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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – April/May – 2017**

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| **Code :** | **14BT2005** | **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. | Discuss the contributions of Edward Jenner in the field of microbiology. | CO1 | 10 |
|  | b. | How spontaneous generation theory was disproved? | CO1 | 10 |
| (OR) | | | | |
| 2. |  | Mention the major discoveries and contributions of various scientists for the development of Microbiology. | CO1 | 20 |
| 3. |  | What is differential staining? With a neat flow chart, role of dyes and steps involved in Gram staining. | CO2 | 20 |
| (OR) | | | | |
| 4. |  | Discuss the principle and working mechanism of phase contrast and fluorescence microscopy and their applications. | CO2 | 20 |
| 5. |  | Give a brief note on lytic and lysogeny cycle of bacteriophages. | CO4 | 20 |
| (OR) | | | | |
| 6. | a. | Write a brief note on major nutritional types of microorganisms. | CO3 | 10 |
|  | b. | Physical agents that are used for control of microorganism’s growth- Discuss. | CO2 | 10 |
| 7. |  | Give a brief account on the production of any two fermented food products. | CO5 | 20 |
| (OR) | | | | |
| 8. |  | What are biopesticides? Discuss in detail the mode of action of biopesticides with suitable examples. | CO5 | 20 |
|  | | **Compulsory:** |  |  |
| 9. |  | Mention the different phases of bacterial growth curve with a neat diagram and mention the process occurring in each phase. | CO3 | 20 |

ALL THE BEST