

## BP703T. PHARMACY PRACTICE (Theory)

45 Hours

### Course Content:

#### Unit-I

10 Hours

##### **Hospital and it's organization**

Definition, Classification of hospital- Primary, Secondary and Tertiary hospitals, Classification based on clinical and non-clinical basis, Organization Structure of a Hospital, and Medical staffs involved in the hospital and their functions.

##### **Hospital pharmacy and its organization**

Definition, functions of hospital pharmacy, Organization structure, Location, Layout and staff requirements, and Responsibilities and functions of hospital pharmacists.

##### **Adverse drug reaction**

Classifications - Excessive pharmacological effects, secondary pharmacological effects, idiosyncrasy, allergic drug reactions, genetically determined toxicity, toxicity following sudden withdrawal of drugs, Drug interaction- beneficial interactions, adverse interactions, and pharmacokinetic drug interactions, Methods for detecting drug interactions, spontaneous case reports and record linkage studies, and Adverse drug reaction reporting and management.

##### **Community Pharmacy**

Organization and structure of retail and wholesale drug store, types and design, Legal requirements for establishment and maintenance of a drug store, Dispensing of proprietary products, maintenance of records of retail and wholesale drug store.

#### Unit-II

10 Hours

##### **Drug distribution system in a hospital**

Dispensing of drugs to inpatients, types of drug distribution systems, charging policy and labeling. Dispensing of drugs to ambulatory patients and dispensing of controlled drugs.

##### **Hospital formulary**

Definition, contents of hospital formulary, Differentiation of hospital formulary and Drug list, preparation and revision, and addition and deletion of drug from hospital formulary.

##### **Therapeutic drug monitoring**

Need for Therapeutic Drug Monitoring, Factors to be considered during the Therapeutic Drug Monitoring, and Indian scenario for Therapeutic Drug Monitoring.

##### **Medication adherence**

Causes of medication non-adherence, pharmacist role in the medication adherence and monitoring of patient medication adherence.

##### **Patient medication history interview**

Need for the patient medication history interview, medication interview forms.

##### **Community pharmacy management**

Financial, materials, staff, and infrastructure requirements.

### **Unit-III**

**10 Hours**

#### **Pharmacy and therapeutic committee**

Organization, functions, Policies of the pharmacy and therapeutic committee in including drugs into formulary, inpatient and outpatient prescription, automatic stop order, and emergency drug list preparation.

#### **Drug information services**

Drug and Poison information centre, Sources of drug information, Computerized services, and storage and retrieval of information.

#### **Patient counselling**

Definition of patient counselling; steps involved in patient counselling, and Special cases that require the pharmacist

#### **Education and training program in the hospital**

Role of pharmacist in the education and training program, Internal and external training program, Services to the nursing homes/clinics, Code of ethics for community pharmacy, and Role of pharmacist in the interdepartmental communication and community health education.

#### **Prescribed medication order and communication skills**

Prescribed medication order- interpretation and legal requirements, and Communication skills-communication with prescribers and patients.

### **Unit-IV**

**8 Hours**

**Budget preparation and implementation:** Budget preparation and implementation. **Clinical Pharmacy:** Introduction to Clinical Pharmacy, Concept of clinical pharmacy, functions and responsibilities of clinical pharmacist, Drug therapy monitoring- medication chart review, clinical review, pharmacist intervention, Ward round participation, Medication history and Pharmaceutical care. Dosing pattern and drug therapy based on Pharmacokinetic & disease pattern.

**Over the counter (OTC) sales:** Introduction and sale of over the counter and rational use of common over the counter medications.

### **Unit-V**

**7 Hours**

#### **Drug store management and inventory control**

Organization of drug store, types of materials stocked and storage conditions, Purchase and inventory control: principles, purchase procedure, purchase order, procurement and stocking, Economic order quantity, Reorder quantity level, and Methods used for the analysis of the drug expenditure.

#### **Investigational use of drugs**

Description, principles involved, classification, control, identification, role of hospital pharmacist, advisory committee.

**Interpretation of Clinical Laboratory Tests** Blood chemistry, haematology and urine analysis.