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



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

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|  |  |  |  |
| **Code :** | **15BI3023** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MICROBIAL GENOMICS** | **Max. Marks :** | **100** |

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

|  |  |  |  |  |
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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Describe the significance of the various types of databases that are available to store large datasets with examples. | CO1 | 20 |
| **(OR)** | | | | |
| 2. |  | Discuss the principle and application of a PCR in genomics. | CO1 | 20 |
|  |  |  |  |  |
| 3. |  | Develop a cloning and manipulating technique to insert large fragments of DNA. | CO2 | 20 |
| **(OR)** | | | | |
| 4. |  | Appraise the importance of Genome analysis and genomics as a modern tool in today’s research. | CO2 | 20 |
|  |  |  |  |  |
| 5. | a. | Compare conventional methods of gene sequencing with modern methods. | CO1 | 10 |
| b. | Infer the methodology of *de nova* identification of genes. | 10 |
| **(OR)** | | | | |
| 6. |  | Discuss the cloning in G+ve Bacteria with suitable research example. | CO3 | 20 |
|  |  |  |  |  |
| 7. |  | Elucidate the methods involved in the anlysis of Trasnciptome. | CO3 | 20 |
| **(OR)** | | | | |
| 8. |  | Discuss the expression profiling in DNA with research examples. | CO3 | 20 |
|  | | **Compulsory**: |  |  |
| 9. |  | Elaborate the genetic modification studies to prevent and cure diseases in Genomics with necessary application tools and examples. | CO3 | 20 |