

B.PHARM PROGRAM OUTCOME

PO1: Adequate knowledge and scientific information regarding basic principles of Pharmaceutical chemistry, Pharmaceutics including cosmetics, Pharmacology/ and Pharmacognosy including Herbal drugs

PO2: Adequate knowledge of practical aspects of synthesis, formulation and analysis of various pharmaceutical and Herbal medicinal agents

PO3: Adequate knowledge of practical aspects of delivering a quality assured product as per pharmacopoeia, WHO and ISO standards

PO4: Adequate knowledge of practical aspects of pharmacological screening, standardization biological and *in-vivo* drug interactions.

PO5: Adequate knowledge of clinical studies for patient counseling leading to physical and social well being of patients.

PO6: Adequate knowledge of practical aspects of product detailing and marketing of Pharmaceutical products.

PO7: Able to synthesize purify, identify and analyze medicinal agents.

PO8: Able to formulate, store, dispense, analyze the prescriptions and / or manufacture the medicinal agents at commercial level.

PO9: Able to learn and apply the quality assurance principles including legal and ethical aspects involving drugs.

PO10: Able to extract, purify, identify and know the therapeutic value of herbal / crude / natural products.

PO11: Able to screen various medicinal agents using animal models for pharmacological activity.

PO12:Willing to apply the current knowledge of pharmacy in the best interest of patients and the community.

PO13:Maintain a high standard of professional ethics in discharging professional obligations.

PO14:Continuously upgrade professional information and be conversant with latest advances in Pharmacy field to serve the community better.

PO15:Willing to participate in continuing education programmes of PCI and AICTE to upgrade knowledge and professionals skills.

PO16:To help and to participate in the implementation of National Health programs.

PROGRAM OUTCOME FOR PHARM D COURSE

PO1. Adequate knowledge and scientific information regarding basic principles of Pharmaceutical chemistry, Pharmaceutics including cosmetics, Pharmacology/ and Pharmacognosy including Herbal drugs

PO2. Adequate knowledge of practical aspects of delivering a quality assured product as per pharmacopoeia, WHO and ISO standards

PO3. Adequate knowledge of practical aspects of pharmacological screening, biological standardization and *in-vivo* drug interactions.

PO4. Adequate knowledge of clinical studies for patient counseling leading to physical and social wellbeing of patients.

PO5. Hospital pharmacy and community pharmacy management

PO6. Able to synthesize, purify, identify and analyze medicinal agents.

PO7. Able to formulate, store, dispense, analyze the prescriptions and / or manufacture the medicinal agents at commercial level.

PO8. Able to learn and apply the quality assurance principles including legal and ethical aspects involving drugs.

PO9. Able to screen various medicinal agents using animal models for pharmacological activity.

PO10. Pharmacotherapeutic decisionmaking skills

PO11. Analytical thinking and interpretational skills

PO12. Communication skills

PO13. Willing to apply the current knowledge of pharmacy in the best interest of patients and the community.

PO14. Continuously upgrade professional information and be conversant with latest advances in Pharmacy field to serve the community better.

PO15. Willing to participate in continuing education programmes of PCI and AICTE to upgrade knowledge and professional skills.

PO16. To help and to participate in the implementation of National Health programs.

PO17. Maintain a high standard of professional ethics in discharging professional obligations.

PROGRAM OUTCOME FOR PHARM D (POST BACCALAUREATE) COURSE

PO1. Adequate knowledge and scientific information regarding basic principles of Pharmaceutical chemistry, Pharmaceutics including cosmetics, Pharmacology/ and Pharmacognosy including Herbal drugs

PO2. Adequate knowledge of practical aspects of delivering a quality assured product as per pharmacopoeia, WHO and ISO standards

PO3. Adequate knowledge of practical aspects of pharmacological screening, biological standardization and *in-vivo* drug interactions.

PO4. Adequate knowledge of clinical studies for patient counseling leading to physical and social wellbeing of patients.

PO5. Hospital pharmacy and community pharmacy management

PO6. Able to synthesize, purify, identify and analyze medicinal agents.

PO7. Able to formulate, store, dispense, analyze the prescriptions and / or manufacture the medicinal agents at commercial level.

PO8. Able to learn and apply the quality assurance principles including legal and ethical aspects involving drugs.

PO9. Able to screen various medicinal agents using animal models for pharmacological activity.

PO10. Pharmacotherapeutic decisionmaking skills

PO11. Analytical thinking and interpretational skills

PO12. Communication skills

PO13. Willing to apply the current knowledge of pharmacy in the best interest of patients and the community.

PO14. Continuously upgrade professional information and be conversant with latest advances in Pharmacy field to serve the community better.

PO15. Willing to participate in continuing education programmes of PCI and AICTE to upgrade knowledge and professional skills.

PO16. To help and to participate in the implementation of National Health programs.

PO17. Maintain a high standard of professional ethics in discharging professional obligations.

POs – M. Pharm

PO1: Demonstrate understanding of basic sciences relevant to specialty.

PO2: Acquire the detailed knowledge about the fundamentals and advances of the respective specialty.

PO3: Update knowledge by self-study and by attending courses, conferences and seminars relevant to specialty.

PO4: Undertake audit, use information and carry out research both basics and professional with the aim of publishing or presenting the work at various scientific gatherings.

PO5: Acquire adequate skills and competence in performing various tasks as required in the specialty.

PO6: Adopt ethical principles in all aspects of the professional practice.

PO7: Foster, professional honesty and integrity.

PO8: Discharge the duties irrespective of social status, caste, creed or religion of the customers/clients.

PO9: Develop oral and written communication skills

PO10: Provide leadership and get the best out of his or her team in a congenial working atmosphere.

PO11: Apply high moral and ethical standard while carrying out human and animal research.

PROGRAMME OUTCOME FOR D. PHARM

PO1: Adequate knowledge and scientific information regarding basic principles of Pharmaceutical chemistry, Pharmaceutics including cosmetics, Pharmacology/ and Pharmacognosy including Herbal drugs

PO2: Adequate knowledge of practical aspects of synthesis, formulation and analysis of various pharmaceutical and Herbal medicinal agents

PO3: Adequate knowledge of practical aspects of delivering a quality assured product as per pharmacopoeia.

PO4: Adequate knowledge of practical aspects of pharmacological screening, standardization biological and *in-vitro* drug interactions.

PO5: Adequate knowledge of clinical studies for patient counseling leading to physical and social well being of patients.

PO6: Adequate knowledge of practical aspects of product detailing and marketing of Pharmaceutical products.

PO7: Able to synthesize purify, identify and analyze medicinal agents.

PO8: Able to formulate, store, dispense, analyze the prescriptions and / or manufacture the medicinal agents at commercial level.

PO9: Able to learn and apply the quality assurance principles including legal and ethical aspects involving drugs.

PO10: Able to extract, purify, identify and know the therapeutic value of herbal / crude / natural products.

PO11: Willing to apply the current knowledge of pharmacy in the best interest of patients and the community.

PO12:Maintain a high standard of professional ethics in discharging professional obligations.

PO13:Continuously upgrade professional information and be conversant with latest advances in Pharmacy field to serve the community better.

PO14:Willing to participate in continuing education programmes of PCI to upgrade knowledge and professionals skills.

PO15:To help and to participate in the implementation of National Health programs.

Program	CourseName	CO Code	COURSE OUTCOME
B.PHARMACY	REMEDIAL BIOLOGY - T	CO1	know the classification and salient features of five kingdoms of life
B.PHARMACY	REMEDIAL BIOLOGY - T	CO2	understand the basic components of anatomy & physiology of plant
B.PHARMACY	REMEDIAL BIOLOGY - T	CO3	understand the basic components of anatomy & physiology animal with special reference to human.
B.PHARMACY	REMEDIAL BIOLOGY - P	CO1	To study the Cell and its inclusions
B.PHARMACY	REMEDIAL BIOLOGY - P	CO2	Understand the section cutting techniques and permanent slide preparation
B.PHARMACY	REMEDIAL BIOLOGY - P	CO3	Understand stem, root, leaf and its modification
B.PHARMACY	REMEDIAL BIOLOGY - P	CO4	Identification of tissues and bones
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - T	CO1	Understand methods of identification, cultivation and preservation of various microorganisms
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - T	CO7	Importance of Genetic engineering & cell culture technology in microbiology & pharmaceutical industries.
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - T	CO2	to know about structure of various microorganisms.
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - T	CO3	Importance of sterilization in microbiology and pharmaceutical industry
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - T	CO4	Learn sterility testing & various evaluation methods of pharmaceutical products
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - T	CO5	to know about various vaccines, diagnostic tests and diseases.
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - T	CO6	Microbiological standardization of Pharmaceuticals
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - P	CO1	Preparation & sterilization of different types of media
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - P	CO2	Identification, Isolation & counting methods of microorganisms
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - P	CO3	Motility testing of microorganisms
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - P	CO4	Microbiological assay of antibiotics
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - P	CO5	Sterility testing by various methods
B.PHARMACY	PHARMACEUTICAL ,MICROBIOLOGY &BIOTECHNOLOGY - P	CO6	Estimation of RNA & DNA by spectroscopic method
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - T	CO2	to know about chemical nature & applications of primary and secondary metabolites of the plant.
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - T	CO3	Learn about diagnostic characters and various evaluation methods of crude drugs.
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - T	CO1	Understand the basic metabolic pathways.
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - T	CO4	to carryout isolation and purification of phytoconstituents.
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - T	CO5	to know about Natural allergens, photosensitizing agents & Marine drugs.
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - P	CO 1	POWDER MICROSCOPY OF CRUDE DRUGS
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - P	CO 2	QUALITATIVE AND GENERAL SPECIFIC CHEMICAL TESTS FOR ALKALOIDS
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - P	CO 3	QUANTITATIVE MICROSCOPY
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - P	CO 4	QUALITATIVE AND GENERAL SPECIFIC

			CHEMICAL TESTS FOR GLYCOSIDES
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - P	CO 5	DETERMINATION OF PROXIMATE VALUES
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - P	CO 6	QUALITATIVE AND GENERAL SPECIFIC CHEMICAL TESTS FOR TANNINS
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - P	CO 7	DETERMINATION OF TOTAL POLYPHENOLIC CONTENT BY FOLIN-CU METHOD
B.PHARMACY	PHARMACOGNOSY AND PHYTOCHEMISTRY - P	CO 8	DEMONSTRATION EXPERIMENTS
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - T	CO 1	understand the status & scope of Herbal treatments
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - T	CO 2	to Know about Plant biotechnology & Enzyme biotechnology
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - T	CO 3	know the Quality control & Standardization of herbal drugs
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - T	CO 4	know the herbal cosmetics, natural sweeteners, nutraceuticals
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - T	CO 5	appreciate patenting of herbal drugs.
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - P	CO 1	Morphology of crude drugs
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - P	CO 2	Isolation of crude drugs
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - P	CO 3	Estimation of crude drugs
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - P	CO 4	Immobilization of enzymes
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - P	CO 5	HPLC & HPTLC PROFILES OF CRUDE DRUGS
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - P	CO 6	DETERMINATION OF SWELLING INDEX
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - P	CO 7	DETERMINATION OF MICROBIAL CONTAMINATION
B.PHARMACY	INDUSTRIAL PHARMACOGNOSY - P	CO 8	INITIATION OF CALLUS CULTURE
PHARM.D	PHARMACOGNOSY&PHYTOPHARMACEUTICALS - T	CO 1	Understand the basic principles of cultivation, collection and storage of crude drugs
PHARM.D	PHARMACOGNOSY&PHYTOPHARMACEUTICALS - T	CO 2	Know the source, active constituents and uses of crude drugs
PHARM.D	PHARMACOGNOSY&PHYTOPHARMACEUTICALS - T	CO 3	know the evaluation techniques for the herbal drugs .
PHARM.D	PHARMACOGNOSY&PHYTOPHARMACEUTICALS - P	CO 1	Know the morphology of crude drugs
PHARM.D	PHARMACOGNOSY&PHYTOPHARMACEUTICALS - P	CO 2	know the microscopy of crude drugs
PHARM.D	PHARMACOGNOSY&PHYTOPHARMACEUTICALS - P	CO 3	Identification of Unknown sample
PHARM.D	PHARMACOGNOSY&PHYTOPHARMACEUTICALS - P	CO 4	Determination of acid value, iodine value saponification value & ester value
PHARM.D	BIOSTATICS AND RESEARCH METHODOLOGY -T	CO 1	Know the various statistical methods.
PHARM.D	BIOSTATICS AND RESEARCH METHODOLOGY -T	CO 2	To know about Research methodology
PHARM.D	BIOSTATICS AND RESEARCH METHODOLOGY -T	CO 3	Operate various statistical softwares
PHARM.D	BIOSTATICS AND RESEARCH METHODOLOGY -T	CO 4	appreciate the importance of Computer in hospital and Community Pharmacy
PHARM.D	BIOSTATICS AND RESEARCH METHODOLOGY -T	CO 5	appreciate the statistical technique in solving the pharmaceutical problems
B.PHARMACY	PHARMACEUTICAL ANALYSIS-I - T	CO1	Understand the principles of volumetric and electro chemical analysis
B.PHARMACY	PHARMACEUTICAL ANALYSIS-I - T	CO2	Carryout various volumetric and electrochemical titrations
B.PHARMACY	PHARMACEUTICAL ANALYSIS-I - T	CO3	Develop analytical skills
B.PHARMACY	PHARMACEUTICAL ANALYSIS-I - P	CO1	Know the preparation and standardization of various compounds
B.PHARMACY	PHARMACEUTICAL ANALYSIS-I - P	CO2	Know to perform the assay of the compounds
B.PHARMACY	PHARMACEUTICAL ANALYSIS-I - P	CO3	Know the determination of Normality by electro-analytical methods
B.PHARMACY	APPLIED BIOCHEMISTRY - T	CO1	Understand the catalytic role of enzymes,

			importance of enzyme inhibitors in design of new drugs, therapeutic and diagnostic applications of enzymes.
B.PHARMACY	APPLIED BIOCHEMISTRY - T	CO2	Understand the metabolism of nutrient molecules in physiological and pathological conditions.
B.PHARMACY	APPLIED BIOCHEMISTRY - T	CO3	Understand the genetic organization of mammalian genome and functions of DNA in the synthesis of RNAs and proteins.
B.PHARMACY	APPLIED BIOCHEMISTRY - P	CO1	Know the Qualitative analysis of carbohydrates
B.PHARMACY	APPLIED BIOCHEMISTRY - P	CO2	Know the identification tests for Proteins
B.PHARMACY	APPLIED BIOCHEMISTRY - P	CO3	Know to perform the qualitative analysis of urine for abnormal constituents
B.PHARMACY	APPLIED BIOCHEMISTRY - P	CO4	Know to perform the qualitative analysis of blood for abnormal constituents
B.PHARMACY	APPLIED BIOCHEMISTRY - P	CO5	Know to perform the determination of Salivary amylase activity
B.PHARMACY	PHARMACEUTICAL ORGANIC CHEMISTRY-II - T	CO1	Write the structure, name and the type of isomerism of the organic compound
B.PHARMACY	PHARMACEUTICAL ORGANIC CHEMISTRY-II - T	CO2	Write the reaction, name the reaction and orientation of reactions
B.PHARMACY	PHARMACEUTICAL ORGANIC CHEMISTRY-II - T	CO3	Account for reactivity/stability of compounds
B.PHARMACY	PHARMACEUTICAL ORGANIC CHEMISTRY-II - T	CO4	Prepare organic compounds
B.PHARMACY	PHARMACEUTICAL ORGANIC CHEMISTRY-II - P	CO2	Know the analysis of the oils and fats
B.PHARMACY	PHARMACEUTICAL ORGANIC CHEMISTRY-II - P	CO1	Understand the principle of quantitative determination of organic compounds
B.PHARMACY	PHARMACEUTICAL ORGANIC CHEMISTRY-II - P	CO3	Know the synthesis of organic compounds involving more than one step
B.PHARMACY	MEDICINAL CHEMISTRY-I - T	CO1	understand the chemistry of drugs with respect to their pharmacological activity
B.PHARMACY	MEDICINAL CHEMISTRY-I - T	CO2	understand the drug metabolic pathways, adverse effect and therapeutic value of drugs
B.PHARMACY	MEDICINAL CHEMISTRY-I - T	CO3	know the Structural Activity Relationship (SAR) of different class of drugs
B.PHARMACY	MEDICINAL CHEMISTRY-I - T	CO4	Write the chemical synthesis of some drugs.
B.PHARMACY	MEDICINAL CHEMISTRY-I - P	CO1	Know the preparation of drugs or intermediates
B.PHARMACY	MEDICINAL CHEMISTRY-I - P	CO2	Know to perform the assay of drugs
B.PHARMACY	MEDICINAL CHEMISTRY-I - P	CO3	Know the determination of Partition coefficient for any two drugs
B.PHARMACY	INSTRUMENTAL& BIOMEDICAL ANALYSIS - T	CO1	Understand the interaction of matter with electromagnetic radiations and its applications in drug analysis.
B.PHARMACY	INSTRUMENTAL& BIOMEDICAL ANALYSIS - T	CO2	Understand the chromatographic separation and analysis of drugs.
B.PHARMACY	INSTRUMENTAL& BIOMEDICAL ANALYSIS - T	CO3	Perform quantitative & qualitative analysis of drugs using various analytical instruments.
B.PHARMACY	INSTRUMENTAL& BIOMEDICAL ANALYSIS - P	CO1	Know the chromatographic separation and analysis of drugs.
B.PHARMACY	INSTRUMENTAL& BIOMEDICAL ANALYSIS - P	CO2	Know to perform the quantitative & qualitative analysis of drugs using various analytical instruments.
B.PHARMACY	INSTRUMENTAL& BIOMEDICAL ANALYSIS - P	co 3	Know the determination of Normality by electro-analytical methods
B.PHARMACY	MEDICINAL CHEMISTRY-II - T	CO1	Understand the chemistry of drugs with respect to their pharmacological activity
B.PHARMACY	MEDICINAL CHEMISTRY-II - T	CO2	Understand the drug metabolic pathways, adverse effect and therapeutic value of drugs

B.PHARMACY	MEDICINAL CHEMISTRY-II - T	CO3	Know the Structural Activity Relationship of different class of drugs
B.PHARMACY	MEDICINAL CHEMISTRY-II - T	CO4	Study the chemical synthesis of selected drugs
B.PHARMACY	MEDICINAL CHEMISTRY-II - P	CO1	Know the preparation of drugs and intermediates
B.PHARMACY	MEDICINAL CHEMISTRY-II - P	CO2	Know to perform the assay of drugs
B.PHARMACY	MEDICINAL CHEMISTRY-II - P	CO3	Know the preparation of medicinally important compounds
B.PHARMACY	MEDICINAL CHEMISTRY-II - P	CO4	Know to draw the structures and reactions using Chem draw
B.PHARMACY	MEDICINAL CHEMISTRY-II - P	CO5	Know to determine the physicochemical properties
B.PHARMACY	PHARMACEUTICAL INORGANIC CHEMISTRY-I - T	CO1	Know the sources of impurities and methods to determine the impurities in inorganic drugs and pharmaceuticals.
B.PHARMACY	PHARMACEUTICAL INORGANIC CHEMISTRY-I - T	CO2	Understand the medicinal and pharmaceutical importance of inorganic compounds.
B.PHARMACY	PHARMACEUTICAL INORGANIC CHEMISTRY-I - P	CO1	Understand the principles and procedures of analysis of drugs and also regarding the application of inorganic pharmaceuticals
B.PHARMACY	PHARMACEUTICAL INORGANIC CHEMISTRY-I - P	CO2	Know the analysis of the inorganic pharmaceuticals their applications
B.PHARMACY	PHARMACEUTICAL INORGANIC CHEMISTRY-I - P	CO3	Appreciate the importance of inorganic pharmaceuticals in preventing and curing the disease.
M.PHARMACY	Modern Pharmaceutical Analysis - P	CO1	Know the chromatographic separation and analysis of drugs.
M.PHARMACY	Modern Pharmaceutical Analysis - P	CO2	know to perform the quantitative & qualitative analysis of drugs using various analytical instruments.
M.PHARMACY	Modern Pharmaceutical Analysis - T	CO1	The analysis of various drugs in single and combination dosage forms
M.PHARMACY	Modern Pharmaceutical Analysis - T	CO2	Theoretical and practical skills of the instrument
PHARM.D	PHARMACEUTICAL ANALYSIS - T	CO1	. Understand the interaction of matter with electromagnetic radiations and its applications in drug analysis.
PHARM.D	PHARMACEUTICAL ANALYSIS - T	CO2	Understand the chromatographic separation and analysis of drugs.
PHARM.D	PHARMACEUTICAL ANALYSIS - T	CO3	Perform quantitative & qualitative analysis of drugs using various analytical instruments.
PHARM.D	PHARMACEUTICAL ANALYSIS - P	CO1	Know the chromatographic separation and analysis of drugs
PHARM.D	PHARMACEUTICAL ANALYSIS - P	CO2	Know to perform the quantitative & qualitative analysis of drugs using various analytical instruments.
PHARM.D	MEDICINAL CHEMISTRY - T	CO2	Understand the drug metabolic pathways, adverse effect and therapeutic value of Drugs.
PHARM.D	MEDICINAL CHEMISTRY - T	CO3	Know the Structural Activity Relationship (SAR) of different class of drugs.
PHARM.D	MEDICINAL CHEMISTRY - T	CO4	Write the chemical synthesis of some drugs.
PHARM.D	MEDICINAL CHEMISTRY - T	CO1	Understand the chemistry of drugs with respect to their pharmacological activity.
PHARM.D	MEDICINAL CHEMISTRY - P	CO1	Know to perform the assays of important drugs
PHARM.D	MEDICINAL CHEMISTRY - P	CO2	Know the preparation of medicinally important compounds or intermediates
PHARM.D	MEDICINAL CHEMISTRY - P	CO3	Monograph analysis of important drugs.
PHARM.D	MEDICINAL CHEMISTRY - P	CO4	Know to Determine partition coefficients,

			dissociation constants and molar refractivity of compounds for QSAR analysis.
PHARM.D	Medicinal biochemistry - P	CO1	Know the qualitative analysis of normal and abnormal constituents of urine
PHARM.D	PHARMACEUTICAL ORGANIC CHEMISTRY - T	CO1	IUPAC/Common system of nomenclature of simple organic compounds belonging to different classes of organic compounds
PHARM.D	PHARMACEUTICAL ORGANIC CHEMISTRY - T	CO2	Some important physical properties of organic compounds
PHARM.D	PHARMACEUTICAL ORGANIC CHEMISTRY - T	CO 3	Free radical/ nucleophilic [alkyl/ acyl/ aryl] /electrophilic substitution, free radical/ nucleophilic / electrophilic addition, elimination, oxidation and reduction reactions with mechanism, orientation of the reaction, order of reactivity, stability of compounds;
PHARM.D	PHARMACEUTICAL ORGANIC CHEMISTRY - T	CO 5	Some named organic reactions with mechanisms; and
PHARM.D	PHARMACEUTICAL ORGANIC CHEMISTRY - T	CO 6	Methods of preparation, test for purity, principle involved in the assay, important medicinal uses of some important organic compounds.
PHARM.D	PHARMACEUTICAL ORGANIC CHEMISTRY - P	CO 3	Know the use of stereo models.
PHARM.D	PHARMACEUTICAL ORGANIC CHEMISTRY - P	CO 1	Know the various laboratory techniques of synthesis
PHARM.D	PHARMACEUTICAL ORGANIC CHEMISTRY - P	CO 2	. Know the identification of organic compounds.
PHARM.D	PHARMACEUTICAL INORGANIC CHEMISTRY - T	CO1	Understand the principles and procedures of analysis of drugs and also regarding the application of inorganic pharmaceuticals
PHARM.D	PHARMACEUTICAL INORGANIC CHEMISTRY - T	CO2	Know the analysis of the inorganic pharmaceuticals their applications
PHARM.D	PHARMACEUTICAL INORGANIC CHEMISTRY - T	CO3	Appreciate the importance of inorganic pharmaceuticals in preventing and curing the disease.
PHARM.D	PHARMACEUTICAL INORGANIC CHEMISTRY - P	CO1	Know to perform the limit test
PHARM.D	PHARMACEUTICAL INORGANIC CHEMISTRY - P	CO2	Know to perform the assays of inorganic compounds
PHARM.D	PHARMACEUTICAL INORGANIC CHEMISTRY - P	CO3	Know the estimation of mixtures
PHARM.D	PHARMACEUTICAL INORGANIC CHEMISTRY - P	CO4	Know the methods of identification test
PHARM.D	PHARMACEUTICAL INORGANIC CHEMISTRY - P	CO5	Know the preparation of inorganic drugs and pharmaceuticals
PHARM.D	PHARMACEUTICAL ANALYSIS - P	CO1	Know the chromatographic separation and analysis of drugs.
PHARM.D	PHARMACEUTICAL ANALYSIS - P	CO2	Know to perform the quantitative & qualitative analysis of drugs using various analytical instruments.
PHARM.D	MEDICINAL CHEMISTRY - P	CO1	Know to perform the assays of important drugs.
PHARM.D	MEDICINAL CHEMISTRY - P	CO2	Know the preparation of medically important compounds or intermediates.
PHARM.D	MEDICINAL CHEMISTRY - P	CO3	Monograph analysis of important drugs.
PHARM.D	MEDICINAL CHEMISTRY - P	CO4	Know to Determine partition coefficients, dissociation constants and molar refractivity of compounds for QSAR analysis.
PHARM.D	Medicinal Bio Chemistry - T	CO1	understand the catalytic activity of enzymes and importance of isoenzymes in diagnosis of diseases
PHARM.D	Medicinal Bio Chemistry - T	CO2	know the metabolic process of biomolecules in health and illness (metabolic disorders)

PHARM.D	Medicinal Bio Chemistry - T	CO3	understand the genetic organization of mammalian genome; protein synthesis; replication; mutation and repair mechanism
PHARM.D	Medicinal Bio Chemistry - T	CO4	know the biochemical principles of organ function tests of kidney, liver and endocrine gland
PHARM.D	Medicinal Bio Chemistry - T	CO5	do the qualitative analysis and determination of biomolecules in the body fluids
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	11	Viva will help to discuss the subject
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	12	Tests will help in evaluation of the students
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	13	Attendance will help in better understanding of the concepts
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	CO1	gain knowledge about rate of reactions and accelerated studies.
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	CO2	Basic knowledge of distribution/partition of drugs between two phases
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	CO3	Learn about diffusion and dissolution of drugs in the body
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	CO4	Learn about flow properties of formulations and thixotropy.
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	CO5	Know about the measurement of particle size analysis
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	CO9	types of complexes and their analysis
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	CO10	refer the record for experiments
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	CO7	Learn about interfacial phenomenon and adsorption isotherms
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	CO8	Preparation, purification and properties of colloids
B.PHARMACY	PHYSICAL PHARMACEUTICS - T	CO6	Applications of new analytical techniques.
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO10	refer the record for experiments
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO1	gain knowledge about rate of reactions and accelerated studies.
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO2	Basic knowledge of distribution/partition of drugs between two phases
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO3	Learn about diffusion and dissolution of drugs in the body
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO11	VIVA WILL HELP BETTER UNDERSTANDING THE CONCEPTS
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO12	Attendance will make better learning.
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO13	Class tests will help better presentation in sessionals.
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO4	Learn about flow properties of formulations and thixotropy.
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO5	Know about the measurement of particle size analysis
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO6	Applications of new analytical techniques.
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO7	Learn about interfacial phenomenon and adsorption isotherms
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO8	Preparation, purification and properties of colloids
B.PHARMACY	PHYSICAL PHARMACEUTICS - P	CO9	types of complexes and their analysis
B.PHARMACY	PHARMACEUTICS - T	CO1	Know the history of profession of pharmacy
B.PHARMACY	PHARMACEUTICS - T	CO2	Understand the basics of different dosage forms, pharmaceutical incompatibilities and pharmaceutical calculations.
B.PHARMACY	PHARMACEUTICS - T	CO3	Understand the professional way of handling the prescription

B.PHARMACY	PHARMACEUTICS - T	CO4	Preparation of various conventional dosage form
B.PHARMACY	PHARMACEUTICS - P	CO1	Understand the basics of different dosage forms, pharmaceutical incompatibilities and pharmaceutical calculations
B.PHARMACY	PHARMACEUTICS - P	CO2	Preparation of various conventional dosage form
B.PHARMACY	PHARMACEUTICAL JURISPRUDENCE - T	CO1	The Pharmaceutical legislations and their implications in the development and marketing
B.PHARMACY	PHARMACEUTICAL JURISPRUDENCE - T	CO2	Various Indian Pharmaceutical Act and laws
B.PHARMACY	PHARMACEUTICAL JURISPRUDENCE - T	CO3	The regulatory authorities and agencies governing the manufacture and sale of pharmaceuticals
B.PHARMACY	PHARMACEUTICAL JURISPRUDENCE - T	CO4	The code of ethics during the pharmaceutical practice
B.PHARMACY	PHARMACEUTICAL ENGINEERING - T	CO1	Able to understand the basic concept of unit processes and dimensions.
B.PHARMACY	PHARMACEUTICAL ENGINEERING - T	CO2	To know the theories of different unit operations and their equipments involved
B.PHARMACY	PHARMACEUTICAL ENGINEERING - T	CO3	To know about material handling systems, materials of construction and ion exchange resins.
B.PHARMACY	PHARMACEUTICAL ENGINEERING - P	CO4	To analyze the different pharmaceutical materials
B.PHARMACY	PHARMACEUTICAL ENGINEERING - P	CO5	To perform different unit operations and understand their calculations.
B.PHARMACY	PHARMACEUTICAL MARKETING - T	CO1	To understand the Pharmaceutical marketing
B.PHARMACY	PHARMACEUTICAL MARKETING - T	CO2	To know Organization and govt. regulations on marketing
B.PHARMACY	PHARMACEUTICAL MARKETING - T	CO3	To learn Pharmaceutical product like new product development and market Considerations
B.PHARMACY	PHARMACEUTICAL MARKETING - T	CO4	To study price competitions, Non price competitions
B.PHARMACY	PHARMACEUTICAL MARKETING - T	CO5	To learn different ways of Promotion like advertising, retailing etc.
B.PHARMACY	PHARMACEUTICAL MARKETING - T	CO6	To study about Wholesaler and retailer
B.PHARMACY	PHARMACEUTICAL MARKETING - T	CO7	To learn the various functions Management
B.PHARMACY	PHARMACEUTICAL MARKETING - T	CO8	To study the health scenario on India
B.PHARMACY	PHARMACEUTICAL MARKETING - T	CO9	To study quality management.
B.PHARMACY	PHARMACEUTICAL TECHNOLOGY AND BIOPHARMACEUTICS - T	CO1	Adequate knowledge and application of basic principles of various preformulation studies. Adequate knowledge and scientific information regarding development and evaluation of dosage forms such as tablets.
B.PHARMACY	PHARMACEUTICAL TECHNOLOGY AND BIOPHARMACEUTICS - T	CO2	Adequate knowledge and scientific information regarding development and evaluation of dosage forms such as capsules.
B.PHARMACY	PHARMACEUTICAL TECHNOLOGY AND BIOPHARMACEUTICS - T	CO3	Adequate knowledge and scientific information regarding development and evaluation of dosage forms such as parenteral.
B.PHARMACY	PHARMACEUTICAL TECHNOLOGY AND BIOPHARMACEUTICS - T	CO4	Adequate knowledge and scientific information regarding development and evaluation of dosage forms such as ophthalmics.
B.PHARMACY	PHARMACEUTICAL TECHNOLOGY AND BIOPHARMACEUTICS - T	CO5	Adequate knowledge and scientific information regarding development and evaluation of dosage forms such liquid orals.

B.PHARMACY	PHARMACEUTICAL TECHNOLOGY AND BIOPHARMACEUTICS - T	CO6	Adequate knowledge and scientific information regarding development and evaluation of dosage forms such aerosols.
B.PHARMACY	PHARMACEUTICAL TECHNOLOGY AND BIOPHARMACEUTICS - T	CO7	Scientific information on formulation, preparation of and evaluation of cosmetics preparations.
B.PHARMACY	PHARMACEUTICAL TECHNOLOGY AND BIOPHARMACEUTICS - T	CO8	Basics, theory and applications of biopharmaceutics and pharmacokinetics
B.PHARMACY	ADVANCED INDUSTRIAL PHARMACY - T	CO5	To know various statistical techniques to solve statistical problems
B.PHARMACY	ADVANCED INDUSTRIAL PHARMACY - T	CO4	To give basic knowledge of quality assurance
B.PHARMACY	ADVANCED INDUSTRIAL PHARMACY - T	CO3	To understand various approaches for development of advanced drug delivery system
B.PHARMACY	ADVANCED INDUSTRIAL PHARMACY - T	CO2	Know the process of pilot plant and scale up of pharmaceutical dosage forms
B.PHARMACY	ADVANCED INDUSTRIAL PHARMACY - T	CO1	understand and appreciate the concept of bioavailability and bioequivalence
M.PHARMACY (Pharmaceutics)	Drug Delivery Systems	CO1	The various approaches for development of novel drug delivery systems.
M.PHARMACY (Pharmaceutics)	Drug Delivery Systems	CO2	The criteria for selection of drugs and polymers for the development of delivering system
M.PHARMACY (Pharmaceutics)	Drug Delivery Systems	CO3	The formulation and evaluation of Novel drug delivery systems.
M.PHARMACY (Pharmaceutics)	Modern Pharmaceutics -T	CO1	To understand Preformation studies – Drug Excipient interactions, Stability testing, theories of dispersion, Large and small volume parental
M.PHARMACY (Pharmaceutics)	Modern Pharmaceutics -T	CO2	To study Optimization techniques and their application in formulation.
M.PHARMACY (Pharmaceutics)	Modern Pharmaceutics -T	CO3	To learn Pharmaceutical Validation, like ICH & WHO guidelines for validation of equipment's, Validation of specific dosage form, Types of validation.
M.PHARMACY (Pharmaceutics)	Modern Pharmaceutics -T	CO4	To learn cGMP considerations and Industrial Management like Materials management, Inventory management and control, Production and planning control and TQM.
M.PHARMACY (Pharmaceutics)	Modern Pharmaceutics -T	CO5	To study physics of tablet compression, forces, solubility enhancement technique
M.PHARMACY (Pharmaceutics)	Modern Pharmaceutics -T	CO6	Study the parameters like Diffusion, Dissolution and Pharmacokinetic, Similarity factors – f2 and f1,
M.PHARMACY (Pharmaceutics)	PHARMACEUTICAL REGULATORY AFFAIR	CO1	The Concepts of innovator and generic drugs, drug development process
M.PHARMACY (Pharmaceutics)	PHARMACEUTICAL REGULATORY AFFAIR	CO2	The Regulatory guidance's and guidelines for filing and approval process
M.PHARMACY (Pharmaceutics)	PHARMACEUTICAL REGULATORY AFFAIR	CO3	Preparation of Dossiers and their submission to regulatory agencies in different Countries
M.PHARMACY (Pharmaceutics)	PHARMACEUTICAL REGULATORY AFFAIR	CO4	Post approval regulatory requirements for actives and drug products
M.PHARMACY (Pharmaceutics)	PHARMACEUTICAL REGULATORY AFFAIR	CO5	Submission of global documents in CTD/ eCTD formats
M.PHARMACY (Pharmaceutics)	PHARMACEUTICAL REGULATORY AFFAIR	CO6	Clinical trials requirements for approvals for conducting clinical trials
M.PHARMACY (Pharmaceutics)	PHARMACEUTICAL REGULATORY AFFAIR	CO7	Pharmacovigilance and process of monitoring in clinical trials.
M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO3	To prepare and evaluate osmotically controlled DDS

M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO4	To learn to make and evaluate Floating DDS- hydro dynamically balanced DDS
M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO5	To prepare and evaluate Muco adhesive tablets.
M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO6	To formulate and evaluate trans dermal patches.
M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO7	To carry out preformulation studies of tablets
M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO8	To study the effect of compressional force on tablets disintegration time.
M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO9	To study Micromeritic properties of powders and granulation
M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO10	To study the effect of particle size and binders on dissolution of a tablet
M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO11	To determine the similarity factors.
M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO1	To study about the In-vitro dissolution of CR/ SR marketed formulation
M.PHARMACY (Pharmaceutics)	Modern PHARMACEUTICS -PRACTICAL-I	CO2	To learn to prepare and evaluate SR matrix tablets
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - T	CO3	Identify the various tissues and organs of different systems of human body
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - T	CO1	Explain the gross morphology, structure and functions of various organs of the human body
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - T	CO2	Describe the various homeostatic mechanisms and their imbalances
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - T	CO5	Appreciate coordinated working pattern of different organs of each system
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - T	CO4	Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - P	CO1	Explain the gross morphology, structure and functions of various organs of the human body
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - P	CO2	Describe the various homeostatic mechanisms and their imbalances
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - P	CO3	Identify the various tissues and organs of different systems of human body
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - P	CO4	Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - P	CO5	Appreciate coordinated working pattern of different organs of each system
B.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY-I - P	CO6	Assess the knowledge acquired in Subject
B.PHARMACY	PATHOPHYSIOLOGY	CO1	To know the basics of pathophysiology and cell injury
B.PHARMACY	PATHOPHYSIOLOGY	CO2	To know the inflammatory pathways and immunity related disorders
B.PHARMACY	PATHOPHYSIOLOGY	CO3	To understand the hypersensitivity reactions
B.PHARMACY	PATHOPHYSIOLOGY	CO4	To study and understand about cancer & its types, shocks and radiation.
B.PHARMACY	PATHOPHYSIOLOGY	CO5	To understand the environmental and nutritional diseases
B.PHARMACY	PATHOPHYSIOLOGY	CO6	To understand the pathogenesis, sign and symptoms of some common diseases, infectious diseases and chromosomal disorders.

B.PHARMACY	PHARMACOLOGY - T	CO1	Understand the pharmacological aspects of drugs falling under the above mentioned chapters
B.PHARMACY	PHARMACOLOGY - T	CO2	Handle and carry out the animal experiments
B.PHARMACY	PHARMACOLOGY - T	CO3	Appreciate the importance of pharmacology subject as a basis of therapeutics
B.PHARMACY	PHARMACOLOGY - T	CO4	Correlate and apply the knowledge therapeutically
B.PHARMACY	PHARMACOLOGY - P	CO1	Understand the pharmacological aspects of drugs
B.PHARMACY	PHARMACOLOGY - P	CO2	Handle and carry out the animal experiments
B.PHARMACY	PHARMACOLOGY - P	CO3	Appreciate the importance of pharmacology subject as a basis of therapeutics
B.PHARMACY	PHARMACOLOGY - P	CO4	Correlate and apply the knowledge therapeutically
B.PHARMACY	PHARMACOLOGY - P	CO5	Perform various pharmacological techniques in Experimental pharmacology
B.PHARMACY	PHARMACOLOGY - P	CO6	Assess the knowledge acquired in experimental pharmacology
B.PHARMACY	PHARMACOLOGY&TOXICOLOGY - T	CO4	Appreciate applicability of Chemotherapy in treating cancer and chemotherapy
B.PHARMACY	PHARMACOLOGY&TOXICOLOGY - T	CO1	Understand the phases involved in drug discovery
B.PHARMACY	PHARMACOLOGY&TOXICOLOGY - T	CO2	Various consideration of CNS acting drugs
B.PHARMACY	PHARMACOLOGY&TOXICOLOGY - T	CO3	Pathways ,Mechanism and Pharmacology of Analgesics and GIT drugs
B.PHARMACY	PHARMACOLOGY&TOXICOLOGY - T	CO5	Principles involved in immunopharmacology and toxicology
B.PHARMACY	PHARMACOLOGY&TOXICOLOGY - T	CO5	Explain Pharmacology of local anesthetics
B.PHARMACY	PHARMACOLOGY&TOXICOLOGY - P	CO2	Various screening methodologies
B.PHARMACY	PHARMACOLOGY&TOXICOLOGY - P	CO1	Bioassay and evaluation of unknown sample
B.PHARMACY	PHARMACOLOGY&TOXICOLOGY - P	CO3	Assessment of record ,Attendance ,aggregate tests and viva in experimental part
M.PHARMACY (Pharmacology)	PHARMACOLOGICAL & TOXICOLOGICAL SCREENING METHODS -I	CO4	Appreciate and correlate the preclinical data to humans
M.PHARMACY (Pharmacology)	PHARMACOLOGICAL & TOXICOLOGICAL SCREENING METHODS -I	CO1	Appraise the regulations and ethical requirement for the usage of experimental animals
M.PHARMACY (Pharmacology)	PHARMACOLOGICAL & TOXICOLOGICAL SCREENING METHODS -I	CO2	Describe the various animals used in the drug discovery process and good laboratory practices in maintenance and handling of experimental animals
M.PHARMACY (Pharmacology)	PHARMACOLOGICAL & TOXICOLOGICAL SCREENING METHODS -I	CO3	Describe the various newer screening methods involved in the drug discovery process
M.PHARMACY (Pharmacology)	PHARMACOLOGY PRACTICAL -I	CO3	Isolation and identification of protein material
M.PHARMACY (Pharmacology)	PHARMACOLOGY PRACTICAL -I	CO4	Spectroscopical analysis of RNA/DNA
M.PHARMACY (Pharmacology)	PHARMACOLOGY PRACTICAL -I	CO5	Applicability of assays in quantitative study of biological samples
M.PHARMACY (Pharmacology)	PHARMACOLOGY PRACTICAL -I	CO1	Understand the Pharmacological Evaluation basics
M.PHARMACY (Pharmacology)	PHARMACOLOGY PRACTICAL -I	CO2	Evaluating the effectiveness of drugs using different screening methods
M.PHARMACY (Pharmacology)	PHARMACOLOGY PRACTICAL -I	CO6	Assessment of record,viva ,test aggregate and Attendance
M.PHARMACY	CELLULAR AND MOLECULAR PHARMACOLOGY	CO1	Explain the receptor signal transduction

(Pharmacology)			pathway
M.PHARMACY (Pharmacology)	CELLULAR AND MOLECULAR PHARMACOLOGY	CO2	Explain the molecular pathways affected by drugs
M.PHARMACY (Pharmacology)	CELLULAR AND MOLECULAR PHARMACOLOGY	CO3	Appreciate the applicablity of molecular pharmacology and biomarkers in drug discovery process
M.PHARMACY (Pharmacology)	CELLULAR AND MOLECULAR PHARMACOLOGY	CO4	Demonstrate Molecular biology techniques as applicable for pharmacology
PHARM.D	COMMUNITY PHARMACY	CO8	To understand about the different activities such as showing sympathy and empathy towards patients
PHARM.D	COMMUNITY PHARMACY	CO9	To study in detail the concepts of essential drug concept and rational drug therapy
PHARM.D	COMMUNITY PHARMACY	CO10	To appreciate store management and inventory control
PHARM.D	COMMUNITY PHARMACY	CO1	TO study about the various pharmaceutical care services
PHARM.D	COMMUNITY PHARMACY	CO2	To study about the changing scenario of pharmacy practice services in India
PHARM.D	COMMUNITY PHARMACY	CO3	To understand the different patient related activities such as patient counselling and dispensing safe and suitable medications
PHARM.D	COMMUNITY PHARMACY	CO4	To learn about various pharmacy skills such as dispensing of prescription and OTC drugs
PHARM.D	COMMUNITY PHARMACY	CO5	To understand about different minor ailments and treatment for these ailments
PHARM.D	COMMUNITY PHARMACY	CO6	To study about the different health screening services to be provided for patient care in a community pharmacy setup
PHARM.D	COMMUNITY PHARMACY	CO7	To learn about community pharmacy and different management skills in community pharmacies such as business and professional practice
PHARM.D	PHARMACOTHERAPETICS-I - T	CO1	To impart knowledge and skills necessary for contribution to quality use of medicines
PHARM.D	PHARMACOTHERAPETICS-I - T	CO2	To study the etiopathogenesis of selected diseases
PHARM.D	PHARMACOTHERAPETICS-I - T	CO3	To study about the rationality of drug therapy
PHARM.D	PHARMACOTHERAPETICS-I - T	CO4	To study the therapeutic approach in the management of diseases
PHARM.D	PHARMACOTHERAPETICS-I - T	CO5	To study the controversies in drug therapy
PHARM.D	PHARMACOTHERAPETICS-I - T	CO6	To prepare the individualized therapeutic plan based on diagnosis
PHARM.D	PHARMACOTHERAPETICS-I - T	CO7	. To study the patient specific parameters in initiating drug therapy
PHARM.D	PHARMACOTHERAPETICS-I - T	CO8	. Distinguish the management strategies of selected diseases in special populations
PHARM.D	PHARMACOTHERAPETICS-I - T	CO9	study in detail the concepts of essential drug concept and rational drug therapy
PHARM.D	PHARMACOTHERAPETICS-I - T	CO10	Assess drug safety monitoring, contraindications and treatment outcomes and modify Treatment plan as needed
PHARM.D	PHARMACOTHERAPETICS-I - P	CO1	To impart knowledge and skills necessary for contribution to quality use of medicines
PHARM.D	PHARMACOTHERAPETICS-I - P	CO2	To study the etiopathogenesis of selected diseases
PHARM.D	PHARMACOTHERAPETICS-I - P	CO3	To study about the rationality of drug therapy

PHARM.D	PHARMACOTHERAPETICS-I - P	CO4	To study the therapeutic approach in the management of diseases
PHARM.D	PHARMACOTHERAPETICS-I - P	CO5	To study the controversies in drug therapy
PHARM.D	PHARMACOTHERAPETICS-I - P	CO6	To prepare the individualized therapeutic plan based on diagnosis
PHARM.D	PHARMACOTHERAPETICS-I - P	CO7	To study the patient specific parameters in initiating drug therapy
PHARM.D	PHARMACOTHERAPETICS-I - P	CO8	Monitoring of drug therapy such as alternatives, therapeutic responses produced and adverse effects
PHARM.D	PHARMACOTHERAPETICS-I - P	CO9	To present case studies according to syllabus
PHARM.D	PHARMACOTHERAPETICS-I - P	CO10	To analyse students based on their class test and attendance
PHARM.D	PHARMACOTHERAPEUTICS-II - T	CO1	To impart knowledge and skills necessary for contribution to quality use of medicines
PHARM.D	PHARMACOTHERAPEUTICS-II - T	CO2	To study the etiopathogenesis of selected diseases
PHARM.D	PHARMACOTHERAPEUTICS-II - T	CO3	To study the therapeutic approach in the management of diseases
PHARM.D	PHARMACOTHERAPEUTICS-II - T	CO4	To prepare the individualized therapeutic plan based on diagnosis
PHARM.D	PHARMACOTHERAPEUTICS-II - T	CO5	To study the patient specific parameters in initiating drug therapy
PHARM.D	PHARMACOTHERAPEUTICS-II - T	CO6	Distinguish the management strategies of selected diseases in special populations
PHARM.D	PHARMACOTHERAPEUTICS-II - T	CO7	Study about rational use of antibiotics
PHARM.D	PHARMACOTHERAPEUTICS-II - T	CO8	Assess drug safety monitoring, contraindications and treatment outcomes and modify treatment plan as needed.
PHARM.D	PHARMACOTHERAPEUTICS-II - P	CO1	Develop skill for writing clinical notes
PHARM.D	PHARMACOTHERAPEUTICS-II - P	CO2	Therapeutic decision making skill
PHARM.D	PHARMACOTHERAPEUTICS-II - P	CO3	Develop recording and documentation skill
PHARM.D	PHARMACOTHERAPEUTICS-II - P	CO4	Develop clinical problem solving skill
PHARM.D	PHARMACOTHERAPEUTICS-II - P	CO5	Practical knowledge , understanding of various disease.
PHARM.D	PHARMACOTHERAPEUTICS-II - P	CO6	Assessment based on test and attendance
PHARM.D	PHARMACOTHERAPEUTICS-III - T	CO1	To impart knowledge and skills necessary for contribution to quality use of medicines
PHARM.D	PHARMACOTHERAPEUTICS-III - T	CO2	To study the etiopathogenesis of selected diseases
PHARM.D	PHARMACOTHERAPEUTICS-III - T	CO3	To study about the rationality of drug therapy
PHARM.D	PHARMACOTHERAPEUTICS-III - T	CO4	To study the therapeutic approach in the management of diseases
PHARM.D	PHARMACOTHERAPEUTICS-III - T	CO5	To study the controversies in drug therapy
PHARM.D	PHARMACOTHERAPEUTICS-III - T	CO6	To prepare the individualized therapeutic plan based on diagnosis
PHARM.D	PHARMACOTHERAPEUTICS-III - T	CO7	To study the patient specific parameters in initiating drug therapy
PHARM.D	PHARMACOTHERAPEUTICS-III - T	CO10	Assess drug safety monitoring, contraindications and treatment outcomes and modify treatment plan as needed
PHARM.D	PHARMACOTHERAPEUTICS-III - T	CO8	Distinguish the management strategies of selected diseases in special populations.
PHARM.D	PHARMACOTHERAPEUTICS-III - T	CO9	Study in detail the concepts of essential drug concept and rational drug therapy
PHARM.D	PHARMACOTHERAPEUTICS-III - P	CO5	To study the controversies in drug therapy
PHARM.D	PHARMACOTHERAPEUTICS-III - P	CO6	To prepare the individualized therapeutic plan

			based on diagnosis
PHARM.D	PHARMACOTHERAPEUTICS-III - P	CO7	To study the patient specific parameters in initiating drug therapy
PHARM.D	PHARMACOTHERAPEUTICS-III - P	CO8	Monitoring of drug therapy such as alternatives, therapeutic responses produced and adverse effects
PHARM.D	PHARMACOTHERAPEUTICS-III - P	CO9	study in detail the concepts of essential drug concept and rational drug therapy
PHARM.D	PHARMACOTHERAPEUTICS-III - P	CO1	To impart knowledge and skills necessary for contribution to quality use of medicines
PHARM.D	PHARMACOTHERAPEUTICS-III - P	CO2	To study the pathophysiology of selected diseases
PHARM.D	PHARMACOTHERAPEUTICS-III - P	CO3	To study about the rationality of drug therapy
PHARM.D	PHARMACOTHERAPEUTICS-III - P	CO4	To study the therapeutic approach in the management of diseases
PHARM.D	HOSPITAL PHARMACY - T	CO1	Know various drug distribution methods
PHARM.D	HOSPITAL PHARMACY - T	CO3	Know the manufacturing practices of various formulations in hospital set up
PHARM.D	HOSPITAL PHARMACY - T	CO4	Appreciate the practice based research methods
PHARM.D	HOSPITAL PHARMACY - T	CO5	Appreciate the stores management and inventory control.
PHARM.D	HOSPITAL PHARMACY - T	CO6	Provide unbiased drug information to the doctors
PHARM.D	HOSPITAL PHARMACY - T	CO2	Know the professional practice management skills in hospital pharmacies
PHARM.D	HOSPITAL PHARMACY - P	CO1	Know various drug distribution methods
PHARM.D	HOSPITAL PHARMACY - P	CO2	Know the professional practice management skills in hospital pharmacies
PHARM.D	HOSPITAL PHARMACY - P	CO3	Know the manufacturing practices of various formulations in hospital set up
PHARM.D	HOSPITAL PHARMACY - P	CO4	Appreciate the practice based research methods
PHARM.D	HOSPITAL PHARMACY - P	CO5	Appreciate the stores management and inventory control.
PHARM.D	HOSPITAL PHARMACY - P	CO6	Provide unbiased drug information to the doctors
PHARM.D	CLINICAL PHARMACY - T	CO6	Interpret selected laboratory results (as monitoring parameters in therapeutics) of specific disease states
PHARM.D	CLINICAL PHARMACY - T	CO1	Retrieve, analyse, interpret and formulate drug information
PHARM.D	CLINICAL PHARMACY - T	CO2	Monitor drug therapy of patient through medication chart review and clinical review
PHARM.D	CLINICAL PHARMACY - T	CO3	Obtain medication history interview and counsel the patients
PHARM.D	CLINICAL PHARMACY - T	CO4	Identify medication errors and resolve drug related problems
PHARM.D	CLINICAL PHARMACY - T	CO5	Detect, assess and monitor adverse drug reaction
PHARM.D	CLINICAL PHARMACY - P	CO1	Answering drug information questions
PHARM.D	CLINICAL PHARMACY - P	CO2	Patient medication counselling
PHARM.D	CLINICAL PHARMACY - P	CO4	Patient medication history interview
PHARM.D	CLINICAL PHARMACY - P	CO3	Present Case studies related to laboratory investigations
PHARM.D	CLINICAL PHARMACY - P	CO7	Improve proper documentation and record maintenance
PHARM.D	CLINICAL PHARMACY - P	CO6	Understand and address clinical conditions as clinical pharmacist

PHARM.D	CLINICAL PHARMACY - P	CO5	Analyse students based on class test and attendance
PHARM.D	CLINICAL RESEARCH	CO1	Know the concept of new drug development process
PHARM.D	CLINICAL RESEARCH	CO2	Know the concept of clinical development of drug
PHARM.D	CLINICAL RESEARCH	CO3	Understand the regulatory and ethical requirements
PHARM.D	CLINICAL RESEARCH	CO4	Conduct the clinical trials in accordance to regulatory and ethical requirements
PHARM.D	CLINICAL RESEARCH	CO5	Coordinate the clinical trials and promote quality drug trial research
PHARM.D	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO1	TO impart knowledge regarding various pharmacoepidemiological methods
PHARM.D	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO2	To identify and interpret outcome measures in pharmacoepidemiology
PHARM.D	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO3	To understand the applications of pharmacoepidemiology in performing research
PHARM.D	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO4	. To interpret the concept of risk involved in pharmacoepidemiology
PHARM.D	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO5	To identify the scope of pharmacoepidemiology in different areas such as drug safety monitoring and regulations
PHARM.D	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO6	To study about the different methods of pharmacoeconomics
PHARM.D	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO7	To learn different applications of pharmacoeconomics
PHARM.D	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO8	To apply and interpret the different concepts of pharmacoeconomics
PHARM.D	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO9	To interpret the various outcome measures in pharmacoeconomics
PHARM.D	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO10	To identify the sources of data for pharmacoepidemiology studies
PHARM.D	PHARMACOTHERAPEUTIC DRUG MONITORING	CO1	Design the drug therapy regimen for individual patient
PHARM.D	PHARMACOTHERAPEUTIC DRUG MONITORING	CO2	Interpret and correlate the plasma drug concentration with patient's therapeutic outcome.
PHARM.D	PHARMACOTHERAPEUTIC DRUG MONITORING	CO3	Recommend dosage adjustment for patients with renal/ hepatic impairment
PHARM.D	PHARMACOTHERAPEUTIC DRUG MONITORING	CO4	Detect and manage drug –drug interaction
PHARM.D	CLERKSHIP	CO5	Appreciate the stores management and inventory control.
PHARM.D	CLERKSHIP	CO6	Provide unbiased drug information to the doctors
PHARM.D	CLERKSHIP	CO1	Know various drug distribution methods
PHARM.D	CLERKSHIP	CO2	Know the professional practice management skills in hospital pharmacies
PHARM.D	CLERKSHIP	CO3	Know the manufacturing practices of various formulations in hospital set up
PHARM.D	CLERKSHIP	CO4	Appreciate the practice based research methods
PHARM D	PHARMACEUTICS - T	CO1	know the formulation aspects of different dosage forms
PHARM D	PHARMACEUTICS - T	CO2	do different pharmaceutical calculation involved in formulation
PHARM D	PHARMACEUTICS - P	CO3	formulate different types of dosage forms
PHARM D	PHARMACEUTICS - P	CO4	appreciate the importance of good formulation

			for effectiveness
PHARM D	PHARMACEUTICAL JURISPRUDENCE - T	CO2	understand the various concepts of the pharmaceutical legislation in India
PHARM D	PHARMACEUTICAL JURISPRUDENCE - T	CO3	know the various parameters in the Drug and Cosmetic Act and rules
PHARM D	PHARMACEUTICAL JURISPRUDENCE - T	CO1	Practice the Professional ethics
PHARM D	PHARMACEUTICAL JURISPRUDENCE - T	CO4	know the Drug policy, Essential commodities Act, DPCO, Patent and design act
PHARM D	PHARMACEUTICAL JURISPRUDENCE - T	CO5	be able to understand the concepts of Dangerous Drugs Act, Pharmacy Act and Medicinal & toilet preparations Act
PHARM D	PHARMACEUTICAL JURISPRUDENCE - T	CO6	To understand Narcotic drugs and Psychotropic substances Act, Drugs & Magic remedies Act, the prevention to cruelty to animals Act and other laws as prescribed by the Pharmacy Council of India
PHARM D	PHARMACEUTICAL FORMULATIONS - T	CO4	understand and appreciate the concept of bioavailability and bioequivalence, their role in clinical situations
PHARM D	PHARMACEUTICAL FORMULATIONS - T	CO1	understand the principle involved in formulation of various pharmaceutical dosage forms
PHARM D	PHARMACEUTICAL FORMULATIONS - P	CO2	prepare various pharmaceutical formulations
PHARM D	PHARMACEUTICAL FORMULATIONS - P	CO3	perform evaluation of pharmaceutical dosage forms
PHARM D	BIOPHARMACEUTICS & PHARMACOKINETICS - T	CO1	Knowledge on biopharmaceutics and ADME of drugs
PHARM D	BIOPHARMACEUTICS & PHARMACOKINETICS - T	CO2	To introduce the basic concepts of pharmacokinetics, compartmental and non-compartmental modelling
PHARM D	BIOPHARMACEUTICS & PHARMACOKINETICS - T	CO3	To understand Multiple dosage regimen, and non-linear pharmacokinetics
PHARM D	BIOPHARMACEUTICS & PHARMACOKINETICS - T	CO4	To understand the various concepts of Bio-availability and Bio-equivalence
PHARM D	BIOPHARMACEUTICS & PHARMACOKINETICS - P	CO5	To study dissolution improvement techniques and methods of comparison of profiles
PHARM D	BIOPHARMACEUTICS & PHARMACOKINETICS - P	CO6	Protein binding studies
PHARM D	BIOPHARMACEUTICS & PHARMACOKINETICS - P	CO7	Determination of pharmacokinetic parameters mathematically and graphically
D.PHARMACY	PHARMACOGNOSY - T	1	to know the techniques in the cultivation and production of crude drugs
D.PHARMACY	PHARMACOGNOSY - T	2	to know the crude drugs, their uses and chemical nature.
D.PHARMACY	PHARMACOGNOSY - T	3	know the evaluation techniques for the herbal drugs
D.PHARMACY	PHARMACOGNOSY - T	4	to carry out the microscopic and morphological evaluation of crude drugs.
D.PHARMACY	PHARMACOGNOSY - P	1	STUDY OF MICROSCOPE
D.PHARMACY	PHARMACOGNOSY - P	2	IDENTIFICATION OF DRUGS BY MORPHOLOGICAL CHARACTERS
D.PHARMACY	PHARMACOGNOSY - P	3	GROSS ANATOMICAL STUDIES OF CRUDE DRUGS
D.PHARMACY	PHARMACOGNOSY - P	4	PHYSICAL AND CHEMICAL EVALUATION OF CRUDE DRUGS
D.PHARMACY	PHARMACOGNOSY - P	5	IDENTIFICATION OF FIBERS AND SURGICAL DRESSINGS
D.PHARMACY	PHARMACEUTICAL CHEMISTRY-II - T	1	Understand the importance of drug Nomenclature and IUPAC Name
D.PHARMACY	PHARMACEUTICAL CHEMISTRY-II - T	2	Understand the chemistry of drugs.

D.PHARMACY	PHARMACEUTICAL CHEMISTRY-II - T	3	Know the Brand name, chemical structure, IUPAC name, physical & chemical properties, stability& storage and therapeutic uses of drugs.
D.PHARMACY	PHARMACEUTICAL CHEMISTRY-II - P	1	To understand the Melting Point of Unknown Compound
D.PHARMACY	PHARMACEUTICAL CHEMISTRY-II - P	2	To understand the boiling Point of unknown compound
D.PHARMACY	PHARMACEUTICAL CHEMISTRY-II - P	3	To perform the Qualitative Test for Organic compounds
D.PHARMACY	PHARMACEUTICAL CHEMISTRY-II - P	4	To perform the synthesis of different organic compounds
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - T	CO6	Appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body.
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - T	CO1	Describe the structure (gross and histology) and functions of various organs of the human body;
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - T	CO2	Describe the various homeostatic mechanisms and their imbalances of various systems
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - T	CO3	Identify the various tissues and organs of the different systems of the human body
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - T	CO4	Perform the hematological tests and also record blood pressure, heart rate, pulse and Respiratory volumes
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - T	CO5	Appreciate coordinated working pattern of different organs of each system
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - P	CO1	Describe the structure (gross and histology) and functions of various organs of the human body
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - P	CO2	Describe the various homeostatic mechanisms and their imbalances of various systems
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - P	CO3	Identify the various tissues and organs of the different systems of the human body
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - P	CO4	Perform the hematological tests and also record blood pressure, heart rate, pulse and Respiratory volumes;
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - P	CO5	Appreciate coordinated working pattern of different organs of each system
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - P	CO6	Appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body.
PHARM D	HUMAN ANATOMY AND PHYSIOLOGY - P	CO7	To justify continuous assesment
PHARM D	PATHOPHYSIOLOGY - T	CO1	Describe the etiology and pathogenesis of the selected disease states
PHARM D	PATHOPHYSIOLOGY - T	CO2	Name the signs and symptoms of the diseases
PHARM D	PATHOPHYSIOLOGY - T	CO2	Name the signs and symptoms of the diseases
PHARM D	PATHOPHYSIOLOGY - T	CO2	Name the signs and symptoms of the diseases
PHARM D	PATHOPHYSIOLOGY - T	CO3	Mention the complications of the diseases
PHARM D	PHARMACEUTICAL MICROBIOLOGY - T	CO1	To know the anatomy, identification, growth factors and sterilization of microorganisms
PHARM D	PHARMACEUTICAL MICROBIOLOGY - T	CO2	To know the mode of transmission of disease causing microorganism, symptoms of disease, and treatment aspect
PHARM D	PHARMACEUTICAL MICROBIOLOGY - T	CO3	Do estimation of RNA and DNA and there by identifying the source
PHARM D	PHARMACEUTICAL MICROBIOLOGY - T	CO4	Do cultivation and identification of the microorganisms in the laboratory
PHARM D	PHARMACEUTICAL MICROBIOLOGY - T	CO5	Do identification of diseases by performing the diagnostic tests

PHARM D	PHARMACEUTICAL MICROBIOLOGY - T	CO6	Appreciate the behavior of motility and behavioral characteristics of microorganisms
PHARM D	PHARMACEUTICAL MICROBIOLOGY - P	CO2	To know the mode of transmission of disease causing microorganism, symptoms of disease, and treatment aspect
PHARM D	PHARMACEUTICAL MICROBIOLOGY - P	CO3	Do estimation of RNA and DNA and there by identifying the source
PHARM D	PHARMACEUTICAL MICROBIOLOGY - P	CO4	Do cultivation and identification of the microorganisms in the laboratory
PHARM D	PHARMACEUTICAL MICROBIOLOGY - P	CO5	Do identification of diseases by performing the diagnostic tests
PHARM D	PHARMACEUTICAL MICROBIOLOGY - P	CO6	Appreciate the behavior of motility and behavioral characteristics of microorganisms
PHARM D	PHARMACEUTICAL MICROBIOLOGY - P	CO1	To know the anatomy, identification, growth factors and sterilization of microorganisms
PHARM D	PHARMACEUTICAL MICROBIOLOGY - P	CO7	To evaluate the practical ability of students by Justify viva voice, record etc.
PHARM D	PHARMACOLOGY-I - T	co1	classify cholinomimetics and pharmacology of ach
PHARM D	PHARMACOLOGY-I - T	co1	classify adrenergic agonist and pharmacology of noradrenaline
PHARM D	PHARMACOLOGY-I - T	co3	note on GPCR
PHARM D	PHARMACOLOGY-I - T	co3	factors effecting absorption of drugs
PHARM D	PHARMACOLOGY-I - T	co3	pharmacokinetic drug interactions
PHARM D	PHARMACOLOGY-I - T	co4	child dose calculation
PHARM D	PHARMACOLOGY-I - T	co3	cholinergic receptors
PHARM D	PHARMACOLOGY-I - T	co3	non competitive antagonism
PHARM D	PHARMACOLOGY-I - T	co4	ganglionic blockers
PHARM D	PHARMACOLOGY-I - T	co4	bioavailability
PHARM D	PHARMACOLOGY	CO1	Understand the pharmacological aspects of drugs.
PHARM D	PHARMACOLOGY	CO2	Carry out the animal experiments confidently
PHARM D	PHARMACOLOGY	CO3	Appreciate the importance of pharmacology subject as a basis of therapeutics
PHARM D	PHARMACOLOGY	CO4	Correlate and apply the knowledge therapeutically
PHARM D	CLINICAL TOXICOLOGY - T	CO5	To know the substance abuse
PHARM D	CLINICAL TOXICOLOGY - T	CO1	To know the management of poisoning, antidotes
PHARM D	CLINICAL TOXICOLOGY - T	CO2	To understand the supportive care in clinical toxicology
PHARM D	CLINICAL TOXICOLOGY - T	CO4	To know the others poisoning i.e venom, plant and food poisoning
PHARM D	CLINICAL TOXICOLOGY - T	CO3	To know the Management of acute and chronic poisoning
D.PHARMACY	PHARMACEUTICAL CHEMISTRY-I - T	co 1	. Know the sources of impurities and methods to determine the impurities in inorganic drugs and pharmaceuticals
D.PHARMACY	PHARMACEUTICAL CHEMISTRY-I - T	co 2	Understand the medicinal and pharmaceutical importance of inorganic compounds
D.PHARMACY	PHARMACEUTICAL CHEMISTRY-I - P		1) Define the following terms A) Antacid b) Bacteriostatics & Bacteriocides c) Disinfectants d) Buffer capacity e) Respiratory stimulants
D.PHARMACY	PHARMACEUTICS-I - T	CO6	To perform various processes involved in pharmaceutical manufacturing process.
D.PHARMACY	PHARMACEUTICS-I - T	CO4	To know various unit operations used in Pharmaceutical industries

D.PHARMACY	PHARMACEUTICS-I - T	CO5	To understand the material handling techniques
D.PHARMACY	PHARMACEUTICS-I - T	CO2	Understand the basics of different dosage forms and pharmaceutical calculations
D.PHARMACY	PHARMACEUTICS-I - T	CO1	Know the history of profession of pharmacy
D.PHARMACY	PHARMACEUTICS-I - P	CO3	Formulate solid, liquid and semisolid dosage forms
D.PHARMACY	PHARMACEUTICS-II - T	CO1	Ability and skill to handle prescriptions
D.PHARMACY	PHARMACEUTICS-II - T	CO2	Knowledge of various pharmaceutical dosage forms including liquid, solid and semi-solid dosage form
D.PHARMACY	PHARMACEUTICS-II - T	CO3	Basic knowledge on Dental and cosmetic preparations
D.PHARMACY	PHARMACEUTICS-II - T	CO4	be able to understand the concepts of Study of sterile dosage forms
D.PHARMACY	PHARMACEUTICS-II - P	CO5	Ability to identify incompatibilities and suggest remedies
D.PHARMACY	PHARMACEUTICS-II - P	CO6	Formulation of various pharmaceutical dosage forms
D.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY - T	co1	classify joints
D.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY - T	co1	prokaryotic and eukaryotic cell
D.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY - T	co1	types of vertebrae and bones of skull
D.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY - T	co1	lymph and explain lymphatic system
D.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY - T	co1	cardiac cycle
D.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY - T	co3	connective tissues and functions
D.PHARMACY	HUMAN ANATOMY AND PHYSIOLOGY - T	co2	clotting and physiology of clotting
D.PHARMACY	PHARMACOLOGY AND TOXICOLOGY - T	CO1	Understand the pharmacological actions of different categories of drugs
D.PHARMACY	PHARMACOLOGY AND TOXICOLOGY - T	CO2	Explain the mechanism of drug action at organ system/sub cellular/ macromolecular levels.
D.PHARMACY	PHARMACOLOGY AND TOXICOLOGY - T	CO3	Apply the basic pharmacological knowledge in the prevention and treatment of various diseases.
D.PHARMACY	PHARMACOLOGY AND TOXICOLOGY - T	CO4	Observe the effect of drugs on animals by simulated experiments
D.PHARMACY	PHARMACOLOGY AND TOXICOLOGY - P	CO1	Understand the pharmacological actions of different categories of drugs
D.PHARMACY	PHARMACOLOGY AND TOXICOLOGY - P	CO2	Explain the mechanism of drug action at organ system/sub cellular/ macromolecular levels
D.PHARMACY	PHARMACOLOGY AND TOXICOLOGY - P	CO3	Apply the basic pharmacological knowledge in the prevention and treatment of various diseases
D.PHARMACY	PHARMACOLOGY AND TOXICOLOGY - P	CO4	Observe the effect of drugs on animals by simulated experiments
D.PHARMACY	PHARMACOLOGY AND TOXICOLOGY - P	CO5	To justify continuous assessment
D.PHARMACY	PHARMACEUTICAL JURISPRUDENCE	CO1	Practice the Professional ethics
D.PHARMACY	PHARMACEUTICAL JURISPRUDENCE	CO2	Understand the various concepts of the pharmaceutical legislation in India
D.PHARMACY	PHARMACEUTICAL JURISPRUDENCE	CO3	Know the various parameters in the Drug and Cosmetic Act and rules
D.PHARMACY	PHARMACEUTICAL JURISPRUDENCE	CO4	Know the DPCO
D.PHARMACY	PHARMACEUTICAL JURISPRUDENCE	CO5	Understand the labeling requirements and packaging guidelines for drugs and cosmetics
D.PHARMACY	PHARMACEUTICAL JURISPRUDENCE	CO6	Be able to understand the concepts of Pharmacy Act
D.PHARMACY	DRUG STORE AND BUSINESS MANAGEMENT	co1	channels of distribution
D.PHARMACY	DRUG STORE AND BUSINESS MANAGEMENT	co4	codification and its disadvantages
D.PHARMACY	DRUG STORE AND BUSINESS MANAGEMENT	co 2	types of tenders

D.PHARMACY	DRUG STORE AND BUSINESS MANAGEMENT	co2	trade and industry
D.PHARMACY	DRUG STORE AND BUSINESS MANAGEMENT	co2	difference between public limited company and private limited company
D.PHARMACY	DRUG STORE AND BUSINESS MANAGEMENT	co2	difference between sole proprietorship and partnership
D.PHARMACY	DRUG STORE AND BUSINESS MANAGEMENT	co2	commerce
D.PHARMACY	BIOCHEMISTRY AND CLINICAL PATHOLOGY - T	CO1	To know the metabolic process of biomolecules in health and illness (metabolic disorders)
D.PHARMACY	BIOCHEMISTRY AND CLINICAL PATHOLOGY - T	CO2	To understand the catalytic activity of enzymes and importance of isoenzymes in diagnosis of diseases
D.PHARMACY	BIOCHEMISTRY AND CLINICAL PATHOLOGY - T	CO3	To understand the chemistry, role, qualitative analysis and determination of biomolecules
D.PHARMACY	BIOCHEMISTRY AND CLINICAL PATHOLOGY - T	CO4	To understand the physiological importance of vitamins in the body
D.PHARMACY	BIOCHEMISTRY AND CLINICAL PATHOLOGY - T	CO5	To study the pathology of blood and urine
D.PHARMACY	BIOCHEMISTRY AND CLINICAL PATHOLOGY - P	CO2	To understand the procedure for identification of biomolecules.
D.PHARMACY	BIOCHEMISTRY AND CLINICAL PATHOLOGY - P	CO3	To perform qualitative tests for biomolecules.
D.PHARMACY	BIOCHEMISTRY AND CLINICAL PATHOLOGY - P	CO4	To find out the abnormal constituents in urine.
D.PHARMACY	BIOCHEMISTRY AND CLINICAL PATHOLOGY - P	CO1	To understand the chemistry, role, qualitative analysis and determination of biomolecules
D.PHARMACY	HEALTH EDUCATION AND COMMUNITY PHARMACY	CO1	know pharmaceutical care services
D.PHARMACY	HEALTH EDUCATION AND COMMUNITY PHARMACY	CO2	know the business and professional practice management skills in community pharmacies
D.PHARMACY	HEALTH EDUCATION AND COMMUNITY PHARMACY	CO3	Do patient counselling & provide health screening services to public in community pharmacy
D.PHARMACY	HEALTH EDUCATION AND COMMUNITY PHARMACY	CO4	Respond to minor ailments and provide appropriate medication
D.PHARMACY	HEALTH EDUCATION AND COMMUNITY PHARMACY	CO5	show empathy and sympathy to patients
D.PHARMACY	HEALTH EDUCATION AND COMMUNITY PHARMACY	CO6	Appreciate the concept of Rational drug therapy.
D.PHARMACY	HOSPITAL & CLINICAL PHARMACY - T	CO1	know various drug distribution methods
D.PHARMACY	HOSPITAL & CLINICAL PHARMACY - T	CO2	know the professional practice management skills in hospital pharmacies
D.PHARMACY	HOSPITAL & CLINICAL PHARMACY - T	CO3	provide unbiased drug information to the doctors
D.PHARMACY	HOSPITAL & CLINICAL PHARMACY - T	CO4	know the manufacturing practices of various formulations in hospital set up
D.PHARMACY	HOSPITAL & CLINICAL PHARMACY - T	CO5	monitor drug therapy of patient through medication chart review and clinical review
D.PHARMACY	HOSPITAL & CLINICAL PHARMACY - T	CO6	obtain medication history interview and counsel the patients
D.PHARMACY	HOSPITAL & CLINICAL PHARMACY - T	CO7	Identify and resolve drug related problems
D.PHARMACY	HOSPITAL & CLINICAL PHARMACY - T	CO8	retrieve, analyze, interpret and formulate drug or medicine information
D.PHARMACY	HOSPITAL & CLINICAL PHARMACY - P	CO1	know the manufacturing practices of various formulations in hospital set up
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - T	CO1	To impart knowledge and skills necessary for contribution to quality use of medicines
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - T	CO2	To study the etiopathogenesis of selected diseases
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - T	CO3	To study about the rationality of drug therapy

PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - T	CO4	To study the therapeutic approach in the management of diseases
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - T	CO5	To study the controversies in drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - T	CO6	To prepare the individualized therapeutic plan based on diagnosis
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - T	CO7	To study the patient specific parameters in initiating drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - T	CO8	Distinguish the management strategies of selected diseases in special populations.
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - T	CO9	Study in detail the concepts of essential drug concept and rational drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - T	CO10	Assess drug safety monitoring, contraindications and treatment outcomes and modify treatment plan as needed
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - P	CO1	To impart knowledge and skills necessary for contribution to quality use of medicines
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - P	CO2	To study the pathophysiology of selected diseases
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - P	CO3	To study about the rationality of drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - P	CO4	To study the therapeutic approach in the management of diseases
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - P	CO5	To study the controversies in drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - P	CO6	To prepare the individualized therapeutic plan based on diagnosis
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - P	CO7	To study the patient specific parameters in initiating drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - P	CO8	Monitoring of drug therapy such as alternatives, therapeutic responses produced and adverse effects
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-III - P	CO9	study in detail the concepts of essential drug concept and rational drug therapy
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - T	CO1	Know various drug distribution methods
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - T	CO2	Know the professional practice management skills in hospital pharmacies
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - T	CO3	Know the manufacturing practices of various formulations in hospital set up
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - T	CO4	Appreciate the practice based research methods
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - T	CO5	Appreciate the stores management and inventory control.
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - T	CO6	Provide unbiased drug information to the doctors
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - P	CO1	Know various drug distribution methods
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - P	CO2	Know the professional practice management skills in hospital pharmacies
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - P	CO3	Know the manufacturing practices of various formulations in hospital set up
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - P	CO4	Appreciate the practice based research methods
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - P	CO5	Appreciate the stores management and inventory control.
PHARM.D[POST BACCALAUREATE]	HOSPITAL PHARMACY - P	CO6	Provide unbiased drug information to the

BACCALAUREATE]			doctors
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - T	CO4	Identify medication errors and resolve drug related problems
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - T	CO5	Detect, assess and monitor adverse drug reaction
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - T	CO6	Interpret selected laboratory results (as monitoring parameters in therapeutics) of specific disease states
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - T	CO1	Retrieve, analyse, interpret and formulate drug information
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - T	CO2	Monitor drug therapy of patient through medication chart review and clinical review
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - T	CO3	Obtain medication history interview and counsel the patients
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - P	CO4	Patient medication history interview
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - P	CO3	Present Case studies related to laboratory investigations
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - P	CO5	Assessment based on class test and attendance
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - P	CO6	Understand and address clinical condition as a clinical pharmacist
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - P	CO7	Improve proper documentation and record
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - P	CO2	Patient medication counselling
PHARM.D[POST BACCALAUREATE]	CLINICAL PHARMACY - P	CO1	Answering drug information questions
PHARM.D[POST BACCALAUREATE]	CLINICAL RESEARCH	CO1	Know the concept of new drug development process.
PHARM.D[POST BACCALAUREATE]	CLINICAL RESEARCH	CO2	Know the concept of clinical development of drug
PHARM.D[POST BACCALAUREATE]	CLINICAL RESEARCH	CO3	Understand the regulatory and ethical requirements.
PHARM.D[POST BACCALAUREATE]	CLINICAL RESEARCH	CO4	Conduct the clinical trials in accordance to regulatory and ethical requirements
PHARM.D[POST BACCALAUREATE]	CLINICAL RESEARCH	CO5	Coordinate the clinical trials and promote quality drug trial research.
PHARM.D[POST BACCALAUREATE]	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO1	TO impart knowledge regarding various pharmacoepidemiological methods
PHARM.D[POST BACCALAUREATE]	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO2	To identify and interpret outcome measures in pharmacoepidemiology
PHARM.D[POST BACCALAUREATE]	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO3	understand the applications of pharmacoepidemiology in performing research
PHARM.D[POST BACCALAUREATE]	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO4	To interpret the concept of risk involved in pharmacoepidemiology
PHARM.D[POST BACCALAUREATE]	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO5	To identify the scope of pharmacoepidemiology in different areas such as drug safety monitoring and regulations
PHARM.D[POST BACCALAUREATE]	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO6	To study about the different methods of pharmacoconomics
PHARM.D[POST BACCALAUREATE]	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO7	To learn different applications of pharmacoconomics
PHARM.D[POST BACCALAUREATE]	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO8	To apply and interpret the different concepts of pharmacoconomics
PHARM.D[POST BACCALAUREATE]	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO9	To interpret the various outcome measures in pharmacoconomics

PHARM.D[POST BACCALAUREATE]	PHARMACOEPIDEMIOLOGY &PHARMACOECONOMICS	CO10	To identify the sources of data for pharmacoepidemiology studies
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTIC DRUG MONITORING	CO1	Design the drug therapy regimen for individual patient
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTIC DRUG MONITORING	CO2	Interpret and correlate the plasma drug concentration with patient's therapeutic outcome.
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTIC DRUG MONITORING	CO3	Recommend dosage adjustment for patients with renal/ hepatic impairment
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTIC DRUG MONITORING	CO4	Detect and manage drug –drug interaction
PHARM.D[POST BACCALAUREATE]	CLERKSHIP	CO3	Know the manufacturing practices of various formulations in hospital set up
PHARM.D[POST BACCALAUREATE]	CLERKSHIP	CO2	Know the professional practice management skills in hospital pharmacies
PHARM.D[POST BACCALAUREATE]	CLERKSHIP	CO1	Know various drug distribution methods
PHARM.D[POST BACCALAUREATE]	CLERKSHIP	CO5	Appreciate the stores management and inventory control.
PHARM.D[POST BACCALAUREATE]	CLERKSHIP	CO6	Provide unbiased drug information to the doctors
PHARM.D[POST BACCALAUREATE]	CLERKSHIP	CO4	Appreciate the practice based research methods
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - T	CO1	To impart knowledge and skills necessary for contribution to quality use of medicines
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - T	CO2	To study the etiopathogenesis of selected diseases
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - T	CO3	To study about the rationality of drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - T	CO4	To study the therapeutic approach in the management of diseases
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - T	CO5	To study the controversies in drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - T	CO6	To prepare the individualized therapeutic plan based on diagnosis
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - T	CO7	To study the patient specific parameters in initiating drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - T	CO8	Distinguish the management strategies of selected diseases in special populations.
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - T	CO9	Study in detail the concepts of essential drug concept and rational drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - T	CO10	Assess drug safety monitoring, contraindications and treatment outcomes and modify treatment plan as needed
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - P	CO1	To impart knowledge and skills necessary for contribution to quality use of medicines
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - P	CO2	To study the pathophysiology of selected diseases
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - P	CO3	To study about the rationality of drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - P	CO4	To study the therapeutic approach in the management of diseases
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - P	CO5	To study the controversies in drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - P	CO6	To prepare the individualized therapeutic plan based on diagnosis
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - P	CO7	To study the patient specific parameters in

BACCALAUREATE]			initiating drug therapy
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - P	CO8	Monitoring of drug therapy such as alternatives, therapeutic responses produced and adverse effects
PHARM.D[POST BACCALAUREATE]	PHARMACOTHERAPEUTICS-I & II - P	CO9	To study in detail the concepts of essential drug concept and rational drug therapy
PHARM.D[POST BACCALAUREATE]	BIOPHARMACEUTICS &PHARMACOKINETICS - T	CO1	Knowledge on biopharmaceutics and ADME of drugs
PHARM.D[POST BACCALAUREATE]	BIOPHARMACEUTICS &PHARMACOKINETICS - T	CO2	To introduce the basic concepts of pharmacokinetics, compartmental and non-compartmental modelling
PHARM.D[POST BACCALAUREATE]	BIOPHARMACEUTICS &PHARMACOKINETICS - T	CO3	To understand Multiple dosage regimen, and non-linear pharmacokinetics
PHARM.D[POST BACCALAUREATE]	BIOPHARMACEUTICS &PHARMACOKINETICS - T	CO4	To understand the various concepts of Bio-availability and Bio-equivalence
PHARM.D[POST BACCALAUREATE]	BIOPHARMACEUTICS &PHARMACOKINETICS - P	CO5	To study dissolution improvement techniques and methods of comparison of profiles
PHARM.D[POST BACCALAUREATE]	BIOPHARMACEUTICS &PHARMACOKINETICS - P	CO6	Study of Protein binding
PHARM.D[POST BACCALAUREATE]	BIOPHARMACEUTICS &PHARMACOKINETICS - P	CO7	Determination of pharmacokinetic parameters mathematically and graphically
PHARM.D[POST BACCALAUREATE]	CLINICAL TOXICOLOGY - T	CO4	To know the others poisoning i.e venom, plant and food poisoning
PHARM.D[POST BACCALAUREATE]	CLINICAL TOXICOLOGY - T	CO5	To know the substance abuse
PHARM.D[POST BACCALAUREATE]	CLINICAL TOXICOLOGY - T	CO2	To understand the supportive care in clinical toxicology
PHARM.D[POST BACCALAUREATE]	CLINICAL TOXICOLOGY - T	CO3	To know the Management of acute and chronic poisoning
PHARM.D[POST BACCALAUREATE]	CLINICAL TOXICOLOGY - T	CO1	To know the management of poisoning, antidotes