PY - 203

B.Pharmacy II Semester Examination, December 20 14

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 ofwhich partA and B (Max.50 words) carry 2 marks, part C (Max. 00 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) What are Electrophiles?

b) Define Diastereomers.

c) What is chirality? Describe the RIS configuration of chiral carbon.

d) What is racemic modification? How the resolution of racemic mixture is done?

OR

Describe the SP' hybridization of methane.

2. a) Describe the free radical substitution reaction ofAlkanc

b) Describe the structure of Carbonium ion

c) Describe the structure of Benzene.

d)Describe the Benzene mechanism

OR

Discuss the mechanism for Electrophilic aromatic substitution in Benzene.

3. a) Write the reaction of Sodium Acetylides with Alkyl Halides.

b) Describe the Resonance in conjugated dienes.

c) Describe the conformations of Cycloalkanes.

d) Describe the SN2 substitution reaction.

OR

Describe the E2 Elimination reaction.

4 a) Write the physical properties of Ethers.

b) Discuss the physical properties of Alcohols.

c) Compare the acidity of phenols with alcohols.

d) Describe the chemical reactivity of Phenols.

OR

Discuss the chemical reactions of Alcohols.

5. a) Describe the structure of carbonyl group.

b) Discuss the physical properties of aldehyde and ketone.

c) Describe the nomenclature of amino compounds.

d) Describe the nucleophilic addition reaction to > C = 0 group.

OR

Describe the chemical reaction of carboxylic acids.