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

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**End Semester Examination – Nov/Dec – 2018**

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| **Code :** | **14BT2041** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MOLECULAR FORENSICS** | **Max. marks :** | **100** |

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

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | What is Molecular forensics?. Discuss in detail about the development of Forensics and the implementation of molecular techniques in Forensic sciences. | CO2 | 20 |
| (OR) | | | | |
| 2. | a. | Discuss a crime scene and write the steps involved in the investigation and identifying the criminals. | CO2 | 10 |
| b. | Write a detailed note on Fossils and its importance in Forensics. | CO3 | 10 |
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| 3. | a. | Write a detailed note on the application RFLP in DNA Finger printing. | CO1 | 10 |
| b. | Elucidate the identification of genetic diseases through RFLP. | CO1 | 10 |
| (OR) | | | | |
| 4. |  | Discuss the personal identification of cadavers and Human remains used in forensic sciences. | CO2 | 20 |
|  |  |  |  |  |
| 5. | a. | Elucidate the importance of RAPD in forensic sciences with suitable examples. | CO1 | 10 |
| b. | Enumerate the methods involved in DNA isolation in challenging samples of forensics. | CO2 | 10 |
| (OR) | | | | |
| 6. | a. | Discuss in detail the mtDNA analysis and its importance in forensics. | CO1 | 10 |
| b. | Discuss the role of RT-PCR in forensic technology. | CO1 | 10 |
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| 7. | a. | Explain the importance of molecular techniques and its applications in Royal Romanov. | CO1 | 10 |
| b. | Write a note on the services provided by various units in crime laboratories and discuss about identification of suspects. | CO3 | 10 |
| (OR) | | | | |
| 8. | a. | Describe that Maxum and Gillbert method of gene sequencing. | CO1 | 10 |
| b. | Discuss Sanger’s method of gene sequencing. | CO1 | 10 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | Discuss the importance of Amelogenin gene and its role in forensic sciences. | CO1 | 10 |
| b | Review the procedure involved for chromosome identification. | CO1 | 10 |