

**ORGANIC CHEMISTRY (BS-ADP 8<sup>th</sup> Semester)**

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|------------------------|---------------------------------------|
| <b>Module Code:</b>    | <b>Chem-458</b>                       |
| <b>Module title:</b>   | <b>Organic Chemistry Lab - I</b>      |
| <b>Name of Scheme:</b> | <b>BS-ADP 8<sup>th</sup> Semester</b> |
| <b>Department:</b>     | <b>School of Chemistry</b>            |
| <b>Faculty:</b>        | <b>Science</b>                        |
| <b>Module Type:</b>    | <b>Compulsory</b>                     |
| <b>Module Rating:</b>  | <b>1 Credit</b>                       |

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**OBJECTIVES:**

To gain experimental skills for separation, purification by chromatography (TLC, etc) and analysis of different organic compounds by spectroscopy (UV, IR).

**SYLLABUS OUTLINES:**

**Purification and Spectroscopic Identification**

Preparation of hydrazones of aromatic aldehydes and ketones and their spectroscopic analysis. Preparation, separation and identification of regio-isomers: *o*-nitrotoluene and *p*-nitrotoluene from toluene; *o*-nitrosophenol and *p*-nitrosophenol from phenol etc.

**RECOMMENDED BOOKS:**

1. The Systematic Identification of Organic Compounds (8<sup>th</sup> Ed.) by R.L. Shriner et al., Wiley, 2003.
2. Practical Organic Chemistry by F.G. Mann and B.C. Saunders, Longman, UK. 1978.
3. Vogel's Textbook of Practical Organic Chemistry (5<sup>th</sup> Ed.) by A.I. Vogel et al. Longman, UK, 1989.
4. Advanced Practical Organic Chemistry, by J. Leonard, B. Lygo, G. Procter, CRC. 1994.
5. Advanced Practical Organic Chemistry (2<sup>nd</sup> Ed.) by N.K. Vishnoi, Vikas Publishing House Pvt. Ltd. India, 1996.