

## **First Year B.Pharm (II Semester)**

### **121T Pharmaceutics II**

#### **Students will able to Know**

**CO 1:** Elucidate imp in pharmacy & studying the plant layout design in mfg unit

**CO 2:** Mechanism of equipment used in Pharma industry and factor affecting in material

**CO 3:** Familiarise with GMP, imp of bioavailability and bioequivalence of drug

### **122T Dosage Form Design**

#### **Students will able to Know**

**CO 1:** To study the basic concept of Dosage form Design

**CO 2:** To describe the variety of types and uses of powders and granules.

**CO 3:** Application of Radioactive isotope in Pharmaceuticals.

**CO 4:** Different approaches to enhance solubility and dissolution of drug.

### **122P Dosage Form Design**

#### **Students will able to Know**

**CO 1:** Formulation of variety of conventional dosage form.

**CO 2:** Evaluation of variety of conventional dosage form.

**CO 3:** Formulation of Liquid with solubility enhancement approach.

### **123T Pharmaceutical Organic Chemistry-II**

#### **Students will able to Know**

**CO 1:** To understand different molecular representations, relevance of stereochemistry & its significance

**CO 2:** To study mechanism and applications of rearrangement of electron deficient & electron rich systems and conformational Analysis.

**CO 3:** To know the chemistry of amino acids, methods of preparation and underlying concepts

### **123P Pharmaceutical Organic Chemistry-II**

#### **Students will able to Know**

**CO 1:** Explain and understand the principle behind various qualitative tests and analyze the given unknown binary organic compounds having different functional groups.

**CO 2:** Synthesize & recrystallize the organic compounds based on rearrangement reactions and should be able to demonstrate techniques such as filtration, precipitation etc

**CO 3:** Explain the principle and methodology involved in column chromatography and TLC.

### **124T Human Anatomy and Physiology-II**

#### **Students will able to Know**

**CO 1:** To get knowledge of terminology related to nervous, endocrine, respiratory, reproductive and urinary system

**CO 2:** Develop and understanding of the role that nervous system plays in regulating the functions of other organ system

**CO 3:** To understand various sense organs involve in our body to maintain homeostasis

**CO 4:** To observe current scenario of health education by visiting Medical college and hospitals.

### **124P Human Anatomy and Physiology-II**

#### **Students will able to Know**

**CO 1:** Identify the different bones of the skeletal system and various models/specimen/slides of human organs and tissues

**CO 2:** Understand various complete blood picture parameters and mechanisms involved blood experiments

**CO 3:** Understand construction, working, and handling of pH meter and Hutchinson's spirometer

## **125T Pharmacognosy**

### **Students will able to Know**

**CO 1:** Study of basic components of cells, their function, cell division also to study tissue, tissue systems

**CO 2:** Study term Pharmacognosy, history, its branches and development.

## **125P Pharmacognosy**

### **Students will able to Know**

**CO 1:** Study correct use of various equipments, handling of simple/compound/digital microscope in technically correct way

**CO 2:** Study skill of plant material, sectioning, staining, mounting, and focusing, also to decide staining reagent required for specific part of plant

**CO 3:** To study morphological and microscopical character also draw microscopy in proper manner and apply theoretical and practical knowledge

**CO 4:** Learn to prepare and label herbarium specimen and its significance

## **126T Pharmaceutical Analysis-I**

### **Students will able to Know**

**CO 1:** Understand the basic concepts, relevance & significance of Analytical Chemistry to Pharmaceutical Sciences.

**CO 2:** Acquire knowledge about concepts and principles of aqueous acid base and non-aqueous acid base titrations.

**CO 3:** To understand different terms, types and basic principles and application of precipitation, gravimetric complexometric and oxidation reduction titrations

## **126P Pharmaceutical Analysis-I**

### **Students will able to Know**

- CO 1:** To understand the correct use of laboratory equipments with calibration of various apparatus used in Analytical Chemistry laboratory together with safety measures
- CO 2:** To perform titrimetric analysis by estimation of analyte concentration in pure form and with thorough understanding of principle and procedure used in different titration methods such as aqueous, non-aqueous, precipitation, complexometric, redox titration methods.
- CO 3:** To understand the principle with quantitative estimation of analyte by gravimetric analysis.