



ROYAL COLLEGE OF PHARMACY
COURSE: DIPLOMA IN PHARMACY
LESSON PLAN

Name of faculty	
Discipline	D. pharmacy
Year	2nd
subject	Hospital and Clinical Pharmacy(ER20-25T)
Total Lecture	75
Each Lecture	1hr

Scope: This course is designed to impart fundamental knowledge and professional skills required for facilitating various hospital and clinical pharmacy services.

Course Objectives: This course will discuss and train the students in the following

1. Hospital and Hospital Pharmacy organization and set-ups
2. Basics of hospital pharmacy services including the procurement, supply chain, storage of medicines and medical supplies
3. Basics of clinical pharmacy including introduction to comprehensive pharmaceutical care services
4. Basic interpretations of common laboratory results used in clinical diagnosis towards optimizing the drug therapy

Course Outcomes: Upon successful completion of this course, the students will be able to

1. Explain about the basic concepts of hospital pharmacy administration
2. Manage the supply chain and distribution of medicines within the hospital settings
3. Assist the other healthcare providers in monitoring drug therapy and address drug related problems
4. Interpret common lab investigation reports for optimizing drug therapy

Lecture No.	Topic to be Covered	Date	Remarks
	Unit -1:Hospital Pharmacy (6hr)		
1	Definition, scope, national and international scenario		
2	Organisational structure		
3	Professional responsibilities, Qualification and experience requirements, job specifications, work load requirements and inter professional relationships		
4	Good Pharmacy Practice (GPP) in hospital		
5	Hospital Pharmacy Standards (FIP		

	Basel Statements, AHSP)		
6	Introduction to NAQS guidelines and NABH Accreditation and Role of Pharmacists		
	Unit -2: Different Committees in the Hospital (4hr)		
7	Pharmacy and Therapeutics Committee - Objectives, Composition, and functions		
8	Hospital Formulary - Definition, procedure for development and use of hospital formulary		
9	Infection Control Committee		
10	Role of Pharmacist in preventing Antimicrobial Resistance		
	CLASS TEST		
	Unit -4: Supply Chain and Inventory Control(14hr)		
11	Preparation of Drug lists		
12	High Risk drugs		
13	Emergency drugs		
14	Schedule H1 drugs		
15	NDPS drugs		
16	Reserved antibiotics		
17	Procedures of Drug Purchases – Drug selection, short term, long term, and tender/e-tender process, quotations, etc.		
18	Inventory control techniques: Economic Order Quantity		
19	Reorder Quantity Level, Inventory Turnover		
20	Inventory Management of Central Drug Store – Storage conditions, Methods of storage, Distribution, Maintaining Cold Chain		
21	Devices used for cold storage (Refrigerator, ILR, Walk-in-Cold rooms)		
22	FEFO, FIFO methods		
23	Expiry drug removal and handling, and disposal. Disposal of Narcotics, cytotoxic drugs		
24	Documentation - purchase and inventory		
	CLASS TEST		
	Unit -5: Drug distribution(7hr)		
25	Drug distribution (in- patients and out - patients) – Definition, advantages		

	and disadvantages of individual prescription order method		
26	Floor Stock Method, Unit Dose Drug Distribution Method		
27	Drug Basket Method		
28	Distribution of drugs to ICCU/ICU/NICU/Emergency wards		
29	Automated drug dispensing systems and devices		
30	Distribution of Narcotic and Psychotropic substances		
31	Storage of Narcotic and Psychotropic substances.		
	Unit -6:Compounding in Hospitals(4hr)		
32	Introduction		
33	Bulk compounding		
34	IV admixture servicesand incompatibilities		
35	Total parenteral nutrition		
	ASSIGNMENT		
	Unit -7:Radio Pharmaceuticals(2hr)		
36	Storage and dispensing		
37	Disposal of radiopharmaceuticals		
	Unit -8:Computers in Hospital Pharmacy Practice(2hr)		
38	Application of computers in Hospital Pharmacy Practice, Electronic health records		
39	Softwareused in hospital pharmacy		
	Unit -9:Clinical Pharmacy(12hr)		
40	Definition, scope, and development - in India and other countries		
41	Technical definitions, common terminologies used in clinical settings		
42	Significance such as Paediatrics, Geriatric, Anti-natal Care, Post-natal Care		
43	Ward round participation		
44	Treatment Chart Review		
45	Adverse drug reaction monitoring		
46	Drug information and poisons information		
47	Medication history		
48	Patient counselling		
49	Interprofessional collaboration		
50	Pharmaceutical care: Definition, classification of drug related		

	problemsPrinciples and procedure to provide pharmaceutical care		
51	Medication Therapy Management, Home Medication Review		
	CLASS TEST		
	ASSIGNMENT		
	Unit -10:Clinical laboratory tests used in the evaluation of disease states - significance and interpretation of test results (10hr)		
52	Haematological, Liver function, Renal function, thyroid function tests •Testsassociated with cardiac disorders • Fluid and electrolyte balance • Pulmonary Function Tests		
53	Liver function		
54	Renal function		
55	Thyroid function tests		
56	Tests associated with cardiac disorders		
58	Fluid		
59	Electrolyte balance		
60	Pulmonary Function Tests		
61	Revision		
	Unit -11:Poisoning(6hr)		
62	Introduction		
63	Types of poisoning		
64	Clinical manifestations and Antidotes		
65	Drugs and Poison Information Centre and their services: Defination		
66	Information resources with examples		
67	Their advantages and disadvantages		
	CLASS TEST		
	Unit -12: Pharmacovigilance (2hr)		
68	Definition, aim and scope		
69	Overview of Pharmacovigilance		
	Unit -12:Medication errors(6hr)		
70	Definition, types, consequences		
71	Strategies to minimize medication errors		
72	LASA drugs		
73	Tallman lettering as per ISMP		
74	Drug Interactions: Definition, types		
75	Clinical significance of drug interactions		
	CLASS TEST		
	CLASS TEST		
	ASSIGNMENT		

Sign of Faculty_____

Sign of H.O.D_____