Roll No. .....

(09/20-I)

5190

B. Sc. EXAMINATION

(For Batch 2014 & Onwards)

(For Re-appear Candidates Only)

(Second Semester)

CHEMISTRY

Paper–VI (CH-106)

Organic Chemistry

Time : Three Hours *Maximum Marks : 27*

Note : Attempt *Five* questions in all. Q. No. **1** is compulsory. Attempt *two* questions out of three from each Sections A and B.

1. (a) What is Saytzeff rule ?

(b) Write a chemical equation to prepare alkene by dehydrohalogenation reaction.

(c) What is Huckel rule ?

(d) Write an example chemical equation for Friedel Craft reaction.

(e) Draw orbital picture of Buta-1,3-diene.

(f) Give an example chemical equation for preparation of alkyl halide from alcohol.

(g) Compare reactivity of allyl halide with vinyl halide for nucleophilic substitution reaction. 1×7=7

Section A

2. (a) Outline the various mechanistic steps to explain unexpectedly higher percentage of formation of but-2-ene by dehydration of butan-1-ol. 2

(b) Explain why anti Markownikov's addition is observed only for addition of HBr and not of HCl and HI on an unsymmetrical alkene. 3

3. (a) Write general mechanistic steps involved in aromatic electrophilic substitution reaction with Lewis acid acting as a catalyst. 2

(b) Write short note on aromatic, anti-aromatic and non-aromatic annulenes. 3

4. (a) Explain the o,p-directing behaviour of $-NH_2$ group when attached to benzene ring. 2

(b) Give one reaction each of hydroboronation-oxidation and Oxy-mercuration-reduction reaction on alkenes. 3

Section B

5. (a) What are various types of dienes ? Explain at least with *one* example in each case. 2

(b) Explain the effect of temperature on 1, 2 and 1, 4 addition of HBr on buta-1, 3-diene $CH_2 = CH - CH = CH_2$. 3

Roll No. .....

(09/20-I)

5190

B. Sc. EXAMINATION

(For Batch 2014 & Onwards)

(For Re-appear Candidates Only)

(Second Semester)

CHEMISTRY

Paper–VI (CH-106)

Organic Chemistry

Time : Three Hours *Maximum Marks : 27*

Note : Attempt *Five* questions in all. Q. No. **1** is compulsory. Attempt *two* questions out of three from each Sections A and B.

1. (a) What is Saytzeff rule ?

(b) Write a chemical equation to prepare alkene by dehydrohalogenation reaction.