SARASWATI MAHILA MAHAVIDHYALAYA, PALWAL

LESSON-PLAN

Class:B.Sc - 1st year(Non -Med +Med)

Semester:2nd

Subject: Inorganic Chemistry

Session:2021-2022

	Unit -1
1	Hydrogen bonding- definition ,types, importance,effects of hydrogen bonding on properties of substances
2	Applications of hydrogen bonding.., Brief discussion of various types of Vanderwaal forces
3	Metallic bond- brief introduction.., silent features of electron sea model .., band theory of metallic bond of Li , Mg atoms...band theory of metals ,non metals and metalloids
4	Semiconductors.,.. introduction..,types..,band model of intrinsic semiconductor,band model of n-type and p- type semiconductor and application of semiconductors
5	Revision test
	Unit -2
6	S- block elements- comparative study of the elements including diagonal relationship and physical properties of s block elements
7	Cause of diagonal relationship.., salient features of hydrides (methods of preparation excluded)..
8	Solvation and complextion tendencies including their functions in biological systems , role of Na and K ions, Ca and Mg ions in biological systems
9	Chemistry of noble gases:- chemical properties of the noble gases with emphasis on their low chemical reactivity.
10	Chemistry of Xenon:- structure and bonding of fluorides , oxides and oxyfluorides of Xenon , structures of XeF2, XeF4, XeF6,XeOF4 ,XeO2F2.
11	Practice for the structures of Xenon fluorides ....shapes and their hybridisation
12	Revision Test

	Unit -3
13	p - block elements:- emphasis on comparative study of properties of p block elements including diagonal relationship and causes of it.
14	Boron family (13th group):- introduction , diborane - properties and structures as an example of electron deficient compound.
15	Borazene- chemical properties and structures..,trihalides of boron., Trends in Lewis acid behaviour .., structure f aluminium trichloride.
16	Carbon family (14 group):- introduction to carbon family, physical properties, catenation, pπ -dπ bonding, carbides and it's types ,fluorocarbons and its uses, silicates and it's structural features .
17	Silicones or Silicone polymers:- introduction, general methods of preparation, cross linked and linear polymers, properties and uses of silicon polymers.
18	Revision Test
	Unit- 4
19	Nitrogen family(15 group):- introduction , physical properties, oxides-- structures of oxides of nitrogen and phosphorus. Oxyacids-- structure and relative acidic strength.
20	Acidic strength of oxyacids of nitrogen and phosphorus Structures of white , red and yellow phosphorus and their preparations .
21	Oxygen family (16 group):- introduction , oxyacids of sulphur H_2SO_3, H_2SO_4,$H_2S_2O_3$ ...their structure and properties
22	Hydrogen peroxide H_2O_2:- it's structural features, properties and uses of H_2O_2
23	Halogen family(17 group):- introduction ., Some physical properties, chemical properties of halogens , interhalogens.... Types and properties.
24	Hydro , oxo, oxyacids of chlorine- structure and comparison of their acidic strengths Acidic strength of HClO, $HClO_2$,$HClO_3$ and $HClO_4$
25	Revision test of p block elements