TKN/KS/16–6982

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 :—
   (a) Write a note on Keto-enol tautomerism
   (b) Explain Huckel's Rule.
   (c) Differentiate between SN1 and SN2.
   (d) Aldehydes are more reactive than Ketone, Explain.
   (e) Explain Confirmations of n-butane.
   (f) Write the mechanism of Hofmann degradation reaction.
   (g) State and explain any two reactions of phenol. 5 x 4 = 20

2. Discuss the electrophilic aromatic substitution reaction of benzene with :—
   (a) Nitration
   (b) Sulphonation
   (c) Halogenation
   (d) Friedel-Craft's alkylation
   (e) 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**) :—
   (a) Aldol condensation.
   (b) Connizarro's Reaction
   (c) Structure of benzene
   (d) Hinsberg test
   (e) Synthesis and applications of Organometallic Compounds. 15