# 18BP067 PHARMACOLOGY-III

## Hours Per Week:

L	Т	Р	СР	CL
3	1	4	2	4

## Total Hours:

L	Т	Р	WA/RA	SSH/HSH	୪	SA	S	BS
45	1	60						

## 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 respiratory and gastrointestinal system, infectious diseases, immuno-pharmacology and in addition, emphasis on the principles of toxicology and chromo pharmacology.

## **COURSE OUTCOMES:**

Upon completion of the course, the student will be able to achieve the following outcomes:

COs	Course Outcomes	POs	PSOs
1	Understand the mechanism of drug action and its relevance in the treatment of different infectious diseases.	1,2,4	1
2	Comprehend the principles of toxicology and treatment of various poisonings.	1,2	1
3	Appreciate correlation of pharmacology with related medical sciences.	1,2	1

VFSTR 111

UNIT-I 10HOURS

#### 1. Pharmacology of drugs acting on Respiratory system

- 1. Anti -asthmatic drugs
- 2. Drugs used in the management of COPD
- 3. Expectorants and anti tussives
- 4. Nasal decongestants
- 5. Respiratory stimulants

#### 2. Pharmacology of drugs acting on the Gastro intestinal Tract

- 1. Anti-ulcer agents.
- 2. Drugs for constipation and diarrhoea.
- 3. Appetite stimulants and suppressants.
- 4. Digestants and carminatives.
- 5. Emetics and anti-emetics.

UNIT-II 10HOURS

## 3. Chemotherapy

- 1. General principles of chemotherapy.
- 2. Sulfonamides and Cotrimoxazole.
- 3. Antibiotics- Penicillins, cephalosporins, chloramphenicol, macrolides, quinolones and fluoroquinolins, tetracycline and amino glycosides

UNIT-III 10HOURS

#### 3. Chemotherapy

- a. Anti tubercular agents
- b. Anti leprotic agents
- c. Anti fungal agents
- d. Antiviral drugs
- e. Anthelmintics
- f. Anti malarial drugs
- g. Anti-amoebic agents

UNIT-IV 08HOURS

# 3. Chemotherapy

I. Urinary tract infections and sexually transmitted diseases. m. Chemotherapy of malignancy.

#### 4. Immuno pharmacology

- a. Immuno stimulants
- b. Immunosuppressant

Protein drugs, monoclonal antibodies, target drugs to antigen, biosimilars

UNIT-V 07HOURS

#### 5. Principles of toxicology

- a. Definition and basic knowledge of acute, sub acute and chronic toxicity.
- b. Definition and basic knowledge of genotoxicity, carcinogenicity, teratogenicity and mutagenicity
- c. General principles of treatment of poisoning
- d. Clinical symptoms and management of barbiturates, morphine, and organo phosphorus compound and lead mercury and arsenic poisoning.

## 6. Chrono pharmacology

- a. Definition of rhythm and cycles.
- b. Biological clock and their significance leading to chronotherapy.

VFSTR 112