

Lesson Plan Session 2023-24 (odd sem)

Name of the Assistant/ Associate Professor:- Pinki Yadav

Class and Section: B.Sc-I (NM), Sem - Ist

Subject: Chemistry (Organic & Physical)

| Week | Date | Topics |
|--------|------------|---------------------------------|
| Week 1 | 24/07/2023 | |
| | 25/07/2023 | |
| | 26/07/2023 | <u>Organic</u> : chemical bonds |
| | 27/07/2023 | Electronic effects |
| | 28/07/2023 | Electronic effects |
| | 29/07/2023 | Electronic effects |
| Week 2 | 31/07/2023 | Holiday |
| | 01/08/2023 | |
| | 02/08/2023 | Vanderwaal's forces |
| | 03/08/2023 | " |
| | 04/08/2023 | Test |
| | 05/08/2023 | optical Isomerism |
| Week 3 | 07/08/2023 | |
| | 08/08/2023 | |
| | 09/08/2023 | optical Isomerism |
| | 10/08/2023 | " |
| | 11/08/2023 | " |
| | 12/08/2023 | " |
| | 13/08/2023 | Sunday |
| Week 4 | 14/08/2023 | |
| | 15/08/2023 | Independence day |
| | 16/08/2023 | Geometrical Isomerism |
| | 17/08/2023 | " |
| | 18/08/2023 | Conformational Isomerism |
| | 19/08/2023 | " |
| Week 5 | 21/08/2023 | |
| | 22/08/2023 | |
| | 23/08/2023 | Projection formula |
| | 24/08/2023 | Test |
| | 25/08/2023 | Arrow notation |
| | 26/08/2023 | Bond cleavage |

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| Week | 28/08/2023 | |
| | 29/08/2023 | |
| | 30/08/2023 | Holiday |
| | 31/08/2023 | Type of Organic reactions |
| | 01/09/2023 | Intermediates |
| | 02/09/2023 | , |
| Week | 04/09/2023 | |
| | 05/09/2023 | |
| | 06/09/2023 | Holiday |
| | 07/09/2023 | formal charges |
| | 08/09/2023 | Alkanes - nomenclature |
| | 09/09/2023 | methods of formation |
| Week | 11/09/2023 | |
| | 12/09/2023 | |
| | 13/09/2023 | Chemical Reactions |
| | 14/09/2023 | Cycloalkanes |
| | 15/09/2023 | , |
| | 16/09/2023 | Test |
| Week | 18/09/2023 | |
| | 19/09/2023 | |
| | 20/09/2023 | <u>Physical</u> : Gaseous state: Intro |
| | 21/09/2023 | velocity |
| | 22/09/2023 | Collision number |
| | 23/09/2023 | Holiday |
| | | |
| Week | 25/09/2023 | |
| | 26/09/2023 | |
| | 27/09/2023 | Deviation of Real gases |
| | 28/09/2023 | Vanderwaal's equation |
| | 29/09/2023 | Boyle's Temperature |
| | 30/09/2023 | Critical Phenomenon |
| | | |
| Week | 02/10/2023 | Holiday |
| | 03/10/2023 | |
| | 04/10/2023 | Compressibility factor |
| | 05/10/2023 | Liquefaction of gases |
| | 06/10/2023 | Liquid states |
| | 07/10/2023 | Surface tension |

Lesson Plan Session 2023-24 (odd sem)

Name of the Assistant/ Associate Professor:- Pinki Yadav

Class and Section: B.Sc-I (M), Sem-Ist

Subject: Organic chemistry

| Week | Date | Topics |
|--------|------------|-----------------------------------|
| Week 1 | 24/07/2023 | str. and bonding - chemical bonds |
| | 25/07/2023 | Electronic effects |
| | 26/07/2023 | |
| | 27/07/2023 | |
| | 28/07/2023 | |
| | 29/07/2023 | |
| Week 2 | 31/07/2023 | Holiday |
| | 01/08/2023 | Electronic effects |
| | 02/08/2023 | |
| | 03/08/2023 | |
| | 04/08/2023 | |
| | 05/08/2023 | |
| Week 3 | 07/08/2023 | Electronic effects |
| | 08/08/2023 | Optical Isomerism |
| | 09/08/2023 | |
| | 10/08/2023 | |
| | 11/08/2023 | |
| | 12/08/2023 | |
| | 13/08/2023 | Sunday |
| Week 4 | 14/08/2023 | optical Isomerism |
| | 15/08/2023 | Holiday |
| | 16/08/2023 | |
| | 17/08/2023 | |
| | 18/08/2023 | |
| | 19/08/2023 | |
| Week 5 | 21/08/2023 | Configuration |
| | 22/08/2023 | Geometrical Isomerism |
| | 23/08/2023 | |
| | 24/08/2023 | |
| | 25/08/2023 | |
| | 26/08/2023 | |

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| Week | 28/08/2023 | Geometrical Isomerism |
| | 29/08/2023 | Meso Compounds |
| | 30/08/2023 | Holiday |
| | 31/08/2023 | |
| | 01/09/2023 | |
| | 02/09/2023 | |
| Week | 04/09/2023 | Test |
| | 05/09/2023 | Assignment |
| | 06/09/2023 | Holiday |
| | 07/09/2023 | |
| | 08/09/2023 | |
| | 09/09/2023 | |
| Week | 11/09/2023 | Conformational Isomerism |
| | 12/09/2023 | Projection formula |
| | 13/09/2023 | |
| | 14/09/2023 | |
| | 15/09/2023 | |
| | 16/09/2023 | |
| Week | 18/09/2023 | Arrow notation |
| | 19/09/2023 | Bond cleavage |
| | 20/09/2023 | |
| | 21/09/2023 | |
| | 22/09/2023 | |
| | 23/09/2023 | Holiday |
| Week | 25/09/2023 | Types of Organic reactions |
| | 26/09/2023 | Intermediates |
| | 27/09/2023 | |
| | 28/09/2023 | |
| | 29/09/2023 | |
| | 30/09/2023 | |
| Week | 02/10/2023 | Holiday |
| | 03/10/2023 | formal Charges |
| | 04/10/2023 | |
| | 05/10/2023 | |
| | 06/10/2023 | |
| | 07/10/2023 | |

PINKI YADAV

M.Sc - CHEMISTRY

SEMESTER - I

CHE-103 ORGANIC CHEMISTRY - I

(Conceptual Organic chemistry & stereochemistry)

| Date | Topic |
|--------------|---|
| 16/08/2023 → | Introduction |
| 17/08/2023 → | unit-I ⇒ Nature of bonding in organic molecules: Delocalized chemical bonding, conjugation |
| 18/08/2023 → | Concept of aromaticity; Huckel's rule |
| 19/08/2023 → | Energy levels of π -molecular orbitals |
| 21/08/2023 → | Annulenes |
| 22/08/2023 → | Antiaromaticity, Homoaromaticity |
| 23/08/2023 → | Addition Compounds |
| 24/08/2023 → | Reaction Mechanism : str. and Reactivity |
| 25/08/2023 → | Types of Mech., types of Reactions |
| 26/08/2023 → | Thermodynamic stability and Rate of R ₂ C ⁺ |
| 28/08/2023 → | Hammond Postulate |
| 29/08/2023 → | Potential energy diagrams |
| 31/08/2023 → | Methods of determining Mechanism |
| 01/09/2023 → | Hammett and Taft equation |
| 02/09/2023 → | Test |
| 04/09/2023 → | Problems discussion |
| 05/09/2023 → | Unit - II ⇒ Stability and Reactivity of Reactive intermediates |

| Date | Topic |
|------------|--|
| 01/09/2023 | → Reactive intermediates |
| 08/09/2023 | → Aliphatic Nucleophilic and Electrophilic substitution |
| 09/09/2023 | → SET Mechanism |
| 11/09/2023 | → Neighboring group participation |
| 12/09/2023 | → Anchimeric Assistance |
| 13/09/2023 | → Rearrangement of Carbocations |
| 14/09/2023 | → Effect of substrate str., Attacking Nucleophile |
| 15/09/2023 | → Leaving group and reaction medium |
| 16/09/2023 | → Regioselectivity |
| 18/09/2023 | → Phase transfer catalyst |
| 19/09/2023 | → SE Mechanism |
| 20/09/2023 | → Bimolecular mechanism |
| 21/09/2023 | → Polarity on the reactivity |
| 22/09/2023 | → Test |
| 23/09/2023 | → Problem solution |
| 25/09/2023 | → Unit - III ⇒ stereochemistry - I Molecular symmetry and chirality |
| 26/09/2023 | → D-L, R-S, E-Z nomenclature |
| 27/09/2023 | → Inter Conversion of formulae |
| 29/09/2023 | → Conformational analysis |
| 30/09/2023 | → Cyclic system |
| 03/10/2023 | → Bicyclic systems and Sugars |

- | Date | Topic |
|------------|--|
| 11/10/2023 | → Optical activity |
| 05/10/2023 | → Allenes |
| 06/10/2023 | → Ansa Compounds |
| 07/10/2023 | → Cyclophanes |
| 09/10/2023 | → Hemispiranes and spiranes |
| 10/10/2023 | → stereochemistry of nitrogen containing Compounds |
| 11/10/2023 | → others Compounds |
| 12/10/2023 | → Test |
| 13/10/2023 | → Problem solution |
| 14/10/2023 | → stereochemistry - II ⇒ Topocity |
| 16/10/2023 | → nomenclature |
| 17/10/2023 | → Prosteroisomerism |
| 18/10/2023 | → stereogeneity |
| 19/10/2023 | → Pseudo Symmetry |
| 20/10/2023 | → stereospecific Reaction |
| 21/10/2023 | → Asymmetric synthesis |
| 23/10/2023 | → Enantioselectivity |
| 25/10/2023 | → optical Purity |
| 26/10/2023 | → Diastereo-selectivity |
| 27/10/2023 | → Asymmetric Synthesis |
| 30/10/2023 | → Asymmetric Synthesis |

| Date | Topic |
|------------|------------------|
| 01/10/2023 | Test |
| 02/11/2023 | Revision |
| 03/11/2023 | Revision |
| 04/11/2023 | Revision |
| 06/11/2023 | Revision |
| 07/11/2023 | Test |
| 08/11/2023 | Revision |
| 09/11/2023 | Problem solution |
| 17/11/2023 | Revision |
| 18/11/2023 | Revision |
| 20/11/2023 | Revision |
| 21/11/2023 | Revision |
| 22/11/2023 | Test |
| 23/11/2023 | Revision |
| 24/11/2023 | Revision |
| 25/11/2023 | Revision |
| 28/11/2023 | Test |
| 29/11/2023 | Problem solution |
| 30/11/2023 | Problem solution |