St.James College of Pharmaceutical Sciences St.James medical Academy River Bank, Chalakudy			
Programme:	B.Pharm	Sem.:	VITH
Name of Course: (*Subject*)	Pharmacology III	Course Code:	BP602T
Teaching faculty of the course	Mrs.Asa Samuel		

Summary of the Lecture Plan

Topic	Lectures	Hours
UNIT-I 1. Pharmacology of drugs acting on Respiratory system.	a) Anti -asthmatic drugs	1
	b) Drugs used in the management of COPD	1
	c) Expectorants and antitussives	1
	d) Nasal decongestants	1
	e) Respiratory stimulants	1
2. Pharmacology of drugs acting on the Gastrointestinal Tract	f) Antiulcer agents.	1
	g) Drugs for constipation and diarrhea	1
	h) Appetite stimulants and suppressants. i). Digestants and carminatives.	1
	J) Emetics and anti-emetics	1
	k) Antiulcer agents.	1
	l) Drugs on skin- melanising and demelanising agents , drugs used in psoriasis, acne	1
UNIT-II 3. Chemotherapy	a) General principles of chemotherapy. including classification of chemotherapeutic agents, microbial resistance, chemoprophylaxis.	3
	b) Sulfonamides and cotrimoxazole. Urinary antiseptics.	3

	c) Antibiotics- Penicillins, cephalosporins, monobactam,,carbapenem,chloramphenicol, macrolides Lincosamides , quinolones and fluoroquinolins, tetracycline and aminoglycosides, oxazolidinediones	4
UNIT-III 4. Chemotherapy	a) Antitubercular agents	1
	b) Antileprotic agents c.) Antifungal agents d.) Antiviral drugs including anti HIV drugs	5
	e) Anthelmintic	1
	f) Antimalarial drugs	2
	g) Antiamoebic agents	1
UNIT-IV **5.Chemotherapy**	a) Drugs used in UTI and STDs b) Anticancer agents	3
6. Immunopharmacology	a) Immunostimulants	2
	b) Immunosuppressant	2
	C) Protein drugs, monoclonal antibodies, target drugs to antigen, biosimilars	2
UNIT-V **7.Gene therapy**	concepts, approaches, gene transfer techniques and application Stem cell therapy -an overview.	5

Major issues or Core aspects to be addressed/ covered:

Topic Title: I) Pharmacology of drugs acting on Respiratory system-a)Anti -asthmatic drugs.
Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Anti - asthmatic drugs.
Topic Title: b) Drugs used in the management of COPD
Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Bronchodilators
Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Corticosteroids.
Topic Title: c) Expectorants and antitussives

Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Expectorants.
Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of antitussives.
Topic Title: d) Nasal decongestants
Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Nasal decongestants.
Topic Title: e) Respiratory stimulants
Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Respiratory stimulants.
Topic Title: 2. Pharmacology of drugs acting on the Gastrointestinal Tract-f) Antiulcer agents.
Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Antiulcer agents.
g) Drugs for constipation and diarrhea Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Laxatives and antidiarrheals.
h) Appetite stimulants and suppressants: Definition, classification, mechanism of action, pharmacological actions, adverse reactions, and therapeutic uses of Appetite stimulants and suppressants.
i) Digestants and carminatives: Definition, examples, mechanism of action, adverse reactions, and therapeutic uses of Digestants and carminatives.
j)Emetics and anti-emetics: Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Emetics and anti-emetics.
k) Drugs on skin: Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of melanising and demelanising agents, drugs used in psoriasis, acne
3.Chemotherapy: a) classification of antimicrobial agents, microbial resistance, chemoprophylaxis.
b). classification, mechanism of action, antimicrobial spectrum ,pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Sulfonamides, cotrimoxazole and Urinary antiseptics.

c) classification, mechanism of action, pharmacological actions, antimicrobial spectrum ,adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Penicillin, cephalosporins, monobactam,,carbapenem,chloramphenicol, macrolides Lincosamides , quinolones and fluoroquinolones, tetracycline and aminoglycosides, oxazolidinediones.
4.Chemotherapy:A) Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Antitubercular agents and fluoroquinolones
B) Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Antileprotic agents.
C) Definition classification, mechanism of action, antimicrobial spectrum ,pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Antifungal agents
D) Definition classification, mechanism of action, antimicrobial spectrum ,pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Antiviral drugs and anti HIV drugs.
E) Definition classification, mechanism of action, antimicrobial spectrum ,pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Anthelmintics.
F) Definition classification, mechanism of action, antimicrobial spectrum ,pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Antimalarial drugs
G)Definition classification, mechanism of action, antimicrobial spectrum ,pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Antiamoebic agents.
5.Chemotherapy:A) classification, mechanism of action , pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of drugs used in the treatment of UTIs. classification, mechanism of action , pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of drugs used in the treatment of syphilis, gonorrhea and AIDS.
B) General toxicities ,Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Anticancer agents.
6. Immunopharmacology: a) Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Immunostimulants.
b)Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Immunosuppressant.
c) Description about Protein drugs, monoclonal antibodies, target drugs to antigen, biosimilars.

7.Gene therapy: Gene transfer methods, viral and non viral vectors, application of gene therapy. Different types of stem cells, properties of stem cells and applications of stem cell therapy.

Sample Questions

Topic Title : Pharmacology of drugs acting on Respiratory system
Explain the pharmacology of Anti -asthmatic drugs.
How is the management of COPD?
Write a brief note on Expectorants and antitussives
What are the therapeutic uses of Bronchodilators and Corticosteroids.
Note on Nasal decongestants
What are Respiratory stimulants?
Topic Title: Pharmacology of drugs acting on the Gastrointestinal Tract
Explain the treatment of Peptic ulcer.
What are Anti emetics? Explain the pharmacology of Anti emetics.
Note on Laxatives.
Explain the management of diarrhea.
Explain about the drugs used in the treatment of skin disorders.
Topic Title: Chemotherapy
Classification of antimicrobial agents
Write about Urinary antiseptics.
Note on cotrimoxazole
Explain the mechanism of action of Penicillin
Explain about fluoroquinolones.
Write a note on DOTs.
What is HAART.
Explain the chemotherapy of fungal, viral and malarial infections.
Topic Title **:Chemotherapy**
Explain the management of UTI
What are the General toxicities of anticancer drugs.
Write the Definition, classification, mechanism of action, pharmacological actions, adverse reactions, contraindications, drug interactions, dose and therapeutic uses of Anticancer agents
Explain the management of STDs
Topic Title: **Immunopharmacology**
Note on Immunostimulants
What are the uses of Immunosuppressants ?

Description about Protein drugs and monoclonal antibodies
Description about target drugs to antigen and biosimilars
Topic Title **:Gene therapy**
Explain about Gene therapy.
Note on viral and non viral victors.
Explain about stem cell therapy