

## Teaching Plan-2024

B.Sc. Chemistry (Prog.) NEP, II Sem.  
Paper- DSC-4, Periodic Properties and Chemical bonding  
Teacher- Dr. Reeta Sharma

Week	Date from -to	Topic
I	18/01/2024 - 27/01/2024	Discussion of syllabus and related books
II	29/01/2024 - 03/02/2024	General characteristics of covalent bonding
III	05/02/2024 - 10/02/2024	Valence Bond Approach postulates, theorem and Limitations.
IV	12/02/2024 - 17/02/2024	Hybridization, type of Hybridization discussion of SP, SP <sub>2</sub> , SP <sub>3</sub> Hybridization
V	19/02/2024 - 24/02/2024	Type of Hybridization SP <sub>3</sub> d, SP <sub>3</sub> d <sub>2</sub> , dsp <sub>2</sub> and dsp <sub>3</sub>
VI	26/02/2024 - 02/03/2024	VSEPR Theory- postulates with examples.
VII	04/03/2024 - 09/03/2024	VSEPR Theory- Explanation with examples.
VIII	11/03/2024 - 16/03/2024	Resonance and Resonating structure, test /assignment
IX	24/03/2024 - 31/03/2024	Mid Sem. Break
X	18/03/2024 - 23/03/2024	MOT, Rules for the LCAO method, Bonding, Nonbonding and Antibonding MOs and their characteristics for s-s, s-p and p-p combinations.
XI	01/04/2024 - 06/04/2024	MO treatment of homonuclear diatomic molecules of 1st and 2nd periods
XII	08/04/2024 - 13/04/2024	Heteronuclear diatomic molecules such as CO, NO and NO <sup>+</sup> .
XIII	15/04/2024 - 20/04/2024	Brief introduction to Metallic Bonding
XIV	22/04/2024 - 27/04/2024	Hydrogen Bonding, van der Waal's Forces , Electronic configurations of the atoms
XV	29/04/2024 - 04/05/2024	Stability of half-filled and completely filled orbitals, concept of exchange energy, inert pair effect.
XVI	06/05/2024 - 11/05/2024	Test /assignment