

NOVEMBER/DECEMBER 2019

**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/Write short note of the following.

1. Biogenesis.
2. Tryndallization.
3. Resolving power.
4. Oil immersion objective lens.
5. Nomenclature.
6. Taxonomy.
7. Cilia.
8. Cyst.
9. Membrane filters.
10. Chlorine.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

Each answer not to exceed 200 words.

11. (a) Define Microbiology. Write an account on scope of microbiology.

Or

- (b) Comment on Robert Koch postulates.

12. (a) Define Microscope. Draw a structure of compound microscope explain their parts in detail.

Or

- (b) Describe the principle, mode of operation and applications of fluorescent microscope.

13. (a) Comment on Endosymbiotic theory.

Or

- (b) Write a note on binomial nomenclature of microbes.

14. (a) Define flagella. Write an account on types of flagella.

Or

- (b) Comment on cytoplasmic inclusions.

15. (a) Define sterilization. List out the methods of sterilization. Comment on filtration.

Or

- (b) Draw a structure of Laminar air flow chamber and explain their parts.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

Each answer not to exceed 500 words.

16. Write about the scientists who are supported and disproved spontaneous generation theory with their experiments.

17. Write a detailed note on Electron microscope.

18. Give an account on microbial evolution and Diversity.

19. Differentiate between Gram positive Cell wall and Gram negative cell wall. Comment on Sporulation.

20. Define antibiotics. Explain how will you tests for sensitivity to antimicrobial agents.

