

PROGRESS REGISTER FOR THE ACADEMIC YEAR-2023-24				
SUBJECT-ENGG. CHEMISTRY				
DISCIPLINE- CIVIL ENGG. SEMESTER-2nd				
NAME OF THE TEACHING FACULTY-PRASANT BEHERA				
Sl.No.	MONTH	UNIT	Topic to be covered as per the Lesson Plan	Topic Actually Covered
1	FEBRUARY	1	Chapter 1: Atomic structure Fundamental particles (electron, proton & neutron Definition, mass and charge) .Rutherford's Atomic model (Chapter 1: Atomic structure Fundamental particles (electron, proton & neutron Definition, mass and charge).Rutherford's Atomic model (postulates and failure), Atomic mass and mass number.
2		1	Definition, examples and properties of Isotopes, isobars and isotones. Bohr's Atomic model (Postulates only)	Definition, examples and properties of Isotopes, isobars and isotones. Bohr's Atomic model (Postulates only)
3		1	Bohr-Bury scheme, Aufbau's principle,	Bohr-Bury scheme, Aufbau's principle,
4		1	Hund's rule, Electronic configuration (up to atomic no 30),	Hund's rule, Electronic configuration (up to atomic no 30),
5		2	Chapter 2 : Chemical Bonding : Definition , types (Electrovalent, Covalent and Coordinate bond with examples	Chapter 2 : Chemical Bonding : Definition , types (Electrovalent, Covalent and Coordinate bond with examples
6		2	Types of bond with examples (formation of NaCl, MgCl ₂ , H ₂ ,Cl ₂ , O ₂ , N ₂ , H ₂ O, CH ₄ , NH ₃ , NH ₄ + , SO ₂).	Types of bond with examples (formation of NaCl, MgCl ₂ , H ₂ ,Cl ₂ , O ₂ , N ₂ , H ₂ O, CH ₄ , NH ₃ , NH ₄ + , SO ₂).
7	March	3	Chapter 3 : Acid base theory : Concept of Arrhenius theory for acid and base with examples (Postulates and limitations only).	Chapter 3 : Acid base theory : Concept of Arrhenius theory for acid and base with examples (Postulates and limitations only).
8		3	Hund's rule, Electronic configuration (up to atomic no 30)	Hund's rule, Electronic configuration (up to atomic no 30)
9		3	Lowry Bronsted theory for acid and base with examples (Postulates and limitations only)	Lowry Bronsted theory for acid and base with examples (Postulates and limitations only)
10		3	Lewis theory for acid and base with examples	Lewis theory for acid and base with examples

11		3	Neutralization of acid & base. Definition of Salt, Types of salts (Normal, acidic, basic, double, complex and mixed salts, definitions with 2 examples).	Neutralization of acid & base. Definition of Salt, Types of salts (Normal, acidic, basic, double, complex and mixed salts, definitions with 2 examples).
12		4	Chapter 4: Solutions : Definitions of atomic weight, molecular weight, Equivalent weight.	Chapter 4: Solutions : Definitions of atomic weight, molecular weight, Equivalent weight.
13	APRIL	4	Determination of equivalent weight of Acid, Base and Salt.	Determination of equivalent weight of Acid, Base and Salt.
14		4	Modes of expression of the concentrations Molarity with Simple Problems	Modes of expression of the concentrations Molarity with Simple Problems
15		4	Modes of expression of the concentrations Normality & molality with Simple Problems	Modes of expression of the concentrations Normality & molality with Simple Problems
16		4	pH of solution (definition with simple numericals),Importance of pH in industry (sugar, textile, paper industries only)	pH of solution (definition with simple numericals),Importance of pH in industry (sugar, textile, paper industries only)
17		5	Chapter 5 : Electrochemistry : Definition and types (Strong & weak) of Electrolytes with example.	Chapter 5 : Electrochemistry : Definition and types (Strong & weak) of Electrolytes with example.
18		5	Electrolysis (Principle & process) with example of NaCl (fused and aqueous solution).	Electrolysis (Principle & process) with example of NaCl (fused and aqueous solution).
19		5	Faraday's 1st law of Electrolysis (Statement, mathematical expression and Simple numerical)	Faraday's 1st law of Electrolysis (Statement, mathematical expression and Simple numerical)
20	MAY	5	Faraday's 2nd law of Electrolysis (Statement, mathematical expression and Simple numerical)	Faraday's 2nd law of Electrolysis (Statement, mathematical expression and Simple numerical)
21		5	Industrial application of Electrolysis- Electroplating (Zinc only)	Industrial application of Electrolysis- Electroplating (Zinc only)

22		6	Chapter 6 : Corrosion: Definition of Corrosion, Types of Corrosion- Atmospheric Corrosion	Chapter 6 : Corrosion: Definition of Corrosion, Types of Corrosion- Atmospheric Corrosion
23		6	Waterline corrosion	Waterline corrosion