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



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

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| --- | --- | --- | --- |
| **Code :** | **14CH2007** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ALIPHATIC AND AROMATIC 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. | a. | Sketch out the reactions of aliphatic nitrogen containing compounds. | CO1 | 10 |
| b. | Describe the reactions of aliphatic carbonyl compounds. | CO1 | 10 |
| **(OR)** | | | | |
| 2. | a. | Explain the synthetic utility of aromatic aldehydes and ketones with examples. | CO1 | 20 |
|  |  |  |  |  |
| 3. | a. | Outline the applications of Aldol reaction with examples. | CO3 | 10 |
| b. | Describe the reactions of mono and di carboxylic acids. | CO1 | 10 |
| **(OR)** | | | | |
| 4. | a. | Illustrate Perkin reaction with examples. | CO3 | 10 |
| b. | Explain the synthesis and reactions of arene diazonium salts. | CO1 | 10 |
|  |  |  |  |  |
| 5. | a. | Point out the synthetic applications of Grignard reactions with examples. | CO3 | 15 |
| b. | Illustrate Gattermann reaction with an example. | CO3 | 5 |
| **(OR)** | | | | |
| 6. |  | Compare Dieckmann condensation and Reimer-Tiemann reaction. | CO3 | 20 |
|  |  |  |  |  |
| 7. | a. | Sketch out the significances of Friedel-Crafts reaction. | CO3 | 10 |
| b. | Explain Wittig reaction with an example. | CO3 | 10 |
| **(OR)** | | | | |
| 8. | a. | Describe the synthetic applications of the following reactions.   1. Clemmensen reduction 2. Baeyer-Villiger reaction 3. Fries reaction 4. Stevens reaction | CO3 | 20 |
|  | | **Compulsory**: |  |  |
| 9. |  | Outline the synthesis and applications of Curtius rearrangement and Hoffmann rearrangement with examples. | CO2 | 20 |