GUJARAT TECHNOLOGICAL UNIVERSITY M.Pharm CLINICAL RESEARCH REGULATIONS SEMESTER: I

Subject Name: REGULATIONS AND LEGISLATION FOR DRUGS & COSMETICS, MEDICAL DEVICES, BIOLOGICALS & HERBALS, AND FOOD & NUTRACEUTICALS IN INDIA AND INTELLECTUAL PROPERTY RIGHTS Subject Code: MRA104T

Scope: This course is designed to impart fundamental knowledge on regulations and legislation in India w.r.t. Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals. It prepares the students for basic regulatory requirements in India of Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals. for manufacture, import & registration, export, sale, marketing authorization, clinical trials and intellectual property rights.

Objectives: Upon completion of this course the student should be able to

- Know different Acts and guidelines that regulate Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals industry in India
- Understand the approval process and regulatory requirements for Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals

Sr No	Course Contents	Total Hrs
1	 Biologicals & Herbals, and Food & Nutraceuticals Acts and Rules (with latest amendments): Drugs and Cosmetics Act 1940 and Rules 1945: DPCO and NPPA Other relevant provisions (rules schedules and guidelines for approval of Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals in India Other relevant Acts: Narcotics Drugs and Psychotropic Substances Act; Medicinal and Toilet Preparations (Excise Duties) Act, 1955; Pharmacy Act, 1948; Drugs and Magic Remedies (Objectionable Advertisements) Act, 1955; Prevention of Cruelty to Animals Act. 	12
2	 Regulatory requirements and approval procedures for Drugs & Cosmetics Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals CDSCO (Central Drug Standard Control Organization) and State Licensing Authority: Organization, Responsibilities Rules, regulations, guidelines and standards for regulatory filing of Drugs & Cosmetics, Medical Devices, Biologicals & Herbals, and Food & Nutraceuticals Format and contents of Regulatory dossier filing Clinical trial/ investigations 	12
3	Indian Pharmacopoeial Standards, BIS standards and ISO and other relevant standards	12
4	 Bioavailability and Bioequivalence data (BA &BE), BCS Classification of Drugs, Regulatory Requirements for Bioequivalence study Stability requirements: ICH and WHO Guidelines for Drug testing in animals/Preclinical Studies 	12

	Animal testing: Rationale for conducting studies, CPCSEA Guidelines	
	Ethical guidelines for human participants	
	ICMR-DBT Guidelines for Stem Cell Research	
5	Intellectual Property Rights: Patent, Trademark, Copyright, Industrial	12
	Designs and Geographical Indications, Indian Patent Scenario. IPR vs	
	Regulatory Affairs	

REFERENCES

- 1. Manual of Patent Practice & Procedure, 3rd Edition, by The Patent Office of India
- 2. Patent Failure How Judges, Bureaucrats, and Lawyers put innovators at risk by James Bessen and Michael J. Meurer
- 3. Principles and Practice of Clinical Trial Medicine by Richard Chin and Bruce Y. Lee
- 4. Ethical Guidelines for Biomedical Research on Human Participants by Indian Council of Medical Research New delhi 2006.
- 5. CPCSEA Guidelines for Laboratory Animal Facility by Committee for the purpose of control and supervision on experiments on animals (CPCSEA)
- 6. ICH E6 Guideline Good Clinical Practicel by ICH Harmonised Tripartite
- 7. Guidance for Industry on Submission of Clinical Trial Application for Evaluating Safety and Efficacy by CDSCO (Central Drug Standard Control Organisation)
- 8. Guidance for Industry on Requirement of Chemical & Pharmaceutical Information including Stability Study Data before approval of clinical trials / BE studies by CDSCO
- 9. Guidelines for Import and Manufacture of Medical Devices by CDSCO
- 10. Guidelines from official website of CDSCO