

GAUTAM COLLEGE OF PHARMACY
DISTT.HAMIRPUR 177001 (H.P)
LESSON PLAN

Course: D. Pharmacy 2nd Year
 Session-2023-2024
 Subject Name: Pharmacology
 Subject Code: ER20-21T
 Total teaching hours allocated by PCI= 75 hrs
 Name of faculty: Sunil Kumar
 Duration of topic: 1 hr

Syllabus coverage schedule

Chapter No.	Topic No	Title of Topic	Learning outcome	Schedule Date	Actual date of lecture taken	Teaching aids to be used	Assignment Detail	Remarks
1	1	Introduction and scope of pharmacology Various routes of drug administration - advantages and disadvantages	After completion of the topic's the student will understand about general concepts of pharmacology including pharmacokinetics, pharmacodynamics, bioavailability, routes of administration, etc.	07/08/2023	07/08/23	Hand written Notes	Assignment on various routes of drug administration	
	2	Drug absorption - definition, types, factors affecting drug absorption		08/08/2023	11/08/23			
	3	Bioavailability and drug distribution of drugs		09/08/2023	18/08/23			
		Tutorial no.-1		14/08/2023	21/08/23			
	4	Drug distribution - definition,		16/08/2023	25/08/23			
	5	Factors affecting drug distribution		19/08/2023	29/08/23			
	6	Biotransformation of drugs		21/08/2023	01/09/23			
		Tutorial no.-2		22/08/2023	04/09/23			
	7	Types of biotransformation reaction		23/08/2023	05/09/23			
	8	Factors influencing drug metabolisms		26/08/2023	08/09/23			
2	9	Excretion of drugs and general mechanism of drug action	After completion of the topic's the student will understand about neurohumoral transmission and definition, classification,	28/08/2023	11/09/23			
		Tutorial no.-3		29/08/2023	12/09/23			
	10	Drug distribution		02/09/2023				
	11	Drugs Acting on the Peripheral Nervous System		04/09/2023	15/09/23	PPT/PDF & Notes through on line mode		
	12	Steps involved in neurohumoral transmission		05/09/2023	18/09/23			
	Tutorial no.-4	06/09/2023		18/09/23				

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	13	Cholinergic drugs,	pharmacologic al actions, dose, mechanism of action ,indications, and contraindicatio ns of various class of drugs used in peripheral nervous system	11/09/2023	22/09/2023				
	14	Adrenergic drugs		12/09/2023	23/09/2023				
	15	Anti-adrenergic drugs		13/09/2023	24/09/2023				
		Tutorial no.-5		16/09/2023	27/09/2023				
	16	Anti-Cholinergic drugs		18/09/2023	29/09/2023				
	17	Neuromuscular blocking agents		19/09/2023	30/09/2023				
	18	Drugs used in Myasthenia gravis		20/09/2023	01/10/2023				
		Tutorial no.-6		23/09/2023	04/10/2023				
	19	Local anaesthetic agents		25/09/2023	06/10/2023				
	20	Non-Steroidal Anti-Inflammatory drugs (NSAIDs)		26/09/2023	07/10/2023				
	21	Classification and Mechanism of NSAIDs		27/09/2023	08/10/2023				
		Tutorial no.-7		30/09/2023	11/10/2023				
3	22	Drugs Acting on the Eye Miotics Mydriatics		After completion of the topic's the student will understand about drugs, their classification, usage, contraindicatio n used in eye disease	03/10/2023	12/10/2023	Hand written Notes		
	23	Drugs used in Glaucoma			04/10/2023	13/10/2023			
4	24	Drugs Acting on the Central Nervous System	After completion of the topic's the student will understand about definition, classification, pharmacologic al actions, dose, mechanism of action ,indications, and contraindicatio ns of various class of drugs used in centrally acting nervous system	07/10/2023	14/10/2023	PPT/PDF & Notes through on line mode	Assignment on opioid analgesics		
		Tutorial no.-8		09/10/2023	15/10/2023				
	25	General anaesthetics		10/10/2023	16/10/2023				
	26	Hypnotics and sedatives		11/10/2023	17/10/2023				
	27	Anti convulsant drugs		16/10/2023	18/10/2023				
		Tutorial no.-9		17/10/2023	19/10/2023				
	28	Anti-anxiety drugs		18/10/2023	20/10/2023				
		Anti-depressant drugs		21/10/2023	21/10/2023				
	29	Anti-psychotics		23/10/2023	22/10/2023				
	30	Centrally acting muscle relaxants		28/10/2023	23/10/2023				
		Tutorial no.-10			24/10/2023				
	31	Opioid analgesics		30/10/2023	25/10/2023				
5	32	Drugs Acting on the Cardiovascular System	After completion of the topic's the student will understand about	31/10/2023	26/10/2023	PPT/PDF & Notes through on line mode			

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	33	Anti-hypertensive drugs	definition, classification, pharmacological actions, mechanism of action, dose, indications, and contraindications of various class of drugs used in cardiovascular system	01/11/2023	15/12/23					
		Tutorial no.-11			08/11/2023	18/12/23				
	34	Anti-anginal drugs			14/11/2023	19/12/23				
	35	Anti-arrhythmic drugs			18/11/2023	22/12/23				
	36	Drugs used in atherosclerosis			20/11/2023	26/12/23				
		Tutorial no.-12			21/11/2023	26/12/23				
	37	Congestive heart failure			22/11/2023	29/12/23				
	38	Drug therapy for shock			25/11/2023	01/01/2024				
6	39	Drugs Acting on Blood and Blood Forming Organs	After completion of the topic's the student shall be know about, classification, pharmacological actions, mechanism of action, dose, indications, and contraindications drugs used in blood and blood forming organs	28/11/2023	01/01/24	Hand written Notes	Assignment on non-steroidal Anti inflammatory drugs			
		Tutorial no.-13			29/11/2023	02/12/24				
	40	Hematinic agents			02/12/2023	16/12/24				
	41	Anti-coagulants			04/12/2023	19/12/24				
	42	Anti-platelet agents			05/12/2023	23/12/24				
		Tutorial no.-14			06/12/2023	23/12/24				
	43	Thrombolytic drugs			11/12/2023	29/12/24				
7	44	Definition, classification, pharmacological actions, dose, indications, and contraindications of Bronchodilators, Expectorants	After completion of the topic's the student will understand about drugs, their classification, mechanism of action, usage, contraindication which are used in respiratory system disorders	12/12/2023	29/12/24	PPT/PDF & Notes through on line mode				
	45	Anti-tussive agents, Mucolytic agents			13/12/2023	30/12/24				
		Tutorial no.-15		16/12/2023	06/01/24					
8	46	Drugs Acting on the Gastro Intestinal Tract	After completion of the topic's the student will understand about drugs, their classification, mechanism of action, usage,	18/12/2023	15/02/24	Hand written Notes	Assignment on anti-ulcer drugs			
	47	Anti-ulcer drugs			19/12/2023	06/01/24				
	48	Anti-emetics			20/12/2023	28/12/24				
		Tutorial no.-16			23/12/2023	18/01/24				
	49	Laxatives and purgatives			26/12/2023	19/01/24				
	50	Anti-diarrheal drugs			27/12/2023	16/02/24				

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			contraindications etc which are used in gastrointestinal tract diseases					
9	51	Drugs Acting on the Kidney Diuretics	After completion of the topic's the student will understand about drugs their classification, mechanism of action, usage, contraindications which are used in renal system disorders	30/12/2023	19/02/2024	Hand written Notes		
		Tutorial no.- 17		01/01/2024	19/02/2024			
	52	Anti-Diuretics		02/01/2024	20/02/2024			
10	53	Hormones and Hormone Antagonists	After completion of the topic's the student will understand about various types of hormones and their role and mechanism of action	03/01/2024	23/02/2024	PPT/PDF & Notes through on line mode	Assignment on medicines and meals: before or after food	
	54	Thyroid hormones Anti-thyroid drugs		06/01/2024	26/02/2024			
		Tutorial no.-18		08/01/2024	26/02/2024			
	55	Parathormone, Calcitonin		09/01/2024	27/02/2024			
	56	Vitamin D		10/01/2024	11/03/2024			
	57	Insulin		16/01/2024	11/03/2024			
		Tutorial no.-19		17/01/2024	12/03/2024			
	58	Oral hypoglycemic agents		20/01/2023	15/03/2024			
	59	Estrogen Progesterone		22/01/2024	18/03/2024			
	60	Oxytocin		23/01/2024	18/03/2024			
		Tutorial no.-20		24/01/2024	19/03/2024			
	61	Corticosteroids		27/01/2024	22/03/2024			
11	62	Autocoids	After completion of the topic's the student will understand about mechanisms of self cure or self healing process	29/01/2024	29/03/2024	Hand written Notes		
	63	Physiological role of Histamine, 5 HT and Prostaglandins		30/01/2024	01/04/2024			
		Tutorial no.-21		31/01/2024	01/04/2024			
	64	Classification, clinical uses, and adverse effects of antihistamines and 5 HT antagonists	03/02/2024	02/04/2024				
12	65	Chemotherapeutic Agents:	After completion of the topic's the student will understand about definition, classification,	05/02/2024	05/04/2024	PPT/PDF & Notes through on line mode		
	66	Penicillins Cephalosporins		06/02/2024	08/04/2024			

		Tutorial no.-22	pharmacologic al actions, dose, mechanism of action ,indications, and contraindicatio ns of various class of drugs used in various types of malignat disorders	07/02/2024	09/04/24				
67		Aminoglycosides		12/02/2024	07/04/24				
68		Fluoroquinolones Macrolides		13/02/2024	10/04/24		Assignment on pre-clinical studies in new drug development		
69		Tetracyclines		14/02/2024	09/04/24				
		Tutorial no.-23		17/02/2024	30/04/24				
70		Sulphonamides		19/02/2024	03/05/24				
71		Anti-tubercular drugs		20/02/2024	03/05/24				
72		Anti-fungal drugs		24/02/2024	03/05/24				
		Tutorial no.-24		04/03/2024	04/05/24				
73		Anti-viral drugs		05/03/2024	04/05/24				
74		Anti-amoebic agents		06/03/2024	04/05/24				
75		Anthelmintics		11/03/2024	04/05/24				
		Tutorial no.-25		12/03/2024	06/05/24				
		Anti-malarial agents	13/03/2024	06/05/24					
13	78	Biologicals Definition and types	After completion of the topic's the student will understand about biological, types with examples from various sources and role of biologicals	16/03/2024	06/05/24	Hand written Notes	Assignment on drugs available as paediatric formulations		
		Tutorial no.-26		18/03/2024	07/05/24				
	79	Indications of biological agents with Examples		19/03/2024					

- Total No of Assignments given: 07
- Model question paper given: Yes/No
- No. of extra lectures delivered:
- Feedback from student taken: Yes/No

Signature of the subject Teacher

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Lesson Plan Practical

Course: D. Pharmacy 2nd Year

Session-2023-2024

Subject Name: Pharmacology

Subject Code: ER20-21P

Total teaching hours allocated by PCI= 50 hrs

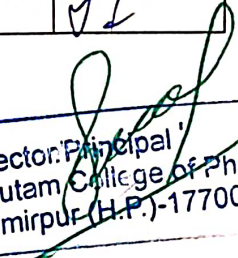
Name of faculty: Sunil Kumar

Duration of topic: 2hrs

Sr. no	Title of virtual experiments	Date Batch A	Date Batch B	Requirements	Remark
1.	Introduction to experimental pharmacology	19/08/23	10/08/23		Sp
2.	Study of laboratory animals (a) Mice; (b) Rats; (c) Guinea pigs; (d) Rabbits	26/08/23	17/08/23		Sp
3.	Commonly used instruments in experimental pharmacology	02/09/23	24/08/23		Sp
4.	Different routes of administration of drugs in animals	10/09/23	31/08/23		Sp
5.	Types of pre-clinical experiments: In-Vivo, In-Vitro, Ex-Vivo, etc.	23/09/23	14/09/23		Sp
6.	Techniques of blood collection from animals	30/09/23	21/09/23		Sp
7.	Study of local anesthetic on rabbit eye	07/10/23	05/10/23		Sp
8.	Study of analgesic activity by writhing test	21/10/23	12/10/23		Sp
9.	Screening of anti convulsant using Electro Convulsimeter	28/10/23	19/10/23		Sp
10.	Screening of Muscle relaxants using Rota-Rod apparatus	18/11/23	26/10/23		Sp
11.	To study effect of analgesics using analgesiometer	25/11/23	23/11/23		Sp
12.	Study of anxiolytic activity using eddy's hot plate	02/12/23	07/12/23		Sp

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