



CHOICE BASED CREDIT SYSTEM (CBCS) SEM V (2016 SYLLABUS)

Sr.No.	Code	Name of Subject	Course outcome
34	BPH C 501 T	ORGANIC CHEMISTRY – III	1.The learner should be able to identify, nomenclate, and to employ fundamental heterocyclic organic reactions in the synthetic design of biologically active molecules containing heterocyclic nucleus
			2. The learner should be able to recognize the steroid molecules, synthetic methods, nature and their role in our body.
			3. The learner should be able to outline the synthesis, chemical reactions of steroids, conversion of cholesterol to progesterone, estrone and testosterone and elucidation of structure of cholesterol.
			4.The learner should be able to state basic terminologies in polymers, different mechanisms involved in the polymer preparation, different polymerization techniques, details about the glass transition temperature and the factors affecting it and the types of polymers with some specific examples of each
35	BPH C 502 T	PHARMACEUTICS II	1.The learner should be able to understand the formulation of liquid biphasic, semisolid, suppository and aerosol dosage forms
			2. The learner should be able to describe the evaluation of such dosage forms
			3. The learner should be able to summarize the packaging of liquid biphasic, semisolid, suppository and aerosol dosage forms
			4.The learner should be able to explain the basic concepts of cosmetic science
36	BPH C 503 T	PHARMACEUTICAL BIOTECHNOLOGY	1. The learner should be able to discuss the tools, techniques, ethics and environmental safety involved in gene cloning, and the applications of Recombinant DNA technology
			2. The learner should be able to discuss basics of immunology and explain the antigen-antibody interactions and defense mechanism and explain technique of monoclonal antibodies production for treating the human diseases
			3. The learner should be able to study fermentation technology and understanding the basic concepts for production of safer vaccines and antibiotics
			4. The learner should be able to study different techniques and applications of microbiological assay, enzyme immobilization and cell culture
37	BPH C 504 T	PHARMACOLOGY II	1. The learner should be able to discuss pharmacology of drugs used in chemotherapy and justify the need for rational use of antimicrobials.
			2. The learner should be able to explain pharmacology of drugs used as immunomodulators

		3. The learner should be able to explain pharmacology of drugs used in endocrine disorders & haematological disorders.
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38	BPH C 505 L	ORGANIC CHEMISTRY LAB II	1. The learner should be able to carry out the separation of simple compound mixtures.
			2. The learner should be able to identify organic compounds based on simple tests
			3. The learner should be able to recrystallize compounds using single solvent and binary solvent mixtures
39	BPH C 506 L	PHARMACEUTICS LAB	1. The learner should be able to understand the formulation aspects of biphasic and semisolid dosage forms
			2. The learner should be able to explain calculations involved in formulations
			3. The learner should be able to describe the importance of quality evaluation of biphasics, semisolids, suppositories, aerosols
40	BPH C 507 L	EXPERIMENTAL TECHNIQUES IN MICROBIOLOGY AND BIOTECHNOLOGY LAB	1. The learner should be able to characterize and identify bacteria using various staining techniques (morphological study), colony characterization, serological and biochemical characteristics
			2. The learner should be able to analyze quality of raw material, food and water and assess the extent of microbial contamination using counting technique and evaluate sterility of products
			3. The learner should be able to impart the knowledge of bioassay of antibiotic and test antibiotic sensitivity of few antibiotics.
41	BPH E 508 T	NUTRACEUTICALS AND DIETARY SUPPLEMENTS	1. The learner should be able to explain concept of nutraceuticals and dietary supplements, classify these based on chemical nature, health benefits and mechanism of action
			2. The learner should be able to discuss the chemistry of phytochemicals, their health benefits, pharmacokinetics, interactions with food and recommended doses along with the marketed preparations
			3. The learner should be able to explain the challenges in formulating nutraceuticals
			4. The learner should be able to understand the significance of safety and stability studies of nutraceuticals
			5. The learner should be able to describe the labeling and regulatory aspects for manufacture and sale of nutraceutical products.
42	BPH E 512 T	COSMETICOLOGY	1. The learner should be able to discuss the various raw materials for cosmetics
			2. The learner should be able to understand the toxicological aspects and toxicity testing for cosmetics.
			3. The learner should be able to discuss the various cosmetics products w.r.t. raw materials, large scale manufacturing and functional and physicochemical evaluation
			4. The learner should be able to know the regulatory guidelines and sensorial assessment for cosmetics