Curriculum Plan (Odd Semester 2024-25)

Teacher Name: **Dr. Geeta Devi Yadav**

Course: B.Sc. (P) Life Science, NEP-UGCF, Semester III year

Paper Name: Coordination Chemistry and its application in biological systems (SEC) (1 periods per week)

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| **S. No.** | **Contents** | **Allocation**  **of Lectures** | **Month wise**  **schedule to be followed** | **Assignments/ Presentations etc** |
| 1. | **Application of coordination compounds in biological systems**  Haemoglobin, Myoglobin, carboxypeptidase, carbonic anhydrase | **4** | **First week August – Fourth week August** | **Syllabus overview**  **Reference books suggestions**  **Question Solving Doubt Session Class Test** |
| 2. | **Thermodynamic and Kinetic aspects of Metal Complexes:**  A brief outline of thermodynamic and kinetic stabilities of metal complexes and factors affecting the stability. Substitution reactions of square-planar complexes – Trans effect: cisplatin and transplatin. | **06** | **First week September – Fourth week September** | **Question-Solving**  **Doubt Session University Papers Discussion** |

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| 3. | Bonding in coordination compounds:  Valence Bond Theory (VBT): The salient features of the theory are the concept of inner and outer orbital complexes and the drawbacks of VBT. |  | **First week October – Third week November** | **Question-Solving Doubt Session**  **University Papers Discussion**  **Assignment Distribution** |

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