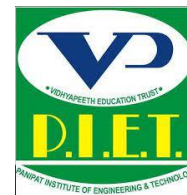




PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Pharmacy

Course: Bachelor of Pharmacy



LESSON PLAN

Faculty Name: Dr Poonam Ruhai	Subject Name: Pharmacology
Class: B.Pharmacy 5th Sem	Subject Code: BP503T

Scope: This subject is intended to impart the fundamental knowledge on various aspects (classification, mechanism of action, therapeutic effects, clinical uses, side effects and contraindications) of drugs acting on different systems of body and in addition, emphasis on the basic concepts of bioassay.

Objectives: Upon completion of this course the student should be able to

1. Understand the mechanism of drug action and its relevance in the treatment of different diseases
2. Demonstrate isolation of different organs/tissues from the laboratory animals by simulated experiments
3. Demonstrate the various receptor actions using isolated tissue preparation
4. Appreciate correlation of pharmacology with related medical sciences

Number of Lectures: 45

Each Lecture: 01 Hour

Lecture No.	Particular	Date/ Remark
UNIT-I (10Hrs)		
Pharmacology of drugs acting on cardio vascular system		
1.	Introduction to hemodynamic of heart	
2.	Introduction to electrophysiology of heart	
3.	Drugs used in congestive heart failure	
4.	Anti-hypertensive drugs	
5.	Anti-hypertensive drugs	
6.	Anti-anginal drugs	
7.	Anti-anginal drugs	
8.	Anti-arrhythmic drugs	
9.	Anti-arrhythmic drugs	
10.	Anti-hyperlipidemic drugs	
UNIT-II (10 Hrs)		
Pharmacology of drugs acting on cardio vascular system		
11.	Drug used in the therapy of shock	
12.	Hematinics	
13.	coagulants	
14.	anticoagulants	

15.	Fibrinolytics	
16.	anti-platelet drugs	
17.	Plasma volume expanders	
Pharmacology of drugs acting on urinary system		
18.	Diuretics.	
19.	Anti-diuretics	
20.	Anti-diuretics	
UNIT-III (10 Hrs)		
Autocoids and related drugs		
21.	Introduction to autacoids and classification	
22.	Histamine	
23.	5-HT and their antagonists	
24.	Prostaglandins,	
25.	Thromboxanes and Leukotrienes	
26.	Angiotensin,	
27.	Bradykinin and Substance P	
28.	Non-steroidal anti-inflammatory agents	
29.	Anti-gout drugs	
30.	Antirheumatic drugs	
UNIT-IV(8 Hrs)		
Pharmacology of drugs acting on endocrine system		
31.	Basic concepts in endocrine pharmacology	
32.	Anterior Pituitary hormones- analogues and their inhibitors	
33.	Thyroid hormones- analogues and their inhibitors.	
34.	Hormones regulating plasma calcium level- Parathormone, Calcitonin and Vitamin-D	
35.	Insulin	
36.	Oral Hypoglycemic agents	
37.	glucagon	
38.	ACTH and corticosteroids	
UNIT-V (7Hrs)		
Pharmacology of drugs acting on endocrine system		
39.	Androgens and Anabolic steroids.	
40.	Estrogens, progesterone and oral contraceptives.	
41.	Drugs acting on the uterus	
Bioassay		
42.	. Principles and applications of bioassay	
43.	Types of bioassay. Bioassay of insulin, oxytocin, vasopressin	
44.	Bioassay of ACTH,d-tubocurarine,	
45.	Bioassay of digitalis, histamine and 5-HT	