



NOVEMBER/DECEMBER 2017

**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 notes on the following:

1. Biogenesis
2. Microbiology
3. Oil immersion objective lens
4. Fluorescent dye
5. Diversity
6. Binomial nomenclature
7. Periplasm
8. Peritrichous
9. Disinfection
10. Give any two chemicals used for sterilization.

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SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

Each answer not to exceed 200 words.

11. (a) Discuss about the scope of microbiology.

Or

- (b) Write the contributions of S.A. Waksman, Alexander Fleming and Thoman T. Burrill.

12. (a) Write the principles, mode of operation applications of dark field microscope.

Or

- (b) Write the principles and procedure of negative and capsule staining.

13. (a) Write an account on Microbial evolution.

Or

- (b) Write a note on Endosymbiotic theory.

14. (a) Write an account on cytoplasmic membrane of prokaryotes.

Or

- (b) Write an essay on Capsule.

15. (a) Draw a diagram of an autoclave. Explain the principles, mode of operation and its application.

Or

- (b) Write an essay on Hot air oven.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

Each answer not to exceed 500 words.

16. Write the contributions of Robert Koch, Louis Pasteur and leewenhoek.

17. Explain the principles, mode of operation and application of Electron microscope.

18. Write a detailed note on classification of microbes.

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

20. Write an essay on anti microbial chemotherapy.

