

ADMISSION NUMBER

School of Biological and Life sciences
Bachelor of Science in General Zoology Botany Chemistry
Mid Term Examination - Nov 2023

Duration: 90 Minutes Max Marks: 50

Sem I - C1UB101T - Basic Concepts and Aliphatic Hydrocarbons

General Instructions

Answer to the specific question asked Draw neat, labelled diagrams wherever necessary Approved data hand books are allowed subject to verification by the Invigilator

1)	Discuss resonance with an example.	K2 (2)
2)	Why hydrolysis of allyl chloride is easier than vinyl chloride?	K1 (3)
3)	Explain mesomeric effect. Compare the basisity of the following:	K2 (4)
4)	Discuss hyperconjugation effect. Explain the relative stabilities of alkenes as well as directive influence of alkyl groups in aromatic alkylbenzenes.	K2 (6)
5)	Utilizing CIP rules assign E or Z configuration of the following compounds:	K3 (6)
	H_3CH_2C D CI CH_3 CI CH_3	
6)	Apply the concept of stereochemistry show how does SN2 reaction	K3 (9)

- give rise to inverted product.
- 7) Compare Saytzeff and Hoffmann eliminations with examples and write K4 (8) mechanisms.

(i)
$$H_3C$$
 $C=C$ CI Br $COOH$

HOOC

(iv)
$$\stackrel{\text{I}}{\longrightarrow} C = C \stackrel{\text{CH}_3}{\longleftarrow} C_3 H_7$$

(v)
$$H_3C$$
 $C=C$ C_3H_7 C_2H_5

(vi)
$$C = C$$

OR

K4 (12) Predict E or Z configuration of the following compounds and write CIP rules: