

**15PH706: Professional Elective-I**

**DRUG REGULATORY AFFAIRS & INTELLECTUAL PROPERTY RIGHTS**

15PH706.E.1.

THEORY

3 Hrs/Week

**MODULE-I**

1. Documentation in Pharmaceutical industry: MFR (Master Formula Record), DMF (Drug Master File), BPR (Batch Processing Record), Packaging and Distribution records, BRR (Batch Release Record).
2. Generic drugs product development: Introduction to generic & brand name of drugs, drug development process.

**MODULE-II**

1. Total Quality Management (TQM) - Introduction, Basic Principles, Benefits.
2. ISO 9000, 9001 and 9002 documentation: Introduction: Guidance on the terminology used in ISO 9000:2000, ISO 9001:2000.

**MODULE-III**

1. Introduction to Intellectual Property Rights (IPR) & basic terminology of Copyright, Trademark and Patents.
2. Regulatory requirement for product approval: API, novel therapies obtaining IND, NDA, ANDA process.

**MODULE-IV**

1. Clinical trials: Developing clinical trial protocols. Requirement to clinical study process, Introduction to pharmacovigilance.

**MODULE-V**

1. Stability Studies: ICH guidelines and WHO guidelines and stability testing protocols for dosage forms.

**REFERENCES**

1. Generic Drug Product Development, Solid Oral Dosage forms, Leon Shargel and Isader Kaufer, Marcel Dekker series, Vol.143.
2. New Drug Approval Process: Accelerating Global Registrations by Richard a Guarino, MD, 5th edition, Drugs and the Pharmaceutical Sciences, Vol.190.
3. ISO 9000 and Total Quality Management by S.K.Ghosh.
4. Clinical Trials and Human Research: A Practical Guide to Regulatory Compliance by Fay A. Rozovsky and Rodney K. Adams.
5. How to Practice GMP by P.P.Sharma.
6. GMPs by Mehra.
7. Validation of analytical procedure: methodology, **ICH harmonized tripartite guideline**, (1996).