

## LESSON PLAN- B.Sc 2<sup>nd</sup> SEMESTER

SUBJECT- INORGANIC CHEMISTRY

TEACHER'S NAME- Dr. ANJU SIWACH

SESSION- 2021-22

WEEKS	SYLLABUS
21-03-2022 to 31-03-2022	<b>B.Sc 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup> semester PRACTICAL EXAMINATION</b>
01-04-2022 to 09-04-2022	<b>Hydrogen Bonding</b> Hydrogen Bonding – Definition, Types, effects of hydrogen bonding on properties of substances, application and Brief discussion of various types of Vander Waals Forces
11-04-2022 to 16-04-2022	<b>Metallic Bond and Semiconductors</b> Metallic Bond- Brief introduction to metallic bond, band theory of metallic bond Semiconductors- Introduction, types and applications.
18-04-2022 to 23-04-2022	<b>s-Block Elements</b> Comparative study of the elements including, diagonal relationships, salient features of hydrides (methods of preparation excluded), solvation and complexation tendencies including their function in biosystems.
25-04-2022 to 30-04-2022	
02-05-2022 to 07-05-2022	<b>Chemistry of Noble Gases</b> Chemical properties of the noble gases with emphasis on their low chemical reactivity, chemistry of xenon, structure and bonding of fluorides, oxides & oxyfluorides of xenon.
09-05-2022 to 14-05-2022	
16-05-2022 to 21-05-2022	<b>p-Block Elements</b> Emphasis on comparative study of properties of p-block elements (including diagonal relationship and excluding methods of preparation). <b>Boron family (13th group):-</b> Diborane – properties and structure (as an example of electron – deficient compound and multicentre bonding), Borazene – chemical properties and structure Trihalides of Boron – Trends in lewis acid character structure of aluminium (III) chloride.
23-05-2022 to 28-05-2022	
30-05-2022 to 04-06-2022	
	<b>Carbon Family (14th group)</b> Catenation, $p\pi-d\pi$ bonding (an idea), carbides,

<p>06-06-2022 to 11-06-2022</p> <p>13-06-2022 to 18-06-2022</p> <p>20-06-2022 to 25-06-2022</p>	<p>fluorocarbons, silicates structural aspects), silicon – general methods of preparations, properties and uses.</p> <p><b>Nitrogen Family (15th group)</b>  Oxides – structures of oxides of N, P. oxyacids – structure and relative acid strengths of oxyacids of Nitrogen and phosphorus. Structure of white, yellow and red phosphorus.</p> <p><b>Oxygen Family (16th group)</b>  Oxyacids of sulphur – structures and acidic strength <math>H_2O_2</math> – structure, properties and uses.</p> <p><b>Halogen Family (17th group)</b>  Basic properties of halogen, interhalogens types properties, hydro and oxyacids of chlorine – structure and comparison of acid strength.</p>
<p>27-06-2022 to 01-07-2022</p> <p>02-07-2022 onwards</p>	<p>Assignments, Viva,  Test, Revision  MDU examination</p>