



SIES

College of Arts,
Science & Commerce
(Autonomous)

RISE WITH EDUCATION

NAAC REACCREDITED "A" GRADE

Sion (West), Mumbai – 400022.

Department of Chemistry

Program: B.Sc.

**Vocational Skill Enhancement (VSC) Course
in Chemistry**

Syllabus for F.Y.B.Sc. Semester I

(To be implemented from 2023 – 2024)

**Credit Based Semester and Grading System
National Education Policy**

Vocational Skill Enhancement (VSC) in Chemistry

Organic Functional Group Transformation

SEMESTER – I		
1	:	Organic Functional group transformations
2	:	Practical

Vocational Skill Enhancement (VSC) in Chemistry

Transformation in Organic Functional Groups

ORGANIC CHEMISTRY

Course Code:

Credits: 1

SEMESTER – I

Unit – 1, 1Hr /Week		15 H
1 Organic Functional group transformations (Only reactions expected):		15 H
1.1	Organic transformation of the following organic functionality: Organic reactions and its basic types, Hydrocarbons (Alkane, alkene, and alkynes), Halogens, Alcohols, Phenols, Aldehydes, Ketones, Carboxylic acid, Esters, Amines, Ethers, Nitro, Thiols, Amides, Anilides	15 H

SUGGESTED REFERENCE

1. Organic Chemistry: S.H. Pine McGraw Hill. Kogakusha Ltd.
2. Advance Organic Chemistry: Jerry March, Wiley Eastern Ltd.
3. Organic Chemistry: T.W.G. Solomons, C. B. Fryhle, 2000 John Wiley and Sons.
4. Organic Chemistry: Morrison and Boyd, Allyn& Bacon Inc.
5. Organic Chemistry: Francis A. Carey, 1996 3rd Ed. McGraw Hill.
6. Fundamentals of Organic Chemistry: G. Mare Loudon, 2002 4th Edition.
7. Organic Reactions with Mechanism: S.P. Bhutani, Ane book Pvt. Ltd.

PRACTICAL COURSE VSC CHEMISTRY LABORATORY**Organic Functional group transformations Practical****Course Code:****Credits: 1 Credits (2 hours)**

1	Organic Functional group transformations Practical
1.1	Organic Functional group transformations:
	Determination of i) solubility ii) aromatic/aliphatic iii) saturated/unsaturated and iv) functionality determination for the Organic Compound containing elements i) C,H,[O] ii) C,H,[O],N, iii) C,H,[O],N,S and iv) C,H,[O],X, X= Cl, Br

SUGGESTED REFERENCE:

1. Vogel's Qualitative and quantitative Inorganic Analysis, G.Svehla, 7th Ed, Longman (2001). Analytical Chemistry, Christian, WSE / Wiley.
2. Quantitative Analysis, R.A Day &A.L Underwood, Prentice Hall Publication.
3. Textbook of Quantitative Inorganic Analysis -Vogel A.I., 5th Edition.
4. Chemical Analysis in the laboratory - A Basic guide by Irene Muller-Harvey, Richard M. Baker, Royal Society of Chemistry.

MODALITY OF ASSESSMENT

Will be as per the guidelines of NEP and Board of Examination and conveyed to BOS for approval in due course of time.