

Department of Toxicology

Class M.Sc. II sem

Course – Biochemical Toxicology

Course contents

Unit – I - Mechanisms of toxicity, Biotransformation of xenobiotics, Phase I and Phase – II reactions, CYP 450, Conjugation mechanisms, transport mechanisms.

Unit –II Lipid peroxidation, Concept of reactive species, free radicals, oxidative stress, diseases caused by oxidative stress

Unit – III Antioxidative mechanisms, enzymatic antioxidants, non enzymatic antioxidants

Unit IV- Role of calcium in cell injury, calcium homeostasis, toxicological consequences

Unit – V- Energy disturbances caused by xenobiotics, mitochondrial homeostasis, inhibition of electron transport.

**e-resources**

US ATSDR, TOXNET, TOXLINE, CATABOL, NTP, HepatoSys, NLM