

VEER NARMAD SOUTH GUJARAT UNIVERSITY

B.E.- II (TEXTILE PROCESSING) Semester - III

TP - 306, ORGANIC CHEMISTRY

Teaching Scheme (No. Of Contact hr.)			Theory Exam		Practical/Quiz/Viva Exam		Grand Total
			Duration (hr.)	Marks	Sem. End Exam	Cont. Int. Evaluation	
Theory	Tut.	Pract.					
3	1	2	3	100	30	20	150

Theory

Structure & Properties : Basic concepts - Atomic orbitals, covalent bond, Polarity of bonds, Solubility - non ionic solutes, protic & aprotic solvents. Application of electronic theory of valency : Factor which affect reaction - electromeric effects, Inductives, Mesomeries effect, Hemolytic & Heterolitic fission - Types of organic reaction, some important mechanisms like Electrophilic substitution and addition, Nucleophilic Addition & Substitution

Organic Chemistry based on functional groups.

C - X bonded compounds - Alkyl halides & arylhalides

C - O bonded compounds - Alcohols & Phenols

C = O bonded compounds - Aldehydes, Ketones, Esters, Carboxylic Acids, Amides

C - N bonded compounds

Preparation & important reaction of polynuclear hydrocarbons with specific reference to Naphthalene & Anthracene. Heterocyclic compounds - Five & Six membering compounds, Aromaticity & Hiickel Rule preparation properties & reactions of pyrrole, furan, thiophene, Pyridine.

Stereo Chemistry :

Stereo isomerism, Optical activity, Plane Polarised light, Specific rotation, Polarimeter, Enantiomerism, Chirality, Optical resolution. Principles of laboratory methods including introduction to process of separation, purification & identification.

Practical

This shall be based on prescribed syllabii.

Term work

This shall consist of records of practical work done during practical & recorded in the journal.

References :-

1.	A Text Book Of Organic Chemistry	P. Soni
2.	Advanced Organic Chemistry	Fischer & Fischer
3.	Advanced Organic Chemistry	Robert & Cassero
4.	Organic Chemistry, Vol. I & II ELBS & Longmans, Green	I. Finar