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

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

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| **Code :** | **14B12009** | **Duration :** | **3hrs** |
| **Sub. Name :** | **BIOETHICS, IPR AND BIOSAFETY** | **Max. Marks :** | **100** |

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

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| **Q.**  **No.** | **Sub**  **Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Comment on the principles of bioethics. | CO1 | 20 |
| **(OR)** | | | | |
| 2. |  | Elaborate on the need of bioethics with a case study. | CO1 | 20 |
|  | | | | |
| 3. |  | What are GMOs? Discuss in detail the scientific and ethical issues to be considered in biotechnological point of view with one example. | CO2 | 20 |
| **(OR)** | | | | |
| 4. |  | What are the ethical concerns associated with rDNA technology? Explain in detail the ethical guidelines in context to biotechnology research. | CO3 | 20 |
|  | | | | |
| 5. |  | Discuss in detail the TRIPS agreement. | CO1 | 20 |
| **(OR)** | | | | |
| 6. |  | What do you understand by IPR laws? Explain in detail with one suitable example. | CO2 | 20 |
|  | | | | |
| 7. |  | What are biological weapons? List its social and ethical implications. | CO2 | 20 |
| **(OR)** | | | | |
| 8. |  | Explain the guidelines involved in releasing the genetically modified organisms. | CO3 | 20 |
|  |  | **Compulsory:** | | |
| 9. | a. | Explain Trade Secrets, GI, MTA and WHO. | CO3 | 10 |
| b. | Write a brief note on levels of containment and its importance. | CO1 | 10 |