

NOVEMBER/DECEMBER 2019

BMB21 — MICROBIAL PHYSIOLOGY

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Bacterial Photosynthesis.
2. Glyoxylate Cycle.
3. Streak plate method.
4. Bacterial serial dilution.
5. Microbial growth.
6. Define the lag phase.
7. Bactericidal.
8. Write any two antiparasitic drug names.
9. Bacterial enzymes.
10. What is Phosphorylation?

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Illustrate on bacterial Heterotrophic and respiration mechanism.

Or

- (b) Write about the Microbial fermentation.

12. (a) Write a short notes on complex or non-synthetic media.

Or

- (b) How will you maintain the pure culture? Explain about the different methods.

13. (a) What are the physical requirements for the microbial growth?

Or

- (b) How to do microbial count by using microscopy? Explain it.

14. (a) Discuss on the types of antiseptic.

Or

- (b) Write the short notes on :

(i) Antibiotics

(ii) Disinfectant.

15. (a) Describe about the Isoenzymes.

Or

- (b) Write short notes on :

(i) Lithotrophs

(ii) Organotroph.

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

Answer any THREE questions.

16. Write an essay on nutritional types of microorganism.

17. Discuss on the methods of isolating bacteria.

18. Give an essay on Measurement of Cell Mass.

19. Write in detail about the physical control of microbial growth.

20. Elaborate on photophosphorylation.

