

SARDAR PATEL UNIVERSITY
Programme & Subject: M.Sc (Biomedical Science)
Semester: IV
Syllabus with Effect from: June - 2014

Paper Code: PT04CBMC03	Total Credit: 4
Title of Paper: Clinical Pharmacology & Toxicology	

Unit	Description in Detail	Weightage (%)
I	Definition and scope of clinical pharmacology: Evaluation of drugs in man, Official regulation of medicines, Classification and naming of drugs; Drug therapy monitoring in special situations such as pediatric geriatric, pregnancy etc; Racial gender and ethnic differences in drugs response; Patient counseling and interviewing techniques, Improving patient compliance and patient monitoring.	25%
II	Development of drug and clinical trials: Development of new drugs, protocol designing, phases, clinical pharmacokinetics and pharmacodynamic studies, therapeutic drug monitoring, pharmacovigilance, Adverse Drug Reaction monitoring, drug utilization studies	25%
III	Mechanism of action and utility of drug: Essential drug concept and rational prescriptions, Recent advances in understanding of mechanism of drug action and treatment of diseases; new drugs and new uses of old drugs, post marketing surveillance, methodology and ethics of clinical trials, Drug information service, therapeutic audit, GLP and GMP	25%
IV	Toxicology of drugs: Principles of toxicology: Definition, scope and different branches of toxicology. Toxicity tests: acute and chronic toxicity studies (in situ implantation, tissue culture, haemolysis, thrombogenic potential test, systemic toxicity, intracutaneous irritation test), sensitization, carcinogenicity and mutagenicity	25%

Basic Text & Reference Books:-

- Tripathi, K. D. Essentials of Medical Pharmacology, Jaypee Brothers Medical Publishers (P) Ltd., 7th Edition
- Brunton, L., Chabner, B., Knollman, B., Goodman and Gilman's The Pharmacological Basis of Therapeutics, McGraw-Hill Professional, 12th edition
- Katzung, B., Masters, S., Trevor, A., Basic and Clinical Pharmacology 12/E (Lange Basic Science Series), McGraw-Hill Medical Publishers, 12th Edition
- Seth, S. D. and Seth, V., Text Book of Pharmacology, Elsevier Publishers
- Brar, F. S. K., Text Book of Pharmacology, S. Chand and Company Limited
- Klaassen, C. D., Casarett and Doull's Toxicology: The Basic Science of Poisons, McGraw-Hill Professional, 7th Edition
- Pillay, V. V., Modern Medical Toxicology, Jaypee Brothers Medical Publishers (P) Ltd., 4th Edition

