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



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

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| **Code :** | **17BT2005** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MICROBIOLOGY** | **Max. Marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Demonstrate the working principle and specimen preparation techniques of TEM. | CO3 | 12 |
| b. | Highlight the functions of different parts of bright field microscope with a neat diagram. | CO3 | 8 |
| **(OR)** | | | | |
| 2. |  | Elaborate on the major discoveries and contribution of scientists in the development of microbiology. | CO1 | 20 |
|  |  |  |  |  |
| 3. | a. | Elucidate the structure and chemical composition of Gram positive bacterial cell wall. | CO2 | 12 |
| b. | Explain lytic and lysogeny cycle of bacteriophages with neat illustrations. | CO2 | 8 |
| **(OR)** | | | | |
| 4. | a. | Narrate the salient features of any five eukaryotic organelles with a neat diagram. | CO2 | 10 |
| b. | Outline the reproduction process and economic importance of actinomycetes. | CO3 | 10 |
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| 5. | a. | Critically analyze the nutrients required by microorganism with specific examples. Add a note on growth factors with examples. | CO5 | 12 |
| b. | Demonstrate any two methods used to quantitate bacterial growth. List their merits and demerits. | CO5 | 8 |
| **(OR)** | | | | |
| 6. | a. | Enlist the different phases of bacterial growth curve with a neat diagram. | CO5 | 5 |
| b. | Enlist any five factors that affect the growth of microorganisms. | CO4 | 15 |
|  |  |  |  |  |
| 7. | a. | Outline the working principle and applications of autoclave and filtration. | CO3 | 10 |
| b. | Elucidate the mode of action of phenol, alchol and detergents with examples. | CO4 | 10 |
| **(OR)** | | | | |
| 8. | a. | Elucidate the mode of action of any three antibacterial agents. | CO4 | 10 |
| b. | Compare the mode of action of any three antifungal agents. | CO4 | 10 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Elaborate on any two bacterial water borne infections with suitable examples. | CO6 | 12 |
| b. | Summarize the impact of nosocomial infections on health care industry. | CO6 | 8 |