*`*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 :** | **14BI2004** | **Duration :** | **3hrs** |
| **Sub. Name :** | **GENOMICS AND PROTEOMICS** | **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. | Describe how a eukaryotic genome is organized. | CO1 | 10 |
| b. | Elucidate the differences between prokaryotic and eukaryotic genomes. | CO1 | 10 |
| (OR) | | | | |
| 2. |  | Discuss how RFLP’s and SNP’s are used in Genetic mapping. | CO1 | 20 |
| 3. |  | Describe the algorithms for predicting genes in DNA sequences for bacteria. | CO1 | 20 |
| (OR) | | | | |
| 4. |  | For a DNA sequence of 4 Mbp, describe how restriction mapping can be carried out using EcoRI and BamHI enzymes. | CO1 | 20 |
| 5. |  | Discuss in detail the process of preparing samples for 2DPAGE. | CO2 | 20 |
| (OR) | | | | |
| 6. |  | Describe the working of MALDI -TOF MS and its applications. | CO2 | 20 |
| 7. |  | Elucidate the types of mass analyzers used in MS. | CO2 | 20 |
| (OR) | | | | |
| 8. |  | Describe how protein sequencing is carried out with PMF technique. | CO2 | 20 |
|  | | **Compulsory:** |  |  |
| 9. |  | Explain the technological progress of the Human Genome Project. | CO1 | 20 |

ALL THE BEST