

Guru Nanak Institute of Pharmaceutical Science & Technology
B. PHARM 3RD YEAR 6TH SEMESTER

Code	OUTCOME	BTL
CO. 611.1	Classify and illustrate on the chemistry of Cardiovascular agents, steroids and the agents acting on central nervous system.	2, 3
CO. 611.2	Analyze and appraise on the mechanism of action of agents acting on cardiovascular system, central nervous system and steroids.	4, 6
CO. 611.3	Outline and explain the reaction scheme for synthesis of diverse medicinal compounds along with their characterization	1, 2
CO. 611.4	Interpret the rational use of steroidal and cardiovascular drugs.	6
CO612.1	Understand the pharmacological actions of different categories of drugs	2
CO612.2	Explain the mechanism of drug action at organ system/sub cellular/ macromolecular levels	2
CO612.3	Apply the basic pharmacological knowledge in the prevention and treatment of various diseases	3
CO612.4	Compare the effect of drugs on animals by simulated experiments	5
CO613.1	Explain the biosynthesis, chemistry and pharmacology of different secondary metabolites, pigments of pharmaceutical importance.	5
CO613.2	Illustrate the novel medicinal agents from marine sources and herbal cosmetics .	4
CO613.3	Evaluate the polyphenol and flavonoid in plant's extract.	4
CO613.4	Discuss the plant tissue culture and cultivation, collection, identification, preservation of important medicinal plants and herb.	6
CO 614.1	Understand the basic concepts in biopharmaceutics and pharmacokinetics and their significance.	2
CO 614.2	Evaluate the pharmacokinetic parameters to describe the kinetics of drug absorption, distribution, metabolism, excretion, elimination.	5

CO 614.3	Distinguish the concepts of bioavailability and bioequivalence study of drug products and their significance.	4
CO 614.4	Apply the knowledge of pharmacokinetic drug interactions in combination therapy.	3
CO615.1	Understand the concept of immunology and Immunological Preparations	2
CO615.2	Students will be able to explain the principles behind different techniques of Genetic Recombination.	2
CO615.3	Students will understand the historical development of antibiotics and fermentation technology to produce antibiotics.	2,5
CO615.4	Students will be able to explain the Microbial Transformation, biotransformation process and its improvements with special reference to steroids.	2,4
CO615.5	Students will know the techniques of immobilization of enzymes	1,2
CO616.1	Apply various approaches to formulate various novel drug delivery systems	3
CO616.2	Discuss the cGMP aspects in pharmaceutical industry	2
CO616.3	Classify the responsibilities of QC and QA departments	2
CO616.4	Explain the process validation methods for pharmaceutical operations	5

CO PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO. 611.1	3	3	2	2	3	1	1	-	-	1	2	2
CO. 611.2	3	2	1	-	1	2	2	-	2	1	-	2
CO. 611.3	3	3	3	2	3	2	2	2	-	1	-	3
CO. 611.4	2	3	2	2	3	1	2	2	3	2	1	2
CO612.1	3	3	2	2	2	3	2	2	2	2	-	2

CO612.2	2	3	-	1	1	-	2	3	-	1	1	2
CO612.3	2	2	3	2	3	2	1	1	1	3	3	3
CO612.4	3	1	2	2	3	2	2	3	1	2	2	2
CO613.1	2	3	1	2	3	2	3	1	3	3	3	3
CO613.2	3	2	1	2	3	2	1	2	3	2	2	3
CO613.3	3	3	2	2	3	3	1	2	3	1	2	2
CO613.4	3	3	3	3	2	1	1	2	1	1	2	3
CO 614.1	3	3	3	3	2	1	1	2	1	1	2	3
CO 614.2	3	2	2	1	2	2	2	2	3	3	3	3
CO 614.3	3	3	2	1	3	2	2	2	3	3	3	3
CO 614.4	2	2	3	2	3	2	1	1	1	3	3	3
CO615.1	3	1	2	2	3	2	2	3	1	2	2	2
CO615.2	2	3	1	2	3	2	3	1	3	3	3	3
CO615.3	3	2	1	2	3	2	1	2	3	2	2	3
CO615.4	3	3	2	2	3	3	1	2	3	1	2	2
CO615.5	3	2	1	-	1	2	2	-	2	1	-	2
CO616.1	3	3	3	2	3	2	2	2	-	1	-	3
CO616.2	2	3	2	2	3	1	2	2	3	2	1	2
CO616.3	3	3	2	2	2	3	2	2	2	2	-	2
CO616.4	2	3	-	1	1	-	2	3	-	1	1	2