Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **18BT2008** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MICROBIOLOGY** | **Max. Marks :** | **100** |

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| **S.No** | **Questions** | **Course**  **Outcome** | **Marks** |
| **PART – A (10X1=10 MARKS)** | | | |
| 1. | Who coined the term *Animacules*? | CO1 | 1 |
| 2. | What is the dye used in fluorescent microscopy? | CO1 | 1 |
| 3. | Name one function of bacterial pilus. | CO2 | 1 |
| 4. | Name the photosynthetic pigment of algae. | CO2 | 1 |
| 5. | Define heterotrophs. | CO3 | 1 |
| 6. | What is generation time? | CO3 | 1 |
| 7. | What is tyndallization? | CO4 | 1 |
| 8. | Name one antiviral agent. | CO5 | 1 |
| 9. | Define protocooperation. | CO6 | 1 |
| 10. | Name any one food poisoning bacteria. | CO6 | 1 |

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| **PART – B (6 X 3 = 18 MARKS)** | | | |
| 11. | Write about capsular statining. | CO1 | 3 |
| 12. | How the multiplication of bacteria occurs? | CO2 | 3 |
| 13. | Draw a bacterial growth curve and label its stages. | CO3 | 3 |
| 14. | Write about antifungal agents. | CO4 | 3 |
| 15. | Differentiate between synergism and symbiosis. | CO5 | 3 |
| 16. | Write about the lichens. | CO6 | 3 |

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| **PART – C (6 X 12 = 72 MARKS)**  **(Answer any five Questions from Q.no 17 to 23. Q.No 24 is a Compulsory Question)** | | | | | |
| 17. | a. | | Write about any one electron microscope in detail. | CO1 | 8 |
| b. | | Give an account of dark field microscope. | CO1 | 4 |
| 18. | a. | | Write about the ED pathway. | CO5 | 7 |
| b. | | What are the factors affecting the bacterial growth? Explain them in brief. | CO5 | 5 |
| 19. | a. | | Write about the life cycle of bacteriophages. | CO2 | 8 |
| b. | | Write briefly about the bacterial cell wall. | CO2 | 4 |
| 20. | a. | | Differentiate between Gram staining and acid fast staining. | CO3 | 8 |
| b. | | What is spontaneous generation theory? | CO1 | 4 |
| 21. | a. | | Give an account of life cycle of *Mucor stolonifer*. | CO3 | 8 |
| b. | | What are the morphological characters of *Actinomycetes*? | CO3 | 4 |
| 22. | a. | | Classify bacteria based on its nutritional requirements with examples. | CO5 | 8 |
| b. | | Write briefly about the bacterial media. | CO5 | 4 |
| 23. | a. | | Explain briefly about the physical control of microorganisms. | CO4 | 8 |
| b. | | Write briefly about the chemotherapy. | CO4 | 4 |
|  | |  | **Compulsory:** | |  |
| 24. | a. | | Write about the normal microflora of human beings. | CO6 | 5 |
| b. | | What are the food and water borne infections caused by bacteria? Add a note on their importance. | CO6 | 7 |