**Govt. College Barota , Gohana**

**LESSON PLAN**

**( From October 12, 2023 to November 25 , 2023)**

**NAME:-** Devender Singh **Designation** :- Assistant Professor in Chemistry

**CLASS:-** B.Sc. II (Inorganic Chemistry) **Sem. :- 3**

**SECTION:-** Non-Medical

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| Dates | Contents |
| 12th - 14th October,2023 | **Unit-1& 2:-**  **Transition Elements:-**  Definition of transition elements, position in the periodic table. General characteristic properties of d-Block elements |
| 16th - 21st Oct. ,2023 | Comparison of properties of 3d elements with 4d and 5d elements with reference to ionic radii, oxidation state. |
|  | Comparison of properties of 3d elements with 4d and 5d elements with reference magnetic and spectral properties. |
| 23rd -28th Nov., 2023 | Comparison of properties of 3d elements with 4d and 5d elements with stereo chemistry. |
|  | Stability of various oxidation states and e.m.f (Latimer)  Stability of various oxidation states and e.m.f (Frost diagrams) |
| 30th Oct. - 4th Nov. , 2023 | Structure and properties of some compounds of transition elements- TiO2, VOCl2 FeCl3 CuCl2 and Ni(CO)4 |
|  | **UNIT:- 3 : Coordination Compounds**  Nomenclature of coordination compounds |
| 6th - 11th Nov. , 2023 | Werner’s theory of coordination compounds |
|  | Effective atomic number, chelates .  Discussion and solution of problems. |
| 20th - 25th Nov. , 2023 | Isomerism in coordination compounds Valence bond theory of transition metal complexes |
| Extra Class 23rd -28th Oct., 2023 | **UNIT :- 4 : Non Aqueous Solvents :-**  Physical properties of solvents , Types of solvents |
| Extra Class  30th Oct. - 4th Nov. , 2023 | Reactions in non aqueous solvents with reference to liquid NH3 |
| Extra Class  6th - 11th Nov., 2023 | Reactions in non aqueous solvents with reference liquid SO2  Assignment of Non aqueous Solvents. |