

**SARDAR PATEL UNIVERSITY**  
**Programme: B.Sc (Home Science)**  
**Semester: II**  
**Syllabus with effect from: November/December-2011**

## Theory

### Objectives

- To provide basic knowledge related to organic chemistry including petroleum products.
- To acquaint students with the application of basic knowledge of chemical ingredient and various organic products.

<b>Paper Code: UH02CCHE01</b>	<b>Total Credit: 2</b>
<b>Title Of Paper: Chemistry</b>	

Unit	Description in detail	Weighting (%)
I	<b>Introduction to organic chemistry</b> Introduction sources importance petroleum <b>Organic compounds</b> Hydrocarbons Functional Groups IUPAC nomenclature Examples of aliphatic and aromatic compounds Isomerism Homologus series Properties of alkane, alkene, alkyne.	20%
II	<b>Structures, Properties And Uses Of Organic Compound</b> Citric Acid Tartaric Acid Phenol Acetone Ethyl Alcohol, Glycerin, Glucose Formaldehyde, Carbon Tetra Chloride, Naphthalene, Aniline Paracetamol, <b>Fuels</b> Classification Characteristics Important properties Units Types	20%
III	<b>Soap and Detergent</b> Soap Preparation	20%



	<p>Cleansing action  Advantages and limitations,  Detergent  Classification  Bio soft and bio hard  Advantages and limitations  Difference between Soap and Detergent  Ingredients  Preparation of dish washing powder  Liquid soap,  Phenyl  Detergent  <b>Pesticides</b>  Definition and explanation  Classification  Some important Pesticides (DDT, BHC)</p>	
IV	<p><b>Polymer</b>  Definition and explanation  Classification  General Properties  Structures, properties and uses of following Polymers</p> <ul style="list-style-type: none"> <li>➤ Polythene</li> <li>➤ Polystyrene</li> <li>➤ Polypropylene</li> <li>➤ Polyvinylchloride,</li> <li>➤ Teflon</li> <li>➤ Nylon</li> <li>➤ Polyester</li> <li>➤ Bakelite</li> <li>➤ Melamine</li> <li>➤ UFR.</li> </ul> <p><b>Dyes and drug</b>  Definition and explanation  Classification with example.</p>	20%
V	<p><b>The molecule of life</b>  Carbohydrates  Lipids  Proteins  Enzymes  Nucleic acids  Vitamin  Hormones.  <b>Water</b>  Sources  Types of impurities  Effect of impurities  Hardness  Types of hardness  Units of hardness  Water treatment for domestic purpose</p>	20%



## Basic Text & Reference Books

- Chemistry for F. Y. B. Sc. Home Science
- Fundamental Chemistry by P. L. Soni
- Organic Chemistry by B.S. Bhal
- Chemistry –Std- XI (Gujarat State boards of School text book)
- Chemistry –Std-XII (Gujarat State boards of School text book)
- Chemistry for XI & XII by R.D. Madan &B.S. Bisht
- A text book of Applied Chemistry for Home Science and allied Science by thankamma Jacob.
- Understanding Chemistry by CNR Rao
- Synthetic Organic Chemistry by Gurdeep R. Chatwal.
- Chemical technology in Gujarati by Yogi Prakashan.

