

**F.Y.B.A (Home Science)**  
**Semester-II**  
**Introduction to Chemistry**  
**(SSE-115)**

Objectives:-

1. To aware he students about chemistry and chemical reaction .

Unit-1

1. Explanation of: Elements, Mixture, Compound.
  - Structure of atom.
  - Definition & Examples: Atom, Molecule, Atomic Weight, Molecular Weight, Equivalent Weight, Valiancy Symbol .
2. Chemical Reaction.
  - Factors affecting on chemical reaction.
  - Acid & Base: Definition, Properties .
  - Useful Acids & Bases.
3. P<sup>H</sup> Scale, Measurement and importance of P<sup>H</sup>.

Unit-2

1. Methods of laboratory preparation, properties and use of the following.  
(1) H<sub>2</sub> (2) O<sub>2</sub> (3) CO<sub>2</sub> (4) SO<sub>2</sub> (5) Cl<sub>2</sub>
2. Water – Method of water purification.
3. Hard water – disadvantage, Types and removal of water hardness.

Unit-3

1. Metals – physical Properties and uses of the following .  
(1) CU (2) Fe (3) Al.
2. Fuels – Types of Fuels.
  - Proper Combustion of Gases .
  - Use of L.P.G.
  - Use of C.N.G.

Unit-4

1. Insecticides – Classification, care in use of Insecticides.
2. Drugs - Antibiotics, Analgesic.

Reference:-

1. Chemistry (Gujarati).
  - University Granth Nirman Board .
2. Chemistry.
  - Azaraben Kazi.