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



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

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|  |  |  |  |
| **Code :** | **14CH3007** | **Duration :** | **3hrs** |
| **Sub. Name :** | **SUPRAMOLECULAR CHEMISTRY** | **Max. Marks :** | **100** |

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

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| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Compare the lock and key principle with the Induced fit model with examples. | CO1 | 20 |
| **(OR)** | | | | |
| 2. |  | Illustrate Co-operativity and Complementarity. | CO1 | 20 |
|  |  |  |  |  |
| 3. |  | Describe the high dilution synthesis of a macrocycle with an example. | CO2 | 20 |
| **(OR)** | | | | |
| 4. |  | Prepare a detailed report on the preparation, host-guest properties and applications of crown ethers. | CO1 | 20 |
|  |  |  |  |  |
| 5. | a. | Explain the different types of synthesis of rotaxanes. | CO2 | 15 |
| b. | Describe the nomenclature of catenanes. | CO2 | 5 |
| **(OR)** | | | | |
| 6. | a. | Discuss Racks, Ladders and Grids with pictorial representations. | CO3 | 15 |
| b. | Indicate the different types of Supramolecular interactions. | CO3 | 5 |
|  |  |  |  |  |
| 7. |  | Discriminate Urea clathrates from Thiourea clathrates. | CO3 | 20 |
| **(OR)** | | | | |
| 8. |  | Explain the structure, composition and catalysis property of Zeolites. | CO3 | 20 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Generalize the advantages and disadvantges of Metal Organic Frame works. | CO2 | 15 |
| b. | Summarize coordination polymers. | CO2 | 5 |