

GANDHI ACADEMY OF TECHNOLOGY AND ENGINEERING				
DEPARTMENT OF BS&H				
LESSON PLAN				
DISCIPLINE:-BS&H				
SEMESTER:-1ST		FROM DATE:-16.08.2023		TODATE:-11.12.2023
Name of Teaching Faculty: MONISA KHADANGA				
SUBJECT:-APPLIED CHEMISTRY				
NO.OF PERIOD/PER WEEK CLASS ALLOTTED:-4				
TOTAL NO.OF CLASS AVAILABLE IN SEM:-60				
SL NO.	WEEK	CLASS DATE	NO. OF CLASS/DAY	TOPICS
1	Week-01	16. 08.2023	1	Introduction on fundamental particles
		17. 08.2023	1	Rutherford's atomic model, atomic mass and mass number
		18.08.2023	1	Isotopes ,isobars and isotones.
		21.08.2023	1	Bohr's atomic model, Bohr-bury scheme
2	Week-02	22. 08.2023	1	Aufbau's principle, Hund's rule ,electronic configuration
		23.08.2023	1	Definition ,types of electrovalent ,covalent bond e.g
		24.08.2023		Definition and example of co-ordinate bond
		25.08.2023	1	Formation of Nacl,H2O,NH4+
3	Week-03	26.08.2023	1	HOLIDAY
		28.08.2023	1	Concept of Arrhenius theory, Lowry- Bronsted theory
		29.08.2023	1	Lewis theory for acid and base with examples
		30.08.2023		HOLIDAY
4	Week-04	31.08.2023	1	Neutralisation of acid and base, definition of salt
		1.09.2023	1	Types of salts(normal ,acidic, basic, double, complex and mixed salts) definition and examples
		4.09.2023	1	Definition of atomic weight, molecular weight, electrovalent weight
		5.09.2023	1	Determination of equivalent weight of acid, base, salt
5	Week-05	6.09.2023	1	Molarity, Normality, Molality with simple problems
		7.09.2023	1	PH of solutions, Definition with simple numericals
		8.09.2023		PH in industry(sugar, textile, paper industry only)
		14.09.2023	1	Definition and types of strong and weak electrolytes with example
6	Week-06	15.09.2023		Electrolysis (principle and process with example of NaCl) fused and aq. solution
		16.09.2023		HOLIDAY
		18.09.2023	1	Faraday 's 1 st and 2 nd law of electrolysis
		19.09.2023	1	Industrial application of electrolysis, electroplating(zinc only)
7	Week-	20.09.2023	1	Definition of Corrosion, types of corrosion

	07			(atmospheric corrosion, Waterline corrosion)
		21.09.2023	1	Mechanism of rusting of iron only
		22.09.2023	1	Protection from corrosion by alloying and Galvanisation
		26.09.2023	1	Definition of mineral, ores, gangue with example
8	Week-08	27.09.2023	1	Distinction between ores and minerals ,general methods of extraction of metals
		28.09.2023	1	Ore dressing, concentration,(gravity separation, magnetic separation, Froth flotation and leaching)
		29.09.2023	1	Oxidation(Calcination, roasting) Reduction(smelting)
		6.10.2023	1	Definition and example of Flux and slag, refining of metal(electro refining and distillation only)
9	Week-09	7.10.2023		HOLIDAY
		8.10.2023	1	Definition of Alloy, types of Alloys(ferro , non ferro, amalgam) with example
		9.10.2023	1	Composition and uses of Brass, Bronze, Alnico, Duralumin
		11.10.2023		HOLIDAY
10	Week-10	13.10.2023	1	Saturated and unsaturated hydrocarbons with e.g , aliphatic and aromatic hydrocarbon(Huckel's rule)
		14.10.2023	1	Difference between aliphatic and aromatic hydrocarbon, IUPAC nomenclature of alkane
		15.10.2023	1	Nomenclature of alkene, alkyl halide and alcohol with bond line notation, uses of aromatic compounds
		16.10.2023	1	Sources of water, soft water, hard water, hardness
11	Week-11	17.10.2023	1	Removal of hardness by lime soda method ,advantages of hot lime over cold lime process
		31.10.2023	1	Organic ion exchange method
		4.11.2023	1	Definition of lubricant, types , specific uses of lubricants, purpose of lubrication
		6.11.2023	1	Definition and classification of fuels, calorific value of fuel , choice of good fuel
12	Week-12	8.11.2023		HOLIDAY
		10.11.2023	1	Diesel, petrol, kerosene composition and uses
		14.11.2023	1	Producer gas and water gas, LPG, CNG, Coal gas
		15.11.2023		HOLIDAY
13	Week-13	17.11.2023	1	Definition of monomer, polymer , homo -polymer
		18.11.2023	1	Co- polymer and degree of polymerization, thermosetting and thermoplastic
		24.11.2023	1	Composition and uses of polythene
		26.11.2023	1	Poly vinyl chloride and bakelite
14	Week-14	28.11.2023	1	Elastomer, Natural rubber, vulcanization of rubber
		5.12.2023	1	Pesticides, insecticides
		6.12.2023		HOLIDAY
		7.12.2023	1	Herbicides, Fungicides example and uses
15	Week-	8.12.2023	1	Biofertilisers and its definition

	15	9.12.2023		HOLIDAY
		10.12.2023	1	Bio fertilizers with example
		11.12.2023	1	Uses of Biofertilisers