

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. - SEMESTER-3 EXAMINATION – SUMMER -2023

Subject Code: BP301TP**Date:04/08/2023****Subject Name: Pharmaceutical Organic Chemistry II****Time: 10:30am to 01:30pm****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- | | | |
|-------------|--|-----------|
| Q.1 | (a) What is aromaticity? Write down characteristic in aromatic benzene. Write down method of preparation of benzene. | 06 |
| | (b) Write a note on Huckel's rule of aromaticity. | 05 |
| | (c) Explain briefly about electrophilic substitution reaction of benzene. | 05 |
| Q.2 | (a) Describe the various qualitative tests of phenol. | 06 |
| | (b) Write a note on reaction of Phenanthrene. | 05 |
| | (c) Detail note on Cannizzaro reaction. | 05 |
| Q.3 | (a) Explain Haworth synthesis for anthracene. Explain chemical reaction involve in anthracene. | 06 |
| | (b) Explain: Bayer's strain theory and give the limitation of it. | 05 |
| | (c) Write structure and uses of diphenyl methane and naphthalene. | 05 |
| Q.4 | (a) Write notes on acidity and effect of substituents of phenol. | 06 |
| | (b) Explain: Sachse Mohr's theory. | 05 |
| | (c) Notes on structure and stability of benzene. | 05 |
| Q.5 | (a) Write a short note Fries Rearrangement and Carbylamines reaction. | 06 |
| | (b) Write a note on diazotization reaction. | 05 |
| | (c) Write down any five methods of Preparation of Phenol. | 05 |
| Q. 6 | (a) Explain hydrogenation of oil with diagram. Discuss significance and principal of acid value and saponification value. | 06 |
| | (b) Write down structure and uses of DDT, BHC and Chloramine. | 05 |
| | (c) Preparation of aromatic amine and aromatic acids. | 05 |
| Q.7 | (a) How will you convert phenol in to (a) Benzene (b) Phenyl acetate (c) Anisole (d) Phenetole (e) Salicylaldehyde (f) P- Hydroxyazobenzene. | 06 |
| | (b) Write down reaction involve in Cyclopropane and cyclobutane. | 05 |
| | (c) Notes on inductive group and its directing effect in monosubstituted benzene. | 05 |
