

**Third Semester Examination For the  
Degree of Bachelor of Pharmacy**

**PHARMACEUTICAL CHEMISTRY – III  
(ORGANIC)**

**3-T-2**

Time : Three Hours ]

[ Max. Marks : 80

- N. B. : (1) Question No.1 is Compulsory.  
(2) Solve any **Four** questions from the remaining.  
(3) Discuss the reaction, mechanism wherever necessary.

1. Solve any **Five** of the following :—

- Write a note on Keto-enol tautomerism
- Explain Huckel's Rule.
- Differentiate between SN1 and SN2.
- Aldehydes are more reactive than Ketone, Explain.
- Explain Confirmations of n-butane.
- Write the mechanism of Hofmann degradation reaction.
- State and explain any two reactions of phenol.

5 × 4 = 20

2. Discuss the electrophilic aromatic substitution reaction of benzene with :—

- Nitration
- Sulphonation

- Halogenation
- Friedel-Craft's alkylation
- Friedel-Craft's acylation 15

3. Give the detail account of SN2 including reaction, mechanism, orientation and reactivity. 15

4. Write a Concise account on reactions and preparations of Carboxylic acids. 15

5. Prepare a full length draft on biomolecular elimination reaction covering mechanism, evidences, orientation and stereochemistry with appropriate examples. 15

6. (a) Describe in detail on preparation of alkenes using suitable examples. 8

(b) Discuss about acidity of Carboxylic acids. 7

7. Write notes on (Any **Three**) :—

- Aldol condensation.
- Connizarro's Reaction
- Structure of benzene
- Hinsberg test
- Synthesis and applications of Organometallic Compounds. 15