

SREE CHAITANYA MAHAVIDYALAYA

(Affiliated by WEST BENGAL STATE UNIVERSITY)

B.Sc. Sem-I, Internal Theory Examination, 2021-22

Chemistry (General)

CEMGCOR01T/ CEMHGEC01T: Atomic Structure, Chemical Periodicity, Acids & Bases, Redox Reactions, General Organic Chemistry, Aliphatic Hydrocarbons

Answer-scripts to be sent within 01 hour after exam at

scm.chem.exam@gmail.com

Time: 30 Minutes

Full Marks: 8

A. Answer the following questions: (any four) (2 X 4 = 8)

1. Arrange the followings according to their stability.
a) CH_3^+ , MeCH_2^+ , Me_2CH^+ , Me_3C^+
2. SN^2 reaction depends upon the nucleophile but SN^1 reaction does not. Explain.
3. Write down the Fischer and Newman projection formula of 2-bromo-3 chloropentane. [$\text{MeCH}(\text{Br})\text{CH}(\text{Cl})\text{Et}$].

4. Discuss the limitation of Bohr's theory on the basis of Heisenberg's uncertainty principle.
5. Electron affinity of Lithium is negative but the electron affinity of Beryllium is positive. Why?