

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm SEMESTER- III• EXAMINATION – SUMMER -2020

Subject Code: BP301TP**Date: 26-10-2020****Subject Name: PHARMACEUTICAL ORGANIC CHEMISTRY-II****Time: 2:30 PM TO 5:30 PM****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? Enlist the electrophilic aromatic substitution reaction with example. **06**
- (b) Give the Friedal craft reaction of alkylation and acylation in Benzene **05**
- (c) Write a short note on Huckel's rule. **05**
- Q.2** (a) Give the difference between 1) Animal fat vs Plant fat **06**
 2) Fats vs Waxes
- (b) Write a short note on saponification value and acid value. **05**
- (c) Write structure and uses of following, **05**
- a. Resorcinol
 - b. Naphthalene
 - c. Diphenyl Methane
 - d. Cresols
 - e. DDT
- Q.3** (a) What are Polynuclear aromatic compound and discuss the reaction of naphthalene. **06**
- (b) Explain Haworth synthesis of Anthracene. **05**
- (c) Write structure and uses of following, **05**
- 1) Sccharin 2) BHC 3) Phenanthrene 4) Phenol 5) Naphthols
- Q.4** (a) Give the three preparation of aromatic amines and aromatic acids. **06**
- (b) Write a short note on basicity of aromatic Amines. **05**
- (c) What are synthetic uses of diazonium salts? **05**
- Q.5** (a) What are phenol? How they differ from alcohols? Write a note on Reimer-tiemann reaction. **06**
- (b) Explain the Bayer's strain theory and give the limitation of it. **05**
- (c) Write a note on Strainless theory and give factor affecting stability of conformation. **05**
- Q.6** (a) Classify aromatic acids and give reaction of benzoic acid. **06**
- (b) Discuss the mechanism of cumene process for phenol synthesis. **05**
- (c) Write three reaction cyclopropane and cyclobutane. **05**
- Q.7** (a) How will you convert phenol in to: **06**
- 1) Salicylic acid 2) Anisole 3) Benzene 4) Phenyl acetate
 - 5) Phenelote
- (b) Explain effect of substitutes on acidity of Aromatic acids. **05**
- (c) Discuss Qualitative test for Phenol. **05**