B. Pharm. Semester-III

COs	Statement
Pharmaceutical Organic Chemistry II (BP301TP)	
301.1	Able to Explain and identify functional groups, synthetic scheme, their physical properties and chemical properties, nomenclature and reaction of Benzene and its deri.
301.2	Explain and perform different type of Organic Synthetic Reaction & Their Mechanism and Reagent used for aromatic amine and carboxylic acid.
301.3	Explain and perform different type of Organic Synthetic Reaction & Their Mechanism and Reagent used for Phenols
301.4	Understand and determine different Reactions & Analytical constants (Ash value, saponification value etc.) for Fats and Oil.
301.5	Develop Basic knowledge of Polynuclear hydrocarbon, their nomenclature, synthesis, reactions & medicinal uses
301.6	To explain: 1. Theories for stabilities & reactions of cycloalkanes 2. Demonstration techniques for distillation and crystallization.
Physical Pharmaceutics I (BP302TP)	
302.1	Ability to apply knowledge of solubility and its measurement in pharmaceutical preparation
302.2	Outline the different physicochemical properties of drug molecules in solid, liquid and gaseous state.
302.3	Can demonstrate the concept of interfacial phenomenon in various dosage forms.
302.4	Able to apply concept of buffer system in pharmaceutical and biological systems
302.5	Can discriminate various types of complexation and its method of analysis
302.6	Able to study various one phase, two phase and three phase component system in states of matter
Biochemistry (BP303TP)	
303.1	To understand concept of bioenergetics and biomolecules with its detail chemistry.
303.2	To understand 1. Importance of carbohydrate metabolism and its metabolic disorder and concept of and biological oxidation. 2. Importance of hormones, its regulation and disorder related to its.
303.3	To know importance of biological oxidation and oxidative phosphorylation, amino acid metabolism and its metabolic disorder
303.4	To know the importance of genetic organization of mammalian genome, functions of DNA, RNA and bio synthesis of proteins.
303.5	To understand structure of enzyme, kinetics, regulation and therapeutic application.
303.6	To acquire

	1. Skill to perform physiological and pathological test of biomolecules and its interpretation. 2. The knowledge structures and re-activities of biomolecules influence during physiological conditions. 3.To know importance of lipid and amino acid metabolism and their related disorder.
Pathophysiology (BP304TT)	
304.1	Know the basic principle of cellular adaptation & cell injury as well mechanism involved in the process of inflammation & repair.
304.2	Explain causes, pathogenesis, clinical manifestations and complications of cardiovascular, respiratory and renal disorders.
304.3	Describe etiology, pathophysiology, clinical manifestations and complications of haematological, endocrine and nervous diseases.
304.4	Understand etiopathophysiology, signs-symptoms and complications of diseases affecting bones, joints and gastrointestinal system.
304.5	Classify cancers along with their common etiology and pathophysiology.
304.6	Acquire knowledge of infectious and sexually transmitted diseases.
Pharmacognosy and Phytochemistry I (BP305TP)	
305.1	Understand basics of Pharmacognosy and classify different crude drugs.
305.2	Able to perform different evaluation parameters for checking adulterants and the quality of herbal drugs.
305.3	Explain different factors and techniques related to cultivation, collection, processing, storage and conservation of medicinal plants.
305.4	Explain different Plant tissue culture techniques for production of new plants and related products.
305.5	Able to explain role of pharmacognosy in alternative system of medicines.
305.6	Identify the types and specific chemical class of various phytoconstituents, primary and secondary metabolites obtained from natural sources.