclusions of bacteria.

Or

- (b) Write a note on cytoplasmic membrane of Prokaryotes.

15. (a) Write a brief note on Antimicrobial chemotherapy.

Or

- (b) Define Antibiotics. List out the different antibiotics with their microorganisms and mode of action.

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

Answer any THREE questions.

Each answer not to exceed 500 words.

16. Write the contributions of Leewen Hock, Robert Koch, Thomas J. Burrill, Stanely and Ivanovsky.

17. Differentiate between TEM and SEM.

18. Discuss about eight kingdom concept classification of Cavalier Smith.

19. Differentiate the cell wall of Gram positive and Gram negative bacteria.

20. Define Sterilization. Discuss about the different methods of Sterilization.