

PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, PANIPAT



## DEPARTMENT OF PHARMACY

**Course: Diploma in Pharmacy** 

## LESSON PLAN

Faculty Name: Kavita Sangwan

Subject Name: Hospital and Clinical

Pharmacy

Class: D. Pharmacy  $-2^{nd}$  year

Subject Code: 2136

**Scope of the Subject:** The primary mission of hospital and clinical pharmacy is to manage the use of medications in hospitals and other medical health care centers. Goals include the selection, prescription, procuration, delivery, administration and review of medications to optimize patient outcomes and in clinical pharmacy which suggests that community pharmacists and hospital pharmacists both can accomplish clinical pharmacy activities.

**Course outcome:** Upon completion of this course the student should be able to:

- Know Various Drug Distribution Methods and Professional Practice Management Skills.
- Provide Unbiased Drug Information and the Manufacturing Practices Of Various Formulations In Hospital Set Ups.
- > Appreciate the stores management and inventory control
- > Monitor drug therapy of patient through medication chart review and clinical review
- Obtain medication history interview and counsel the patients and Identify and resolve drug related problems
- Detect, assess and monitor adverse drug reaction and Interpret selected laboratory results
- Retrieve, analyze, interpret and formulate drug

## Number of Lectures: 75

Each lecture: 01 hour

Lecture	Particular	Remark/Date			
No.					
<b>PART 1 -</b>	PART 1 – Hospital Pharmacy				
Module 1	Module 1: Hospital concept				
1.	Introduction, definition, functions,				
2.	Classification based on various criteria				
3.	Management and health delivery system in India.				
Module 2	Module 2: Hospital Pharmacy				
4.	Introduction, Definition, function and Objective of hospital				
	services				
5.	Location, layout, flow chart of materials and men				
6.	Location, layout, flow chart of materials and men				
7.	Personnel and facilities requirements including equipments based				

	on individual and basic needs,	
8.	Requirements and abilities required for hospital pharmacists	
Module 3	3: Drug Distribution system in Hospitals	
9.	Introduction, out-patient service, In-patient services types of	
	services detail discussion of unit dose system,	
10.	In-patient services types of services detail discussion of unit dose	
	system,	
11.	Floor ward stock system ,satellite pharmacy services	
12.	Central sterile services ,bed side pharmacy	
Module 4	4: Manufacturing	
13.	Economical considerations, estimation of demands	
14.	Sterile manufacture-large and small volume parenterals, facilities, requirements,	
15.	Sterile manufacture-large and small volume parenterals,	
16	facilities, requirements,	
16.	Layout production planning, man-power requirements.Non-sterilemanufacture-Liquidorals,externals-bulk	
17.	concentrates.	
18.	Procurement of stores and testing of raw materials.	
19.	Nomenclature and uses of surgical instruments and Hospital Equipments and health accessories.	
20.	Nomenclature and uses of surgical instruments and Hospital Equipments and health accessories.	
21.	P.T.C. (Pharmacy Therapeutic committee )	
	5: Hospital Formulary System	
22.	Introduction and their organization,	
23.	Functioning and composition of hospital formulary.	
	6: Drug information services	
24.	Drug Information service	
25.	Drug Information Bulletin	
	7: Surgical dressing	
26.	Introduction, surgical dressing like cotton , gauze , bandages and adhesive tapes including their pharmacopoeial tests for quality	
27.	Introduction, surgical dressing like cotton , gauze , bandages and adhesive tapes including their pharmacopoeial tests for quality	
28.	Other hospital supply e.g. I.V. set , B.G. sets, Ryals tubes , catheters , syringes etc	
29.	Other hospital supply e.g. I.V. set , B.G. sets, Ryals tubes , catheters , syringes etc	
Module 8	8: Application of Computer in Pharmacy	
30.	Briefly explain the application of computer in pharmacy	
	Clinical Pharmacy	
	9: Introduction to Clinical Pharmacy Practice	
31.	Introduction, Definition, scope.	
	10: Modern dispensing aspects	
	Pharmacists and patient counseling	
32.	Final macists and Datient Counsemp	

Iodule 1	1: Common daily terminology used in the Practice of Medicine.	
35.	Common daily terminology used in the Practice of Medicine.	
36.	Common daily terminology used in the Practice of Medicine.	
Iodule 1	2: Diseases, manifestations and patho-physiology	
37.	Diseases manifestations and syndromes of Hepatitis	
38.	Diseases manifestations and syndromes of Hypertension	
39.	Diseases manifestations and syndromes of Angina	
40.	Diseases manifestations and syndromes of Arrythmia	
41.	Diseases manifestations and syndromes of Diabeties	
42.	Diseases manifestations and syndromes of Tuberculosis	
43.	Diseases manifestations and syndromes Peptic ulcer	
44.	Diseases manifestations and syndromes Epilepsy	
45.	Diseases manifestations and syndromes of Rheumatoid arthritis	
46.	Treatment strategies for peptic ulcer and diabeties	
lodule 1	3: Physiological parameters with their significance	
47.	Physiological parameters with their significance	
48.	Physiological parameters with their significance	
lodule 1	4: Drug interactions	
49.	Introduction to drug interaction definition,	
50.	Classification of drug interactions	
51.	Drug interactions significance	
52.	Mechanisms involved in drug- drug and drug and food interaction	
53.	Drug –drug interaction with reference to analgesics	
54.	Drug –drug interaction with reference to analgesics	
55.	Drug –drug interaction with reference to diuretics	
56.	Drug –drug interaction with reference to Cardiovascular	
57.	Drug –drug interaction with reference to Cardiovascular	
58.	Drug –drug interaction with reference to gastrointestinal agents	
59.	Vitamins and oral hypoglycemic agents	
60.	Drug –food interaction	
Iodule 1	5: Adverse Drug Reaction	
61.	Definition of adverse drug reaction and significance	
62.	Drug induced diseases	
63.	Teratogenicity	
<b>Iodule</b>	16 : Drugs in Clinical Toxicity	
64.	Drugs in Clinical Toxicity – Introduction, general treatment of	
(5	poisoning Consultant structure of a singular	
65.	General treatment of poisoning	
66.	Systematic antidotes Treatment of insectioida poisoning	
67.	Treatment of insecticide poisoning	
68.	Heavy metal poison	
<u>69.</u>	Narcotic drugs	
70.	Barbiturate, Organophosphours poisons     16 : Drug dependences	

71.	Drug dependences, Drug abuse, addictive drugs and their treatment, complications		
72.	Drug dependences, Drug abuse, addictive drugs and their		
	treatment, complications		
Module 17: Bio-availability of drugs			
73.	Introduction – definitions		
74.	Factors affecting bioavailability		
75.	Factors affecting bioavailability		
Revision			
76.	Revision of previous question papers		
77.	Revision of previous question papers		
78.	Revision of previous question papers		
79.	Revision of previous question papers		
80.	Revision of previous question papers		

**Teacher in-charge** 

HOD

Principal