# First Year B.Pharm (I Semester)

## **111T Pharmaceutics I**

### Students will able to Know

- CO 1: Basic knowledge of pharmacy, pharmacopoeia and alternative system of medicine.
- **CO 2:** Influence of the design of pharmaceutical dosage form and factors, study of route of administration.
- CO 3: Preformulation study (physical and chemical) and formulation of dosage form.

### **111P Pharmaceutics I**

### Students will able to Know

- **CO 1:** Introduction of labelling, packaging importance of shelf life in stability study as per ICH.
- CO 2: Formulation & evaluation of dosage form.
- CO3: Introduction and demonstration of various equipments in pharmaceutical lab with SOP.

### **112T Modern Dispensing Practices**

### Students will able to Know

- **CO 1:** Accurate & appropriate compounding, dispensing & counselling of pharmaceutical product.
- **CO 2:** To report various information to health care professional regarding ADR, Idiosyncrasy & Pharmacovigilance.
- **CO 3:** Application of Principle, Working knowledge & calculation of drug dose, pharmaceutical Measuring & Weighing.
- **CO 4:** Community Pharmacist Role of pharmacist in health care system.

# **112P Modern Dispensing Practices**

### Students will able to Know

CO 1: Compounding & Dispensing of Various dosage form like Mouthwash, Liniment,

Emulsion, Gargle etc.

- **CO 2:** To study Physical, chemical & Therapeutic Incompatibility with respect to dosage form.
- **CO 3:** Patient counselling regarding safe use of medicine, pharmaceutical calculations Allegation method, Proof Spirit & Isotonicity adjustment

### **113T Pharmaceutical Inorganic Chemistry**

### Students will able to Know

- **CO 1:** Understand the different pharmacopoeias, monographs and their significance in Pharmaceutical science.
- **CO 2:** Acquire knowledge about limits tests, qualitative tests, methods of purification of inorganic compound.
- CO 3: Illustrate importance of GIT agents, Electrolytes, Topical agents and trace elements.

### **113P Pharmaceutical Inorganic Chemistry**

#### Students will able to Know

- CO 1: To prepare, perform calculations and identification of compounds as per IP.
- **CO 2:** To understand principles behind limit tests for identification of impurities in pharmaceutical substances.
- **CO 3:** Perform systematic qualitative analysis of unknown inorganic binary mixture with principles behind the test.

### **114T Pharmaceutical Organic Chemistry**

#### Students will able to Know

- **CO 1:** Understand the basic terminologies and concepts in organic chemistry, like- inductive effect, resonance, hyper conjugation, hybridization etc.
- **CO 2:** Acquire knowledge about different Reaction Intermediates & their application in reaction mechanism.
- **CO 3:** Explain the mechanism involved in the substitution, addition, nucleophilic and elimination reactions.

**CO 4:** Assign IUPAC Nomenclature to the Organic Compounds with respect to functional groups.

### **114P Pharmaceutical Organic Chemistry**

### Students will able to Know

- **CO 1:** Understand and adopt technique of synthesis of organic compounds with respect to their mechanism of reaction.
- **CO 2:** Explain correct use of various equipment's & Safety measures in Pharmaceutical Chemistry laboratory.
- **CO 3:** Perform systematic qualitative analysis of unknown organic compounds with principles behind the test.

### **115T Human Anatomy and Physiology**

### Students will able to Know

- **CO 1:** Understand basic terminologies used in Anatomy and physiology as well as prefixes and suffixes used to identify body parts and directional terms.
- CO 2: Understand composition and functions of blood components and blood coagulation.
- **CO 3:** Recognize the relevance and significance of human anatomy and physiology to pharmaceutical sciences.
- CO 4: To observe current scenario of health education by visiting Blood banks and hospitals.

# 115P Human Anatomy and Physiology

### 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:** Explain various complete blood picture parameters and mechanisms involved blood experiments
- **CO 3:** Explain various methods, handling procedures in the estimation and analysis of various blood experiments

### **116T Communication Skills and Development**

### Students will able to Know

- **CO 1:** Would learn to handle interpersonal relations & communicate effectively.
- **CO 2:** It would help to comprehend the concept of communication.
- **CO 3:** It would assist to convert the conceptual understanding of communication into everyday practice.
- **CO 4:** Course would be useful to develop thought process that is imperative to develop interview skills.
- **CO 5:** The course structure sharpens memory skills and other study skills, which are vital for academic excellence & management.
- **CO 6:** Course with activities assists to bring out creativity and other latent talents with proper goal setting so that self- esteem gets enhanced. It is a good path for leadership skill.