

TOXICOLOGICAL EVALUATION (1 + 2)

Course Description:

This course deals with the study of the theoretical and practical aspects of the techniques used in the evaluation of the acute and chronic toxicity of drugs and other chemicals.

Course contents:

Hours

A)	Theoretical aspects of the methods used in testing for:	
	- Acute, subacute and chronic toxicity	3
	- Behavioural toxicity	1
	- Male and female reproductive toxicity	1
	- Developmental toxicity	1
	- Mutagenicity	1
	- Carcinogenicity	1
	- Immunotoxicity	1
	- Dermal toxicity	1
	- Inhalants toxicity	1
	- Ototoxicity	1
	- Examination:	1
B)	<u>Practicals:</u>	
	- Determination of the lethal dose ₅₀ (LD ₅₀) by the oral route.	2
	- Determination of the LD ₅₀ by the intraperitoneal route.	2
	- Behavioural toxicity testing (Irwin's procedure)	2
	- Specific tests for the detection of neurotoxicity in rodents.	
	a) Locomotor activity and its modifications by stimulants and depressants.	2
	b) Anorexigenic response.	2
	c) Hyper- and or hypothermic response(s).	2
	d) Conditioned avoidance response.	2
	e) Anxiogenic response.	2
	- Teratogenic effects of e.g. lead, amphetamine, urethane etc.	2
	- Differential blood count after subacute treatment with e.g. antineoplastic etc.	2
	- Induction of hepatotoxicity in mice (e.g. by CCl ₄) prolongation of pentobarbitone sleeping time in mice with liver damage.	2
	- Dermatological toxicity.	2
	- Gross pathological changes after acute doses of known toxicants.	2

- Examination.