

CITY COLLEGE
B.SC Semester 1 Internal Assessment (online), under CU 2020-21

CHEMISTRY- GENERAL

Paper: CC1/GE 1

(Paper 1)

Full Marks – 10

Attempt all the questions

Q.1. Which one is Amphoteric substance?

- a) Zn b) Al c) Both a) and b) d) none of these.

Q.2. $2\text{HI} \rightarrow \text{H}_2 + \text{I}_2$, what is the order of the reaction?

- a) 1 b) 2 c) 3 d) 4

Q.3. The $t_{1/2}$ of a first order reaction is 15 min, what is the rate constant of that reaction?

- a) 0.0462 min^{-1} b) 0.0562 min^{-1} c) 0.0662 min^{-1} d) none of these.

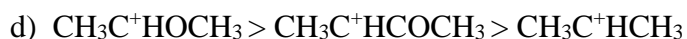
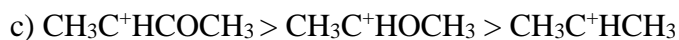
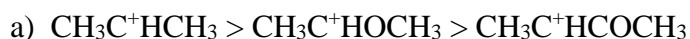
Q.4. What is the electronic configuration of Fe^{3+} ion

- a) $[\text{Ar}]3\text{d}^5$ b) $[\text{Ar}]3\text{d}^64\text{s}^2$ c) $[\text{Ar}]3\text{d}^6$ d) none of these

Q.5. What is the value of azimuthal quantum no.(l) for f-orbitals

- a) $l=3$ b) $l=4$ c) $l=2$ d) $l=1$

Q.6. The correct order of decreasing stability is



Q.7. which of the following has the highest nucleophilicity in Dimethyl Sulfoxide?



Q.8. Which of the following groups has the highest priority in the CIP sequence rules?

- a) CH_2CH_3
- b) $\text{CH}=\text{CH}_2$
- c) OCH_3
- d) OH

Q.9. Which of the following compounds displays optical isomerism?

- (a) $\text{CH}_2(\text{OH})-\text{CH}_2(\text{OH})$
- (b) $\text{CH}_3-\text{CHCl}-\text{CH}_2(\text{OH})$
- (c) $\text{CH}_3-\text{CHCl}-\text{CH}_3$
- (d) $\text{CH}_3-\text{O}-\text{C}_2\text{H}_5$

Q.10. Number of hyperconjugation structures in isopropyl radical is

- (a) 9
- (b) 3
- (c) 6
- (d) 5