

Paper III: Natural Products, Heterocycles and Spectroscopy (CHE-553)

BLOCK I : NATURAL PRODUCTS – II

Unit – 1: Alkaloids

Unit – 3: Prostaglandins

Unit – 4: Vitamins

Unit – 5: Rotenoids and porphyrins

BLOCK II : ENZYMES AND BIOGENESIS

Unit – 6: Enzymes and their reactivity

Unit – 7: Biochemical path ways – I

Unit – 8: Metabolism of fatty acids and proteins

Unit – 9: Biosynthetic methods, general methods and feeding experiments

Unit –10: Biosynthesis aromatic hydro carbons by acetate/malonate and Shikimic acid pathway

BLOCK III : HETEROCYCLIC COMPOUNDS

Unit – 11 : Membered heterocycles containing two hetero atoms

Unit – 12 : Membered heterocycles containing more than two hetero atoms

Unit – 13 : Membered heterocycles containing two hetero atoms

Unit – 14 : Synthesis of pyrimidine, purine and xanthine bases

Unit – 15 : And 4-membered heterocyclic compounds

BLOCK IV : SPECTROSCOPY – III

Unit – 16 : ¹³C NMR spectroscopy – I

Unit – 17 : ¹³C NMR spectroscopy – ii

Unit – 18 : ¹⁹F, ³¹P NMR spectroscopy

Unit – 19 : Multipulse sequences in NMR spectroscopy

Unit – 20 : Optical rotatory dispersion studies (ORD)