## GUJARAT TECHNOLOGICAL UNIVERSITY

PHARM.D 4<sup>th</sup> Year

**Subject Name: Hospital Pharmacy** 

Subject Code: 848802

**Scope:** In the changing scenario of pharmacy practice in India, for successful practice of Hospital Pharmacy, the students are required to learn various skills like drug distribution, drug dispensing, manufacturing of parenteral preparations, drug information, patient counselling, and therapeutic drug monitoring for improved patient care.

**Objectives:** At completion of this subject it is expected that students will be able to understand –

- a. know various drug distribution methods;
- b. know the professional practice management skills in hospital pharmacies;
- c. provide unbiased drug information to the doctors;
- d. know the manufacturing practices of various formulations in hospital set up;
- e. appreciate the practice based research methods; and
- f. appreciate the stores management and inventory control

Sr.	Topic	Hr
1.	Hospital - its Organisation and functions	
2.	Hospital pharmacy-Organisation and management	
	a) Organizational structure-Staff, Infrastructure & work load statistics b) Management	
	of materials and finance c) Roles & responsibilities of hospital pharmacist	
3.	The Budget – Preparation and implementation	
4.	Hospital drug policy	
	a) Pharmacy and Therapeutic committee (PTC) b) Hospital formulary c) Hospital	
	committees - Infection committee - Research and ethical committee d) developing	
	therapeutic guidelines e) Hospital pharmacy communication – Newsletter	
5.	Hospital pharmacy services	
	a) Procurement & warehousing of drugs and Pharmaceuticals b) Inventory control	
	Definition, various methods of Inventory Control ABC, VED, EOQ, Lead time, safety	
	stock c) Drug distribution in the hospital i) Individual prescription method ii) Floor	
	stock method iii) Unit dose drug distribution method d) Distribution of Narcotic and	
	other controlled substances e) Central sterile supply services – Role of pharmacist	
6.	Manufacture of Pharmaceutical preparations	
	a) Sterile formulations – large and small volume parenterals b) Manufacture of	
	Ointments, Liquids, and creams c) Manufacturing of Tablets, granules, capsules, and	
_	powders d) Total parenteral nutrition	
7.	Continuing professional development programs	
	Education and training	
8.	Radio Pharmaceuticals – Handling and packaging	
9.	Professional Relations and practices of hospital pharmacist	

## **Practicals:**

1. Assessment of drug interactions in the given prescriptions 2. Manufacture of parenteral formulations, powders. 3. Drug information queries. 4. Inventory control

## **Reference books:**

- 1. Hospital pharmacy by William .E. Hassan
- 2. A text book of Hospital Pharmacyby S.H.Merchant & Dr. J.S. Qadry. Revised by R.K.Goyal & R.K. Parikh
- 3. WHO consultative group report.
- 4. R.P.S. Vol.2. Part –B; Pharmacy Practice section.
- 5. Handbook of pharmacy health care. Edt. Robin J Harman. The Pharmaceutical press.

## **List of Assignments:**

- 1. Design and Management of Hospital pharmacy department for a 300 bedded hospital.
- 2. Pharmacy and Therapeutics committee Organization, functions, and limitations.
- 3. Development of a hospital formulary for 300 bedded teaching hospital
- 4. Preparation of ABC analysis of drugs sold in one month from the pharmacy.
- 5. Different phases of clinical trials with elements to be evaluated.
- 6. Various sources of drug information and systematic approach to provide unbiased drug information.
- 7. Evaluation of prescriptions generated in hospital for drug interactions and find out the suitable management.