Lesson Plan for session:-2023-24

B.Sc. 5th sem Organic Chemistry Name of Teacher:-Kavita Yadav

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| Week | Topic |
| 1 | Carbohydrates I : Classification and nomenclature. |
| 2 | \*Monosaccharides \*Osazone  \*Interconversion of Glucose and Fructose |
| 3 | \*Chain lengthening and Chain shortening of aldoses  \*Configuration of monosaccharides. |
| 4 | \*Erythro and Threo diastereomers \*Conversion of Glucose and Mannose.  \*Formation of glycosides, ethers and esters. |
| 5 | \*Determination of ring size of Glucose and Fructose & their open chain structure.  \*Mechanism of Mutarotation. \*Structure of ribose and deoxyribose. |
| 6 | Carbohydrates II: Introduction of Disaccharides ( maltose, sucrose &lactose) |
| 7 | \*Polysaccharides (Starch and Cellulose)  \*Structure of various carbohydrates |
| 8 | Organometallic Compounds:-\* Organomagnesium compounds- preparation and chemical properties |
| 9 | \*Organozinc compounds – preparation and chemical properties |
| 10 | \*Organolithium compounds- preparation and chemical properties |
| 11 | NMR Spectroscopy I-Principle, No. of signal and peak area  \*Equivalent and non-equivalent protons |
| 12 | \*Position of signal and chemical shift.  \*Shielding and Deshielding of protons |
| 13 | \*Proton counting  \*Shifting of signals and coupling constant.  \*Magnetic equivalence of protons. |
| 14 | NMR Spectroscopy II  \*Discussion of NMR spectra of molecules |
| 15 | \*Discussion of NMR spectra of molecules |
| 16 | \*Revision |
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