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 – Nov/Dec– 2017**

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|  |  |  |  |
| **Code :** | **15BT3015** | **Duration :** | **3hrs** |
| **Sub. Name :** | **PHARMACEUTICAL 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. | Narrate the mechanism of action of antibiotics. | CO1 | 10 |
| b. | Outline the polymeric drug delivery system. | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | i. Analyse the microbial production and spoilage of   pharmaceutical products.  ii. List the types of sterilization. | CO1 | 8  7 |
| b. | Summarize the applications in pharmaceuticals. | CO1 | 5 |
|  |  |  |  |  |
| 3. | a. | Precursor often stimulates the production of secondary metabolite. Justify. | CO1 | 10 |
|  | b. | List different types of polymers used in drug delivery with suitable examples. | CO1 | 10 |
| (OR) | | | | |
| 4. | a. | Enzyme mediated processes are rapidly gaining interest in market. Justify with suitable examples. | CO1 | 12 |
|  | b. | Explain the regulatory aspects of quality control and validation in pharmaceutical. | CO1 | 8 |
|  |  |  |  |  |
| 5. | a. | Illustrate on different macromolecular drugs and their uses. | CO1 | 7 |
|  | b. | List the application of microbial enzymes. | CO1 | 13 |
| (OR) | | | | |
| 6. | a. | Liposomes a tool for immobilization. Justify. | CO1 | 12 |
|  | b. | Explain the synthetic antimicrobial agents. | CO1 | 8 |
|  |  |  |  |  |
| 7. | a. | Compare cellular drug carriers and synthetic drug carriers | CO1 | 10 |
|  | b. | Discuss GMP and GLP. | CO1 | 10 |
| (OR) | | | | |
| 8. | a. | Criticize the quality assurance and quality management in pharmaceuticals. | CO1 | 10 |
|  | b. | Elaborate on ISO and US certifications and add a note on quality management. | CO1 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Summarize ADME mechanism. | CO1 | 15 |
|  | b. | Mention your opinion on first pass mechanism. | CO1 | 5 |

ALL THE BEST