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 – 2016**

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|  |  | **Semester :** | **2016-17 ODD** |
| **Code :** | **14BI2004** | **Duration :** | **3hrs** |
| **Sub. Name :** | **GENOMICS AND PROTEOMICS** | **Max. marks :** | **100** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Describe the way eukaryotic genomes are organized. | CO1 | 10 |
| b. | Differentiate prokaryotic and eukaryotic genomes. | CO1 | 10 |
| (OR) | | | | |
| 2. |  | Describe the types of Genetic Markers used for mapping genomes. | CO1 | 20 |
| 3. |  | Describe software and algorithms deployed to identify the presence of genes in a DNA sequence. | CO1 | 20 |
| (OR) | | | | |
| 4. |  | Explain how one would carry out restriction mapping on a short sequence of DNA. | CO1 | 20 |
| 5. |  | Describe in detail the principles used to separate proteins on 2DPAGE. | CO2 | 20 |
| (OR) | | | | |
| 6. |  | Describe the parts of a MALDI-TOF instrument and its working. | CO2 | 20 |
| 7. |  | Explain about the types of mass analysers used in ESI tandem MS. | CO2 | 20 |
| (OR) | | | | |
| 8. |  | Describe how protein sequencing is performed using Peptide Mass Fingerprinting. | CO2 | 20 |
|  | | **Compulsory:** |  |  |
| 9. |  | Explain how the Human Genome Project was instigated. Discuss its applications. | CO1 | 20 |

ALL THE BEST