Chandigarh Engineering College-CGC, Landran, Mohali

Department of Applied Sciences

Assignment No. 2 **Max Marks:** 10

Subject and Subject code: Chemistry (BTCH101-23) **Semester:** Ist

Date on which assignment given 06-11-2023 **Date of submission of assignment** 16-11-2023

Course Outcomes: Student will be able to

CO1 interpret concepts related to atomic and molecular structure at orbital level as well as categorize various intermolecular forces.

CO2 infer about thermodynamic functions, chemical equilibria, water chemistry and corrosion.

CO3 interpretation of data by using different spectroscopic techniques and its daily life applications.

CO4 explain and distinguish different periodic properties of elements such as ionization energy, electron affinity, electronegativity, oxidation state and polarizability

CO5 classify major organic chemical reactions used for the synthesis of molecules as well as drugs

CO6 Illustrate three dimensional arrangements and isomers possible for a molecule and their properties

Bloom's Taxonomy Levels

L1- Remembering, L2 - Understanding, L3- Applying, L4 - Analyzing, L5 - Evaluating, L6 - Creating

	Assignment related to COs	Relevance to CO No.	Bloom's Taxonomy Levels
Q1.	a) Explain the mechanism of Rusting of iron. **(1.5 marks)** b) Derive Nernst equation for single half-cell. **(1.5 marks)**	CO-2	L2 L3
Q2.	a) What type of nuclei show NMR spectra? Explain chemical shift in NMR. **(2 Marks)** b) What is the principle of UV visible spectroscopy? Give any two applications of electronic spectroscopy. **(2 Marks)**	CO-3	L1 L3
Q3.	Differentiate between Enantiomers and diastereomers with the help of examples. **(3Marks)**	CO-6	L2 L5

Course Co-ordinator **HOD Applied Sciences** **IQAC Member**