



जम्मू केंद्रीय विश्वविद्यालय

CENTRAL UNIVERSITY OF JAMMU

रसायन शास्त्र एवं रासयानिक बिज्ञान

DEPARTMENT OF CHEMISTRY AND CHEMICAL SCIENCES

राया-सूचानी (बागला), जिला सांबा-181143, जम्मू, जम्मू एवं कश्मीर

Rahya-Suchani (Bagla), District Samba-181143, Jammu, Jammu & Kashmir

**Integrated B.Sc. (Hons.)-M.Sc. Chemistry
Teaching Plan (August 2022-January 2023)**

Semester: III
Course: Organic Chemistry Lab-II (ICCHM3C007T), 2 Credits, 4 h/w
Course Teacher: Dr. V. Sridharan

Week	Practical No./Day	Experiment to be Conducted	No of Hours	Suggested Readings
1 st Week	I	Acetylation of any two of the following compounds: Aniline, Toluidines, Anisidines, Phenols, β -Naphthol, Salicylic acid by using conventional method	4	1-3
2 nd Week	I	Contd...	4	1-3
3 rd Week	I	The above experiment using green approach	4	1-3
4 th Week	I	Benzoylation of any two of the following compounds: Aniline, Toluidines, Anisidines, Phenols, β -Naphthol, Resorcinol by Schotten-Baumann reaction	4	1-3
5 th Week	I	Contd...	4	1-3
6 th Week	I	Bromination of acetanilide by conventional method	4	1-3
7 th Week	I	Bromination of acetanilide by using green approach	4	1-3
8 th Week	I	Bromination of aniline or phenol	4	1-3
9 th Week	I	Nitration of acetanilide or nitrobenzene by conventional method	4	1-3
10 th Week	I	Nitration of salicylic acid by green approach (using ceric ammonium nitrate)	4	1-3
11 th Week	I	Selective reduction of <i>m</i> -dinitrobenzene to <i>m</i> -nitroaniline	4	1-3
12 th Week	I	Reduction of <i>p</i> -nitrobenzaldehyde by sodium borohydride	4	1-3
13 th Week	I	Hydrolysis of amides and esters	4	1-3
14 th Week	I	Semicarbazone of any one of the following compounds: Acetone, Ethyl methyl ketone, Cyclohexanone, Benzaldehyde.	4	1-3



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15 th Week	I	Aldol condensation using either conventional or green method	4	1-3
16 th Week	I	Model Practical Exam	4	

REFERENCES

1. F. G. Mann and B. C. Saunders, *Practical Organic Chemistry*, Pearson Education, 2009.
2. B. S. Furniss, A. J. Hannaford, P. W. G, Smith and A. R. Tatchell, *Vogel's Textbook of Practical Organic Chemistry*, 5th Ed., Pearson, 2012.
3. In-house laboratory manual with experimental procedures and relevant information (Department of Chemistry and Chemical Sciences, Central University of Jammu).