

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 × 4 = 20
2. Discuss the electrophilic aromatic substitution reaction of benzene with :—
- (a) Nitration
  - (b) Sulphonation

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Contd.

- (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

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