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

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

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| **Code :** | **14BT2011** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MOLECULAR BIOLOGY** | **Max. marks :** | **100** |

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

|  |  |  |  |  |
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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Explain how the process of DNA replication depends on the structure of DNA in eukaryotes. | CO1 | 20 |
| (OR) | | | | |
| 2. | a. | Explain in detail about the replication fork model in prokaryotes | CO2 | 10 |
| b. | Discuss about rolling circle model of replication. | CO2 | 10 |
|  |  |  |  |  |
| 3. | a. | Explain transcription process in Eukaryotes with diagrammatic representation. | CO2 | 10 |
|  | b. | Outline the structure of tRNA. | CO2 | 10 |
| (OR) | | | | |
| 4. |  | Discuss the importance of Genetic Code. | CO2 | 20 |
|  |  |  |  |  |
| 5. | a. | Explain transcription process in Eukaryotes with diagrammatic representation. | CO3 | 10 |
|  | b. | Outline the structure of tRNA. | CO3 | 10 |
| (OR) | | | | |
| 6. |  | Explain different methods involved in post transcriptional modification. | CO2 | 20 |
|  |  |  |  |  |
| 7. |  | Explain the process of translation in eukaryotes. | CO2 | 20 |
| (OR) | | | | |
| 8. |  | Discuss in detail about gene regulation in Eukaryotes. | CO1 | 20 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | Explain Griffith’s bacterial transformation with neat illustration and what Hershey and chase wants to state from the experiment. | CO1 | 20 |