

**SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2018****(CUCBCSS-UG)****Biotechnology****BTY 2B 02 – GENERAL MICROBIOLOGY****Time : Three Hours****Maximum : 80 Marks****Section A***Answer any two questions in about 1,500 words.**Each question carries 10 marks.*

1. Write an essay on the morphology of bacteria.
2. Write a detailed note on the lytic life cycle of Phage.
3. Describe TCA Cycle with proper illustrations.
4. Give an account on dermatomycoses.

**(2 × 10 = 20 marks)****Section B***Answer any seven questions.**Each question carries 5 marks.*

5. Briefly explain Koch postulates.
6. Explain developments observed in the field of immunization.
7. Explain germ theory of disease.
8. Give a brief note on filtration methods.
9. Explain chemical methods of sterilization.
10. How do you sterilize media using Autoclave? Explain.
11. Explain replication of any one virus.
12. How do you classify microbes based on oxygen requirement? Explain.
13. Give a short note on bacterial reproduction.
14. Explain glycolysis of fructose.
15. How bacteria obtain energy? Explain.
16. Describe sulphate respiration.
17. Mention media used for the isolation of Salmonella.
18. Write the morphology of HIV virus.

**(7 × 5 = 35 marks)****Turn over**

**Section C**

*Answer all questions in about 50 words.*

*Each question carries 3 marks.*

19. Give the contributions of Sergi N. Winogradsky.
20. Explain media composition of Nutrient agar. Add its importance.
21. Mention methods of fungal reproduction.
22. Give the importance of glycolysis.
23. Explain cultural characteristics of Epidermophyton.

(5 × 3 = 15 marks)

**Section D**

*Answer all questions in about one or two sentences.*

*Each question carries 2 marks.*

24. Define Antisepsis with example.
25. Write a note on culture media with example.
26. What is diauxic growth?
27. Define Phosphorylation.
28. What is Tinea pedis?

(5 × 2 = 10 marks)