

Roll No .....

**PY - 203**

**B.Pharm. II Semester**

Examination, December 2015

**Pharmaceutical Chemistry-III**

**(Organic-I)**

*Time : Three Hours*

*Maximum Marks : 70*

- Note:* i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.  
ii) All parts of each question are to be attempted at one place.  
iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.  
iv) Except numericals, Derivation, Design and Drawing etc.

1. a) Explain Resonance in brief.  
b) Write in brief about Nitrenium ion.  
c) Write a note on Polarity with suitable examples.  
d) Define Isomerism. Classify of isomers with suitable examples.

OR

Write a note on structure, stability and reactivity of Carbonium ion.

2. a) What are conformational isomers?  
b) State and explain: Saytzeff's rule.  
c) Give the free radical reactions of alkanes.  
d) What is Racemic Mixture? Give methods of resolve racemic mixture.

OR

Discuss the orientation and reactivity of electrophilic

3. a) Explain in brief Claisen condensation.  
b) Give conversion of alcohol to Tosylates.  
c) Give reactions of Phenols.  
d) Discuss in detail substitution reactions of alkyl halides.

OR

Write in detail about Nucleophilic aromatic substitution reactions of benzene.

4. a) Give any two chemical properties of Ketones.  
b) Discuss Hofmann degradation.  
c) Give method of preparations of ethers.  
d) Write a note on reactions of carbonyl compounds with suitable examples.

OR

Give difference between substitution vs. elimination reactions.

5. a) Comment Ammonia is more basic than methyl amine.  
b) How will you differentiate alcohols?  
c) Give reactions of amines.  
d) Write a note on diazonium salts.

OR

Give methods of preparation of Esters and amides.

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