ORGANIC CHEMISTRY - II

Paper-II

(Common for B.Sc. Bio-Tech. Semester-II)

Time : Three Hours] [Maximum Marks : 26

Note : Attempt five questions in all. Select two questions each from Section A and B while Question

No. IX of Section-C is compulsory.

SECTION-A

I.	(a)	Explain Dehydrohalogenation of alkyl halides.	2
	(b)	Define Saytzeffs rule with example.	2
II.	(a)	Describe the mechanism of dehydration of alcohols.	2
	(b)	Explain briefly 1,2-hydride shift and 1,2-alkyl shift.	2
III.	(a)	Explain the Markownikoffs rule with example.	2
	(b)	Give the mechanism of Peroxide effect,	2
IV.	(a)	Why conjugated dienes are more stable than non- conjugated dienes ?	3
	(b)	Describe Diel's-Alder reaction with example.	1

SECTION - B

V.	(a)	Why alkynes are less reactive towards electrophilic addition reactions than alkenes ?	2
	(b)	Prove that alkynes are acidic in nature.	2
VI.	(a)	Explain Non-aromatic and Anti-aromatic compounds with example.	2
	(b)	Describe the term SNj with mechanism and stereo¬chemistry.	2
VII.	(a)	Explain Elimination addition reaction mechanism with example.	2
	(b)	Describe the Sandmeyer reaction and Fittig reaction.	2
VIII.	(a)	Give the structure of Benzyne with diagram.	2
	(b)	Describe the mechanism of Sulphonation of Benzene.	2

SECTION-C.

(Compulsory Question)

IX. Answer all the following :

(a) Explain Hoffmann Elimination reaction.
(b) Describe the ozonolysis of alkenes with application.
(c) Write down the Huckel rule of aromaticity.
(d) Describe Hoffmann ammonolysis reaction.
(e) Write down the Wurtz-Fittig reaction with examples. (5×2=10)