

ENVIRONMENTAL BIOCHEMISTRY.

UNIT – I

Introduction to environmental biochemistry: Air pollution – types of air pollutants – sources – effect on vegetation, animals and human health. Water pollution – sources, effect of pollution on lakes and oceans. Noise pollution and their biochemical effects.

UNIT – II

Industrial pollution : Sources of Industrial effluents, treatment of effluents, removal of waste from sugarcane, paper, pesticide and tannery industries.

UNIT – III

Toxicology : xenobiotics – metabolic fate, nature and mode of action of xenobiotics – pesticides like parathion and DDT.

UNIT – IV

Environmental carcinogens and mutagens: Role of chemicals in human cancer, metabolism of carcinogens – Benz (o) pyrene., Chemical mutagens – nitrosamine, mechanism of mutagenesis.

UNIT – V

Organs and Cytotoxicity
Neurotoxicity : effects of barbiturates.
Hepatotoxicity : toxicants causing cirrhosis
Pulmonary toxicity : Silicosis and asbestosis
Environmental poisonous chemicals.

Reference:

1. Modern Toxicology – Gupta and salunka Vol. I, II, III.