February 2011

[KY 758] **Sub. Code : 4252**

FIRST B. PHARM. DEGREE EXAMINATION.

(Regulations 2009) Candidates Admitted from 2009-2010

Paper II — PHARMACEUTICAL ORGANIC CHEMISTRY

Q.P. Code : 564252

Time : Three hours **Maximum : 80 marks**

I. Essay questions: Answer any **TWO** questions. **(2 x 20 = 40)**

1. (a) Define aromatic electrophlic substitution reactions. Discuss the reaction and mechanism of nitration sulphonation, and friedel-craft reaction, sulphonation, and friedel-craft reaction. (15)
   (b) Describe clemmenser reduction with suitable example (5)
2. (a) Define elimination reaction. Discuss the mechanism of E1 and E2 reaction with suitable example. (10)
   (b) Write any four general methods of preparation of alkyl halides. (10)
3. (a) Discuss Bayer's strain theory with suitable examples. (10)
   (b) Explain the facts supporting kekule structure of Benzene. (10)

II. Write short notes: Answer any **SIX** questions. **(6 x 5 = 30)**

1. Write short note on peroxide effect.
2. Explain nucleophilic substitution reaction with example.
3. Write the preparation and synthetic utility of diazanium salts.
4. Outline the general methods of preparation of alkynes.
5. Discuss the basicity of amines.
6. Write note on Inductive effect.
7. Write note on free radical reaction.
8. Write any two method of preparation of alcohol.

III. Short answers: Answer any **FIVE** questions **(5 x 2 = 10)**

1. Tollens reagent.
2. Define hyper – conjugation.
3. Explain conjugated dienes.
4. Explain resonance effect.
5. Lucas test.
6. Give the structure for 5-Bromo-4-methyl-hex-3-en-2-one.
7. Give the IUPAC name for Ho -CH_2 -CH_2 - COOH.

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