



Toxicology	
Title: Toxicology	
Subject Code: 531 PHL	
Semester: Ninth Semester (Fifth year).	
Duration: 2 + 1 Units (5 contact hours) per week.	
Aims: To provide general knowledge on toxicology, detection and isolation of poisons and their treatment, biological assays.	
Objectives: Upon successful completion of the course the student should be able to understand toxicity, toxins and their antidotes, clinical toxicology and biological assays.	
Contents:	
Lectures:	
	<ul style="list-style-type: none">• General principles involved in the management of poisoning• Antidotes and the clinical applications• Toxicokinetics• Supportive care in clinical Toxicology• Clinical symptoms and management of acute poisoning with the following agents - Pesticide poisoning, Opiates overdose, Antidepressants, Barbiturates and benzodiazepines, Alcohol (ethanol, methanol), Paracetamol and salicylates, Non-steroidal anti-inflammatory drugs, Radiation poisoning, Hydrocarbons (Petroleum products & PEG), Caustics (inorganic acids & alkali).• Clinical symptoms and management of chronic poisoning with the following agents - Heavy metals: Arsenic, Lead, Mercury, Iron, Copper.



- Carcinogenicity
- Teratogenicity
- Gut Decontamination
- Venomous snake bites - Families of venomous snakes, clinical effects of venoms, general management as first aid, early manifestations, complications and snake bite injuries.
- Plants poisoning. Mushrooms, Mycotoxins
- Food poisonings
- Forensic toxicology

Bioassay — Definitions and terminology. Conditions under which bioassay is performed. Principles, types of bioassay, important pharmacopoeal assays.

Practical:

- Selected toxins, corrosives, identification and analysis of poisons.
- Bioassay

Minimum course requirements: 30 (2x15) Unit lectures and 45 (3x15) practical hours per level.

Evaluation methods:

-Quizzes	10%
- Mid term examination	25%
- Practical examinations	25%
- Final examination (written)	40%

Text Books (latest edition):

1- Introduction to Toxicology, Timbrell.



2- The Basis of Toxicity Testing, Ecobichon.

Recommended books (latest edition):

1- Clinical Management of Poisoning and Drug Overdose, Lester M.

Haddad, Michael W. Shannon, James F. Winchester, Philadelphia: W.B. Saunders Company.

2- Emergency Toxicology, Peter Vicclio, NY: Lippincott-Roven Publishers.

3- In vitro Toxicology, S. Gad, Taylor and Francis.

4- H.B. of Toxicology and Ecotoxicology for the Pulp, Robinson.