

Programme: Master of Science Chemistry (MSCCH20)

Year / Semester: Ist semester

Paper Code: MCH 502

Paper Name: Organic Chemistry- I

Syllabus

Organic Chemistry

Block – 1: stereochemistry of organic compounds

Unit –1: Molecular representation and classification of stereoisomers

Unit –2: Molecular symmetry and chirality enantiomers and diastereoisomers Unit

–3: Molecules with one and more than one chiral centers

Unit –4: Absolute configurational nomenclature determination of configuration and resolution of racemates

Unit – 5: Axial, planar and helical chirality and ii- or e, z- diastereoisomerism

Block – 2: Organic reaction mechanism

Unit – 6: Basic concepts, electronic effects, electronegativity resonance, acid and basic character of organic

Unit – 7: Reaction pathways

Unit – 8 : Electrophilic addition to carbon-carbon double bonds

Unit – 9: Aliphatic nucleophilic substitution

Unit – 10: Neighbouring group participation, ambident nucleophiles, aromatic nucleophilic substitution and aliphatic electrophilic substitution