

S.No. 1989

12UMB02

(For the candidates admitted from 2012 – 2013 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Second Semester

Microbiology

MICROBIAL PHYSIOLOGY

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Cell wall
2. Pili
3. Growth curve
4. Autotrophs
5. Metabolism
6. Chemiosmosis
7. Glycolysis

8. Write the net yield of ATP in TCA.

9. Thylokoids

10. Photo Synthetic bacteria

PART B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Comment on Capsule.

Or

(b) Give an account on Plasma membrane.

12. (a) Discuss the nutritional requirements of bacteria.

Or

(b) Give an account on continuous culture of bacteria.

13. (a) Discuss the photophosphorylation.

Or

(b) Comment on generation of ATP.

14. (a) Illustrate the glyoxalate cycle.

Or

(b) List out the glycolysis cycle involving enzymes.

15. (a) Explain the significance of photosynthesis.

Or

(b) Comment on site of photosynthesis.

PART C — (3 × 10 = 30 marks)

Answer any THREE out of five.

16. Draw a diagram of the ultra structure of flagella.

17. Discuss the preservation of cultures.

18. Describe in detail the oxidative phosphoryation.

19. Explain the EMP cycle.

20. Discuss the photosynthetic process in bacteria.