



## Term Evaluation (Odd) Semester Examination September 2025

Roll no.....

Name of the Course: Diploma Engineering

Semester: I

Name of the Paper: Applied Chemistry-I

Paper Code: DTCH-103

Time: 1.5 hour

**Maximum Marks: 50**

**Note:**

- (i) Answer all the questions by choosing any one of the sub-questions
- (ii) Each question carries 10 marks.

Q1.

(10 Marks)

a. Discuss evolution of Modern Periodic Table and its properties. (CO1)

OR

b. Define Atomic number and atomic mass. Also discuss electronic theory of valency in chemical bonding. (CO1)

Q2.

(10 Marks)

a. Define Hydrogen Bonding with its classification & Coordinate Bond. (CO1)

OR

b. Explain any two (i) Electrovalent Bond (ii) Covalent Bond (iii) Metallic Bond (CO1)

Q3.

(10 Marks)

a. Illustrate Ionization Potential and Atomic Radius. Also express their trend along with its periodic. (CO1)

OR

b. Define Electrolysis and discuss Faraday's Laws of Electrolysis. (CO2)

Q4.

(10 Marks)

a. Describe various industrial applications of Electrolysis and Electrorefining in detail. (CO2)

OR

b. What do you understand by Corrosion explain any one theory of corrosion in detail (CO2)

Q5.

(10 Marks)

a. Differentiate between 1. Conductors & Non Conductors & 2. Electrolytes & Non electrolytes (CO2)

OR

b. Discuss causes of Corrosion & methods of preventing corrosion. (CO2)