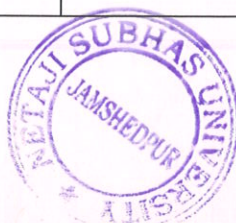
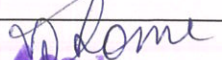


CURRICULUM AND ITS RELEVANCE TO LOCAL /NATIONAL /REGIONAL/GLOBAL NEEDS

DEPARTMENT NAME–PHARMACY (B.PHARM)

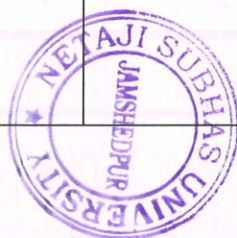
SL.NO	Course Code	Course Name	Relevance (Local/National/ Regional/Global)	Description (Importance for Student)
1.	BP101T	Human Anatomy and Physiology I– Theory	Global	This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body.
2.	BP102T	Pharmaceutical Analysis I–Theory	Global	This course deals with the fundamentals of analytical chemistry and principles of electrochemical analysis of drugs.
3.	BP103T	Pharmaceutics I– Theory	Global	This course is designed to impart a fundamental knowledge on the preparatory pharmacy with arts and science of preparing the different conventional dosage forms.
4.	BP104T	Pharmaceutical Inorganic Chemistry– Theory	Global	This subject deals with the monographs of inorganic drugs and pharmaceuticals.
5.	BP105T	Communication skills– Theory*	National	This course will prepare the young pharmacy student to interact effectively with doctors, nurses, dentists, physiotherapists and other health workers.
6.	BP106RBT	Remedial Biology/ Remedial	National	To learn and understand the components of living world, structure and functional system of plant and animal kingdom.
7.	BP106RMT	Mathematics–Theory*	National	This is an introductory course in mathematics. This subject deals with the introduction to Partial fraction, Logarithm, matrices and Determinant, Analytical geometry, Calculus, differential equation and Laplace transform.
8.	BP201T	Human Anatomy and Physiology II–Theory	Global	This subject is designed to impart fundamental knowledge on the structure and functions of the various systems of the human body.




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9.	BP202T	Pharmaceutical Organic Chemistry I–Theory	Global	This subject deals with classification and nomenclature of simple organic compounds, structural isomerism, intermediates forming in reactions, important physical properties, reactions and methods of preparation of these compounds. The syllabus also emphasizes on mechanisms and orientation of reactions.
10.	BP203T	Biochemistry–Theory	Global	Biochemistry deals with complete understanding of the molecular levels of the chemical process associated with living cells.
11.	BP204T	Pathophysiology–Theory	Global	Pathophysiology is the study of causes of diseases and reactions of the body to such disease producing causes. This course is designed to impart a thorough knowledge of the relevant aspects of pathology of various conditions with reference to its pharmacological applications, and understanding of basic pathophysiological mechanisms.
12.	BP205T	Computer Applications in Pharmacy–Theory	National	This subject deals with the introduction Database, Database Management system, computer application in clinical studies and use of databases.
13.	BP206T	Environmental sciences–Theory*	National	Environmental Sciences is the scientific study of the environmental system and the status of its inherent or induced changes on organisms. It includes not only the study of physical and biological characters of the environment but also the social and cultural factors and the impact of man on environment.
14.	BP301T	Pharmaceutical Organic Chemistry II–Theory	Global	This subject deals with general methods of preparation and reactions of some organic compounds. Reactivity of organic compounds is also studied here. The syllabus emphasizes on mechanisms and orientation of reactions. Chemistry of fats and oils are also included in the syllabus.
15.	BP302T	Physical Pharmaceutics I–Theory	Global	The course deals with the various physical and physicochemical properties, and principles involved in dosage forms/formulations.

16.	BP303T	Pharmaceutical Microbiology–Theory	Global	Study of all categories of micro-organisms especially for the production of alcohol antibiotics, vaccines, vitamins enzymes etc.
17.	BP304T	Pharmaceutical Engineering–Theory	Global	This course is designed to impart a fundamental knowledge on the art and science of various unit operations used in pharmaceutical industry.
18.	BP401T	Pharmaceutical Organic Chemistry III–Theory	Global	This subject imparts knowledge on stereo-chemical aspects of organic compounds and organic reactions, important named reactions, chemistry of important hetero cyclic compounds. It also emphasizes on medicinal and other uses of organic compounds.
19.	BP402T	Medicinal Chemistry I–Theory	Global	This subject is designed to impart fundamental knowledge on the structure, chemistry and therapeutic value of drugs. The subject emphasizes on structure activity relationships of drugs, importance of physicochemical properties and metabolism of drugs. The syllabus also emphasizes on chemical synthesis of important drugs under each class.
20.	BP403T	Physical Pharmaceutics II–Theory	Global	The course deals with the various physical and physicochemical properties, and principles involved in dosage forms/formulations. Theory and practical components of the subject help the student to get a better insight into various areas of formulation research and development, and stability studies of pharmaceutical dosage forms.
21.	BP404T	Pharmacology I–Theory	Global	The main purpose of the subject is to understand what drugs do to the living organisms and how their effects can be applied to therapeutics. The subject covers the information about the drugs like, mechanism of action, physiological and biochemical effects (Pharmacodynamics) as well as absorption, distribution, metabolism and excretion (pharmacokinetics) along with the adverse effects, clinical uses, interactions, doses.



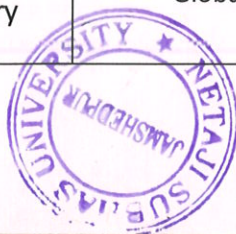
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				contraindications and routes of administration of different classes of drugs.
22.	BP405T	Pharmacognosy and Phytochemistry I–Theory	Global	The subject involves the fundamentals of Pharmacognosy like scope, classification of crude drugs, their identification and evaluation, phyto-chemicals present in their medicinal properties.
23.	BP501T	Medicinal Chemistry II–Theory	Global	This subject is designed to impart fundamental knowledge on the structure, chemistry and therapeutic value of drugs. The subject emphasizes on structure activity relationships of drugs, importance of physicochemical properties and metabolism of drugs.
24.	BP502T	Industrial Pharmacy I–Theory	National	Course enables the student to understand and appreciate the influence of pharmaceutical additives and various pharmaceutical dosage forms on the performance of the drug product.
25.	BP503T	Pharmacology II–Theory	Global	This subject is intended to impart the fundamental knowledge on various aspects (classification, mechanism of action, therapeutic effects, clinical uses, side effects and contraindications) of drugs acting on different systems of body and in addition, emphasis on the basic concepts of bioassay.
26.	BP504T	Pharmacognosy and Phytochemistry II–Theory	Global	The main purpose of subject is to impart the students the knowledge of how the secondary metabolites are produced in the crude drugs, how to isolate and identify and produce them industrially.
27.	BP505T	Pharmaceutical Jurisprudence–Theory	Global	This course is designed to impart basic knowledge on important legislations related to the profession of pharmacy in India.
28.	BP601T	Medicinal Chemistry III–Theory	Global	This subject is designed to impart fundamental knowledge on the structure, chemistry and therapeutic value of drugs. The subject emphasis on modern techniques of rational drug design like quantitative structure activity relationship (QSAR), Pro drug



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				concept, combinatorial chemistry and Computer aided drug design (CADD).
29.	BP602T	Pharmacology III–Theory	Global	This subject is intended to impart the fundamental knowledge on various aspects (classification, mechanism of action, therapeutic effects, clinical uses, side effects and contraindications) of drugs acting on respiratory and gastrointestinal system, infectious diseases, immuno-pharmacology and in addition, emphasis on the principles of toxicology and chrono-pharmacology.
30.	BP603T	Herbal Drug Technology–Theory	National	This subject gives the student the knowledge of basic understanding of herbal drug industry, the quality of raw material, guidelines for quality of herbal drugs, herbal cosmetics, natural sweeteners, Nutraceuticals etc.
31.	BP604T	Bio-pharmaceutics and Pharmacokinetics–Theory	Global	This subject is designed to impart knowledge and skills of Bio-pharmaceutics and pharmacokinetics and their applications in pharmaceutical development, design of dose and dosage regimen and in solving the problems arise there in.
32.	BP605T	Pharmaceutical Biotechnology–Theory	Global	Biotechnology has along promise to revolutionize the biological sciences and technology. It is basically are search-based subject.
33.	BP606T	Quality Assurance–Theory	Global	This course deals with the various aspects of quality control and quality assurance aspects of pharmaceutical industries. It deals with the important aspects like cGMP, QC tests, documentation, quality certifications and regulatory affairs.
34.	BP701T	Instrumental Methods of Analysis–Theory	Global	This subject deals with the application of instrumental methods in qualitative and quantitative analysis of drugs. This subject is designed to impart a



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				fundamental knowledge on the principles and instrumentation of spectroscopic and chromatographic technique.
35.	BP702T	Industrial Pharmacy II–Theory	Global	This course is designed to impart fundamental knowledge on pharmaceutical product development and translation from laboratory to market
36.	BP703T	Pharmacy Practice–Theory	Global	In the changing scenario of pharmacy practice in India, for successful practice of Hospital Pharmacy, the students are required to learn various skills like drug distribution, drug information, and therapeutic drug monitoring for improved patient care. In community pharmacy, students will be learning various skills such as dispensing of drugs, responding to minor ailments by providing suitable safe medication, patient counseling for improved patient care in the community set up.
37.	BP704T	Novel Drug Delivery System –Theory	Global	This subject is designed to impart basic knowledge on the area of novel drug delivery systems.
38.	BP801T	Bio-statistics and Research Methodology – Theory	Global	To understand the applications of Biostatistics in Pharmacy. This subject deals with descriptive statistics, Graphics, Correlation, Regression, logistic regression Probability theory, Sampling technique, Parametric tests, Non Parametric tests, ANOVA, Introduction to Design of Experiments, Phases of Clinical trials and Observational and Experimental studies, SPSS, R and MINITAB statistical software's, analyzing the statistical data using Excel.
39.	BP802T	Social and Preventive Pharmacy –Theory	Global	The purpose of this course is to introduce to students a number of health issues and their challenges. This course also introduced a number of national health programme. The roles of the pharmacist in these contexts are also discussed.
40.	BP804ET	Pharmaceutical Regulatory	Global	This course is designed to impart the fundamental knowledge on the regulatory requirements for approval of new drugs, and drug products in regulated markets of India & other countries like US, EU, Japan, Australia, UK etc.



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41.	BP809ET	Cosmetic Science— Theory	Global	Cosmetic science is an emerging field within pharmacy, focusing on the formulation, development, safety and efficacy of cosmetic and personal care products.
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