## **Second year**

#### Semester-3

## Chemistry-3: Inorganic, organic & Physical Chemistry-3 (core)

Block - 1: Inorganic Chemistry - 3.

Unit − 1: Chemistry of Group VIA elements

Unit − 2: Chemistry of Group VIIA elements

Unit – 3: Compounds of Zero (VIIIA) Group elements.

Block - 2: Organic Chemistry -4.

Unit – 4: Aldehydes & Ketones (Carbonyl compounds).

Unit − 5: Carboxylic acids and its derivatives.

Unit -6: Carbanion as intermediates in synthesis.

Block-3: Physical Chemistry-3.

Unit – 7: Solutions

Unit − 8: Colligative properties − I

Unit − 9: Colligative properties − II

Block -4: General Chemistry -2.

Unit – 10: Nuclear Chemistry

Unit – 11: Colloids, Emulsions

Unit − 12: Adsorption

### **Semester-3**

# **Practical: Chemistry-3: Preparation of Organic Compounds.**

## **Block - 1: Preparation of organic compounds - 1.**

Unit -1A: Determination of Melting point and boiling point.

Unit − 1B: Preparation of Acetanilide.

Unit − 2: Preparation of Aspirin.

Unit -3: Preparation of Benzylidene aniline.

## **Block - 1: Preparation of organic compounds - 2.**

Unit -4: Preparation of  $\beta$ -Naphthyl methyl ether.

Unit – 5: Preparation of p-bromoacetanilide

Unit − 6: Preparation of Nitrobenzene