

- To understand and learn the principle of quantitative estimation of different types of organic molecules, methods such as sugars, amino acids, phenols, carboxylic acids, amides, esters, aldehydes, ketones, urea, acid-ester mixture, amide-ester mixture.
- To know the estimation of functional groups like hydroxyl, vic-hydroxy, enol, amino, amide, unsaturation, nitro group
- Semi-micro analysis of nitrogen, halogen, alkoxy, C-methyl and active hydrogens. and semi-micro analysis of nitrogen, halogen, alkoxy, C-methyl and active hydrogens. and semi-micro analysis of nitrogen, halogen, alkoxy, C-methyl and active hydrogens.

Quantitative determination of sugars, amino acids, phenols, carboxylic acids, amides, esters, aldehydes, ketones, urea by various methods. Determinations of acid & ester and acid & amide in the mixtures.

Determination of functional groups like hydroxyl, vic-hydroxyl, enol, amino, amide, unsaturation and nitro groups by various methods. Semi-micro analysis of Nitrogen, Halogen, Alkoxy, C-methyl and active hydrogens.

OC P 508: Organic Chemistry Practicals – IV

COURSE OUTCOME:

Enable the students:

- To gain the knowledge about the isolation and characterization of caffeine, ricinolic acid, azelic acid, piperine, hesperidine, cysteine, casein, lycopene, carotenes, lipase and sucrose.
- To understand the extraction of groundnut oil and coconut oil, determination of saponification and iodine values. value of the oils and fats.
- To know the identification and purification of organic compounds by paper, TLC and column chromatographic techniques.
- To learn the characterization of natural products by oxidation and derivatisation.

Isolation and Characterization of natural products like Caffeine, Ricinoleic acid, Azelic acid, Piperine, Hesperidine, Cysteine, Casein, Lycopene and enzymes like Lipase and Sucrase. Extraction of Groundnut oil and Coconut oil. Determination of Saponification oils and fats, Determination of Iodine values of oils and fats using ICI & chloramine-T. Isolation of Carotenes-Purification by paper, TLC and Column. Characterization of natural products by oxidation studies, Derivatization of natural products.

OC P 509: Organic Chemistry Practicals – V

COURSE OUTCOME:

Enable the students:

- To acquire in-depth knowledge and skill on separation and purification of ternary mixture of organic compounds,
- Identification and qualitative analysis of the individual compounds of the mixture,
- Characterization by derivatization,
- Recording physical constant, TLC and spectral techniques.