

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. - SEMESTER-III • EXAMINATION – WINTER-2020

Subject Code: BP301TP**Date: 18/02/2021****Subject Name: Pharmaceutical Organic Chemistry II****Time: 02:30PM TO 04:30PM****Total Marks: 54****Instructions:**

1. Attempt any **THREE** questions from Q-1 to Q-6.
2. **Q.7** is compulsory to attempt.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

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|-------------|--|-----------|
| Q.1 | (a) Write a note on friedel craft alkylation and mention its limitation. | 06 |
| | (b) Write a note on electrophilic aromatic substitution with general mechanism and explain any one reaction in detail. | 05 |
| | (c) Write structure and uses of DDT and BHC | 05 |
| Q.2 | (a) Describe a note on Reimer–Tiemann reaction. | 06 |
| | (b) Justify the following | 05 |
| | a) Phenol is more acidic than alcohol. | |
| | b) Aromatic amines are less basic than aliphatic amines. | |
| | (c) Write structure and use of naphthol and resorcinol. | 05 |
| Q.3 | (a) Explain a note on Haworth synthesis of naphthalene | 06 |
| | (b) Write a note on diazotization reaction. | 05 |
| | (c) Write a note Hoffman degradation reaction. | 05 |
| Q.4 | (a) Give detail note on conformation of cycloalkanes | 06 |
| | (b) Write a note on reaction of anthracene. | 05 |
| | (c) Write structure and uses of diphenyl methane and phenanthrene . | 05 |
| Q.5 | (a) Write a note on preparation of phenol | 06 |
| | (b) Justify the following | 05 |
| | a) Though halides are electron withdrawing group, they are o-p directing group on benzene. | |
| | b) Benzene gives electrophilic substitution reaction instead of addition reaction. | |
| | (c) Detail note on Huckel Rule | 05 |
| Q. 6 | (a) Write a note on reaction of benzoic acid | 06 |
| | (b) Write a note on reaction of fatty acid. | 05 |
| | (c) Write a note on qualitative test for phenols. | 05 |
| Q.7 | (a) Preparation of aromatic amine. | 06 |
| | OR | |
| | (a) Detail note on Cannizzaro reaction. | 06 |
| | OR | |
| | (a) Write a note on Saponification value. | 06 |
