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



**End Semester Examination – Nov/Dec – 2017**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **14BT2014** | **Duration :** | **3hrs** |
| **Sub. Name :** | **BIOORGANIC PRINCIPLES** | **Max. marks :** | **100** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Illustrate the E-and Z-configuration with suitable examples? | CO1 | 5 |
| b. | Explain the rules and procedures for describing the molecules as ‘rectus’ and ‘sinster’? | CO1 | 15 |
| (OR) | | | | |
| 2. |  | Describe the principles and functions of polarimeter with a neat diagram? | CO1 | 20 |
|  |  |  |  |  |
| 3. |  | Describe the various types of bonds that are existing in biological molecules? | CO1 | 20 |
| (OR) | | | | |
| 4. |  | Compare the unimolecular and bimolecular elimination reactions with suitable reaction mechanisms? | CO2 | 20 |
|  |  |  |  |  |
| 5. | a. | Describe the mechanism of acid-base catalysis? | CO2 | 10 |
|  | b. | Illustrate the mechanism of action of carboxypeptidase- A? | CO1 | 10 |
| (OR) | | | | |
| 6. |  | Discuss the types of proteases? Explain in detail about the catalytic mechanisms of any two types of proteases? | CO3 | 20 |
|  |  |  |  |  |
| 7. | a. | Discuss the mechanism of amide bond hydrolysis? | CO2 | 10 |
|  | b. | Comment of the mechanism of HIV-1 protease? | CO3 | 10 |
| (OR) | | | | |
| 8. |  | Describe in detail about the types of Specificity of Enzyme action? | CO2 | 20 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Describe the mechanism of flavin nucleotides in enzyme catalysis? | CO3 | 15 |
|  | b. | Write short notes on the coenzyme-A in enzyme catalysis? | CO2 | 5 |

ALL THE BEST