

ORGANIC CHEMISTRY - II

(Common with B.Sc. Bio. Tech.)

Time : Three Hours]

[Maximum Marks : 26

Note : Attempt total *five* questions. Attempt *two* question each from Section A and B while Q. no. 9 of Section C is compulsory.

Section - A

- | | | | |
|----|-----|--|---|
| 1. | (a) | Explain Dehydrohalogenation of alkyl halides. | 2 |
| | (b) | Describe Saytzeff's Rule with example. | 2 |
| 2. | (a) | Describe the mechanism of dehydration of alcohols. | 2 |
| | (b) | Give than mechanism of 1, 2,-alkyl shift and 1, 2-hydride shift. | 2 |
| 3. | (a) | Explain the Markownikoff's Rule with examples. | 2 |
| | (b) | Give the mechanism of Anti-Markowinkoff's Rule. | 2 |
| 4. | (a) | Describe Diel's Alder reaction with example. | 2 |
| | (b) | Why conjugated dienes are more stable than non conjugated dienes ? | 2 |

Section - B

- | | | | |
|----|-----|---|---|
| 5. | (a) | Give <i>two</i> methods used for the preparation of acetylene. | 2 |
| | (b) | Why alkynes are acidic in the nature ? Prove with example. | 2 |
| 6. | (a) | Describe the term S_N1 with its mechanism and stereo-chemistry. | 2 |
| | (b) | Explain the aromatic and non-aromatic compounds with examples. | 2 |
| 7. | (a) | Explain Elimination addition reaction mechanism with example. | 2 |
| | (b) | Give the orbitabl structure of benzene with diagram. | 2 |
| 8. | (a) | Describe the mechanism of Friedal-Craft reaction. | 2 |
| | (b) | Explain the Sandmeyer reaction and Fitting reaction. | 2 |

Section - C

(Compulsory Questions)

9. Attempt all the following :
- | | |
|-----|--|
| (a) | Explain Hoffmann elimination reaction. |
| (b) | Describe the mechanism of ozonolysis of alkenes. |
| (c) | Write down the Huckel rule of aromaticity. |
| (d) | Define Hoffmann ammonolysis reaction. |
| (e) | Write donw the Wutz-Fitting with examples. |

(2×5=10)