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 :** | **14BI2003** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MOLECULAR BIOLOGY AND GENETIC ENGINEERING** | **Max. marks :** | **100** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Questions** | | **Course**  **Outcome** | Marks |
| 1. | Explain how prokaryotes copy DNA. | | CO1 | 20 |
| (OR) | | | | |
| 2. | Describe the process of transcription of DNA. | | CO1 | 20 |
| 3. | Explain how eukaryotic cells make proteins. | | CO1 | 20 |
| (OR) | | | | |
| 4. | Describe what was confirmed by the Hershey Chase experiment. | | CO1 | 20 |
| 5. | Define an operon. Explain how the lac operon operates. | | CO2 | 20 |
| (OR) | | | | |
| 6. | Explain atleast 2 types of vectors used in rDNA technology. | | CO2 | 20 |
| 7. | Describe the requirements and the steps in a PCR. | | CO2 | 20 |
| (OR) | | | | |
| 8. | Describe the procedure for Northern Blotting. | | CO2 | 20 |
|  | | **Compulsory:** | | |
| 9. | Explain the production monoclonal antibodies using Hybridoma technology. | | CO1 | 20 |

ALL THE BEST