



**PES Modern College of Pharmacy (for Ladies), Moshi**  
**Diploma in Pharmacy**

Sr.No.	PO's	ID	Program Outcome
1	PO	PO1	<b>Pharmacy Knowledge:</b> Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy.
2	PO	PO2	<b>Modern tool usage:</b> Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy – related computing tools with an understanding of the limitations.
3	PO	PO3	<b>Leadership skills:</b> understand and consider the human reaction to change, motivation issues, leadership and team building when planning changes required for fulfillment of practice, professional
4	PO	PO4	<b>Professional Identity:</b> Understand, analyse and communicate the value of their professional role in society (e.g. health care professionals, promoters of the health, educators, managers,
5	PO	PO5	<b>Pharmaceutical ethics:</b> Honour personal values and apply ethical principle in professional and social contexts. Demonstrate behaviour that recognizes cultural and personal variability in values
6	PO	PO6	<b>Communication:</b> Communicate effectively with the pharmacy community and with society at large, such as being able to comprehend and write effective reports, make effective presentations
7	PO	PO7	<b>The pharmacy and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional
8	PO	PO8	<b>Environment and sustainability:</b> understand the impact of the professional pharmacy solutions in societal and environmental contexts , and demonstrate the knowledge of , and need for
9	PO	PO9	<b>Life - Long Learning :</b> Recognize the need for , and have the preparation and ability to engage in independent and Life - Long learning in the broadest context of technological change. Self Assess and use feedback effectively from others to identify learning needs







**PES MODERN COLLEGE OF PHARMACY**  
(NBA Accredited) (FOR LADIES)



Approved by AICTE, New Delhi (F.No.06/07/MS/PHARMA/2004/047, DTE,Mumbai (2/NGC/2004/342)  
Government of Maharashtra No. TEM/2004(235/04) TE-1, Pharmacy Council of India (32-347/2012-PC),  
Permanently affiliated to Savitribai Phule Pune University, ID No. PU/PH/Pharmacy/200/2004

Prof. Dr. S. N. Dhole  
M. Pharm., Ph. D.  
Principal

**PARENT SOCIETY :- PROGRESSIVE EDUCATION SOCIETY**

Prof. Dr. G. R. Ekbote,  
(M.S., M.N.A.M.S.) Chairman,  
Business Council P.E. Society, Pune

**STANDARD OPERATING PROCEDURE FOR PLANING AND IMPLEMENTATION OF CURRICULUM**

**D. PHARM**

- Design the Course Outcomes (COs) based on course objectives and weightage of topic in the syllabus. Diploma course must have six COs for theory and four COs for practical course.
- Prepare the course plan (for 75 lectures and 25 tutorials) considering the Hrs. assigned in the syllabus as well as actual number of lectures required for delivery of contents.
- Planner for theory and practical course should be prepared for 75 lectures and 25 practical turns including three sessional examinations.
- First internal theory assessment should be planned after completion of 30% of syllabus.
- At least 30% of the syllabus should be covered before First sessional theory exam which is normally conducted after 40-50 academics days. Weak and bright learners should be identified after evaluation. Corrective actions to be taken.
- For practical courses, 30-40 % of experiments should be covered before First sessional examination.
- At least 75% of the syllabus should be covered before Second sessional theory exam which is normally conducted after 60-75 academics days. Slow and advance learners identified should be reviewed after evaluation. Corrective actions to be taken if required.
- For practical courses, 50-75% experiments should be covered before Second sessional practical exam.
- Second continuous theory assessment should be conducted after completion of 75% syllabus and at the end of academic calendar.
- For practical courses, 100% experiments should be covered before third sessional practical exam.
- Third continuous theory assessment should be conducted after completion of 100% syllabus and at the end of academic calendar.
- The entire syllabus should be covered and all COs should be attained in 75 lectures or 25 experimental turn and 180 academic days.
- Attendance of students should be recorded on daily basis.

Revised By	Checked By	Approved and Authorized By
Ms. Archana S. Gadakh (Academic I/C)	Dr. Mohini C. Upadhye (HOD)	Dr. Shashikant. N. Dhole <b>PRINCIPAL</b> PES Modern College of Pharmacy (For Ladies)

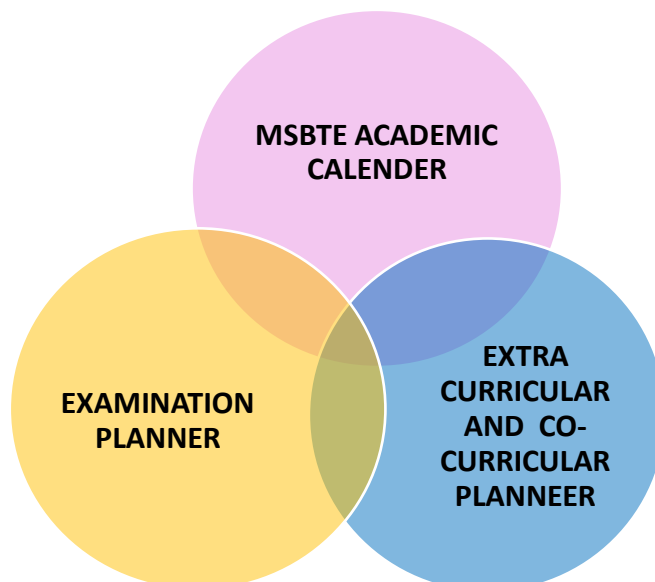


Borhadewadi, At/Post-Moshi,  
Tal. Haveli, Dist. Pune-412 105.

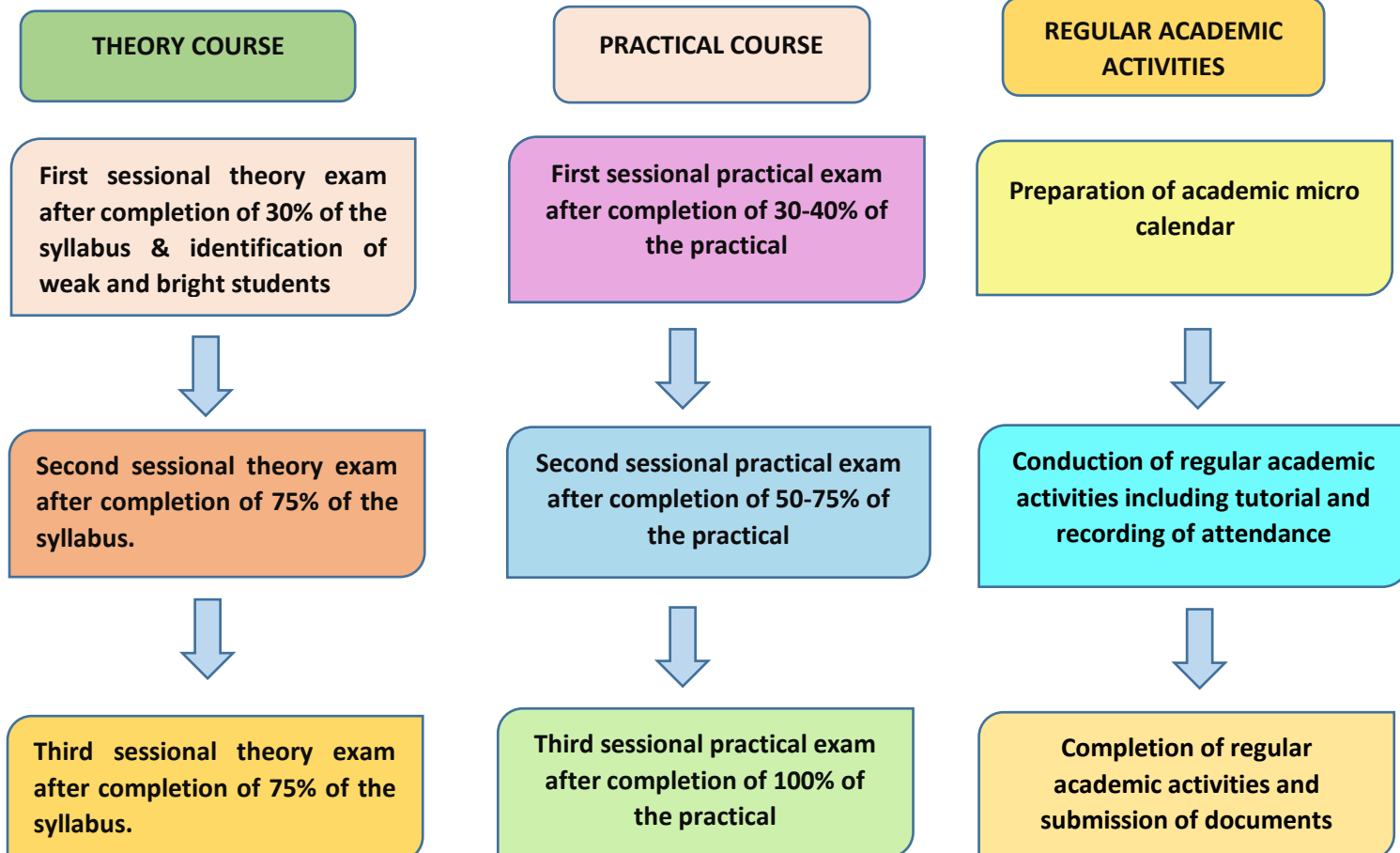




## PLANNING AND IMPLEMENTATION OF CURRICULAM



### ACADEMIC CALENDER & TIMETABLE





**COURSE  
OUTCOMES  
D.PHARMACY**

D.PHARMACY  
OUTCOMES  
COURSE





**PES MODERN COLLEGE OF PHARMACY(FOR LADIES) MOSHI,PUNE.**  
**COURSE OUTCOMES**  
**D.PHARMACY 2023-24 (J-SCHEME)**

<b>20111T Pharmaceutics (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20111T.CO1	Learn the pharmacopeia, history of the Pharmacy, packaging material, and pharmaceutical aids used in pharmaceutical formulations.
20111T.CO2	Describe the history of the pharmacy, pharmacopeia, packaging material, and pharmaceutical aids used in pharmaceutical formulations.
20111T.CO3	Understand unit operations in pharmaceutical manufacturing, and formulation of solid, liquid, and semisolid dosage forms.
20111T.CO4	Explain unit operations in pharmaceutical manufacturing, and formulation of solid, liquid, and semisolid dosage forms.
20111T.CO5	Know the concepts behind the sterile dosage forms, immunological products, QAQC, and novel drug delivery systems.
20111T.CO6	Discuss the concepts behind the sterile dosage forms, immunological products, QAQC, and novel drug delivery systems.

<b>20051P Pharmaceutics (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20051P.CO1	Define and give preparations of various pharmaceutical dosage forms along with examples.
20051P.CO2	Discuss and differentiate between various pharmaceutical dosage forms and their advantages and disadvantages.
20051P.CO3	Compute pharmaceutical formulations and dispense them in an appropriate container.
20051P.CO4	Analyze the basic quality control tests for prepared pharmaceutical dosage forms.
20051P.CO5	Generating reports based on knowledge gained through assignments and field visits.

<b>20112T Pharmaceutical Chemistry (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20112T.CO1	Understand the nomenclature of organic compounds, impurities, inorganic pharmaceuticals and volumetric analysis of the chemical substances given in the official monographs.
20112T.CO2	Explain about the impurities, volumetric analysis, inorganic pharmaceuticals and nomenclature of organic chemical systems with reference to heterocyclic compounds up to three rings.
20112T.CO3	Learn about the monograph of CNS, ANS, diuretic drug and cardiovascular system.
20112T.CO4	Describe the classification, chemical name, structure, uses, stability & storage conditions, formulation and brand names of CVS, CNS, diuretics and ANS drugs.
20112T.CO5	Define the hypoglycemic agents, analgesics & anti-inflammatory/NSAID's agents and anti-neoplastic agents.
20112T.CO6	Discuss the detail monograph of anti-neoplastics, anti-infective agent, hypoglycemic drugs.





<b>20051P Pharmaceutical Chemistry (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20052P.CO1	Understand the purity, limit tests, synthesis, volumetric & qualitative analysis for various inorganic elements.
20052P.CO2	Explain about the purity, limit tests, synthesis, volumetric & qualitative analysis for various inorganic elements.
20052P.CO3	Analyze systematic qualitative analysis tests to identify the unknown chemical substances and synthesis of organic compounds.
20052P.CO4	Determine the identification /purity test, limit test, volumetric analysis and fundamentals of preparative organic chemistry.
20052P.CO5	Generating report based on knowledge gained through the assignments.

<b>20113T Pharmacognosy (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20113T.CO1	Define Pharmacognosy, scope and classification, adulteration, Quality control of crude drugs of natural origin.
20113T.CO2	Illustrate types of adulteration, pharmacopeial standards and brief outline of plant metabolites.
20113T.CO3	Learn Pharmacognostic study of different categories of crude drugs with therapeutic efficacy
20113T.CO4	Discuss Pharmacognostic study of different categories of crude drugs including plant fibers used as surgical dressing
20113T.CO5	Understand indigenous systems of medicine, role of medicinal and aromatic plants in national economy, nutraceuticals, cosmeceuticals.
20113T.CO6	Explain and classify indigenous systems of medicine, herbal formulation. phytochemical investigation of crude drugs

<b>20051P Pharmacognosy (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20053P.CO1	Describe and identify the given crude drugs based on morphological characteristics.
20053P.CO2	Explain and discuss different evaluation parameters for identification of drugs of natural origin.
20053P.CO3	Examine given powdered drug with the help of physical and chemical tests.
20053P.CO4	Investigate the anatomical characteristics of the given crude drug under microscopical conditions
20053P.CO5	Generating reports based on knowledge gained through field visits and assignment.

<b>20114T Human Anatomy and Physiology (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20114T.CO1	Define and discuss the various terminology of the human body.
20114T.CO2	Execute the study of anatomical features of the human organs, tissues along with the homeostatic mechanism regulating the normal physiology in human system.
20114T.CO3	Define the Cardiovascular,Respiratory,Digestive,Skeletal and Nervous System.
20114T.CO4	Analyze and Evaluate the significances of various vital physiology parameters of the human body/system.
20114T.CO5	Understand the basic concepts of nervous system,sensesorgan,urinarysystem,endocrine and reproductive system.
20114T.CO6	Analyze and evaluate the significance of various vital physiology parameters of the human system.





<b>20054P Human Anatomy and Physiology (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20054P.CO1	Define and understand the hematological tests and skeletal system in human subjects.
20054P.CO2	Discuss the significance of various anatomical and physiological characteristic of the human body.
20054P.CO3	Know the important human tissues under the microscopical condition and human skeleton.
20054P.CO4	Record, Monitor and document the vital physiology parameters of human subjects and interpret the results.

<b>20115T Social Pharmacy (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20115T.CO1	Learn and understand roles of pharmacists in the various national health program and effect of environment on the health.
20115T.CO2	Discuss the effect of environment on the health and role of pharmacist in various health programs.
20115T.CO3	Understand the healthcare issues associated with food and nutritional substances.
20115T.CO4	Explain the various health hazardous with its preventive measures.
20115T.CO5	Know about various communicable and non communicable diseases along with its epidemiology.
20115T.CO6	Discuss various ongoing national health programs and the concept of the pharmacoconomics.

<b>20055P Social Pharmacy (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20055P.CO1	Learn the role and responsibilities of pharmacist in various diseases and national health programs.
20055P.CO2	Understand the various preventive measures for diseases and explain personal hygiene with family planning devices.
20055P.CO3	Illustrate the educational chart for communicable and non- communicable diseases and personal hygiene.
20055P.CO4	Discuss the first aid measures for various emergency condition.
20055P.CO5	Generating report based on the knowledge gained through field visits and assignments.

<b>20221T Pharmacology (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20221T.CO1	Define and understand basic concept of pharmacology along with drug acting on ANS and eye.
20221T.CO2	Describe the general pharmacology and drug acting on ANS and eye.
20221T.CO3	Define and learn drug acting on CNS ,CVS, Respiratory ,GIT system along with kidney.
20221T.CO4	Explain the pharmacological profile of drug acting on CNS, CVS, GIT, Respiratory system and drug acting on kidney
20221T.CO5	Know the pharmacology of hormone and hormone antagonist ,chemotherapeutic agent and understand the basic concept of autocoids and biologicals.
20221T.CO6	Analyze the effect of autocoids, hormones and hormone antagonists along with chemotherapeutic agent.





<b>20056P Pharmacology (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20056P.CO1	Student able to understand laboratory techniques used in experimental pharmacology
20056P.CO2	Discuss uses of experimental animal models in different pharmacological study.
20056P.CO3	Examine the effect of drugs in animal and illustrate the preclinical experiments.
20056P.CO4	Evaluate the effect of different drugs using the experimental animal models.
20056P.CO5	Plan and assessment of knowledge gained through assignment.

<b>20222T Community Pharmacy and Management (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20222T.CO1	Understand Community pharmacy practice, prescription, and Community Pharmacists' handling and communication skills.
20222T.CO2	Discuss the Community pharmacy practice, prescription, handling and communication skills of Community Pharmacists.
20222T.CO3	Learn patient counseling, Medication Adherence, Health Screening Services in Community Pharmacy, and OTC medications.
20222T.CO4	Describe patient counseling, Medication Adherence, Health Screening Services in Community Pharmacy, and OTC medications.
20222T.CO5	Know the concepts behind community pharmacy management.
20222T.CO6	Explain the concepts behind community pharmacy management.

<b>20057P Community Pharmacy and Management (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20057P.CO1	Understand the prescriptions, Patient counselling, identification of drug interactions in the prescription.
20057P.CO2	Discuss patient counseling on various diseases and minor ailments.
20057P.CO3	Design the patient information leaflets and counseling of patients on prescription or non prescription medicines.
20057P.CO4	Evaluate basic health screening tests of the patients in drug store.
20057P.CO5	Generating the report based on the knowledge gained through Assignments and field visits.

<b>20223T Biochemistry and Clinical Pathology (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20223T.CO1	Learn various functions of biomolecules like carbohydrates, proteins, Lipids, Nucleic acids and Enzymes.
20223T.CO2	Describe the Biological role of the different biomolecules in life processes.
20223T.CO3	Recall the metabolic pathways of different biomolecules in both physiological and pathological conditions.
20223T.CO4	Investigate the biological role of minerals along with water and electrolyte.
20223T.CO5	Explain different organ function tests.
20223T.CO6	Identify the clinical pathology of blood and urine.





<b>20058P Biochemistry and Clinical Pathology (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20058P.CO1	Recall different identification tests for biomolecules.
20058P.CO2	Discuss the qualitative analysis of biomolecules and quantitative analysis of blood and urine for different samples.
20058P.CO3	Identify different constituents of blood/serum by qualitative analysis.
20058P.CO4	Explain the hydrolysis of starch by salivary amylase.
20058P.CO5	Generating report based on knowledge gained through assignments.

<b>20224T Pharmacotherapeutics (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20224T.CO1	Define and discuss of Pharmacotherapeutics, CVS, Respiratory and Endocrine system.
20224T.CO2	Implementing the planning of rational medicine therapy for CVS, Respiratory and endocrine system diseases.
20224T.CO3	Define the CNS, GI, Haematological and infectious disease.
20224T.CO4	Analyze and evaluate drug related problems and provide therapeutics interventions of CNS, GI, Haematological and infectious disease.
20224T.CO5	Discuss the concepts of musculoskeletal, dermatology, psychiatric, ophthalmology and women health.
20224T.CO6	Executing the knowledge of musculoskeletal, dermatology, psychiatric, ophthalmology and women health.

<b>20059P Pharmacotherapeutics (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20059P.CO1	Define the of SOAPs (Subjective, Objective, Assessment and Plan) for the given clinical case of selected common diseases.
20059P.CO2	Understand and discuss SOAP notes for the given clinical cases of selected common diseases, counsel the patients about the disease condition and treatment.
20059P.CO3	Prepare SOAP notes for the given clinical cases of selected common diseases, counsel the patients about the disease condition and treatment.
20059P.CO4	Evaluate the SOAP notes for the given clinical cases of selected common diseases counsel the patients about the disease condition and treatment.

<b>20225T Hospital and Clinical Pharmacy (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
20225T.CO1	Learn the basic concepts of hospital pharmacy, its different committees in hospital and inventory control.
20225T.CO2	Discuss and Describe basic concepts of hospital pharmacy, its different committees in hospital and inventory control.
20225T.CO3	Understand the concepts of drug distribution, Radio pharmaceuticals and clinical pharmacy
20225T.CO4	Apply the concepts of drug distribution, Radio pharmaceuticals and clinical pharmacy.
20225T.CO5	Remember and understand the concepts of poisoning, clinical laboratory test, Pharmacovigilance and medication error.
20225T.CO6	Analyse the concepts of clinical laboratory test, poisoning, Pharmacovigilance and medication error.





20060P Hospital and Clinical Pharmacy (Practical)	
CO ID	Course Outcomes
20060P.CO1	Define and discuss handling drug information queries, drug therapy, ADR report and demonstration on various medical/ surgical aids and devices
20060P.CO2	Interpret and report the drug- drug interaction in common diseases for optimizing the drug therapy.
20060P.CO3	Execute the demonstration on various medical surgical aids and devices.
20060P.CO4	Evaluate the concepts for the given clinical cases of selected common diseases, counsel the patients about disease condition and treatment.
20060P.CO5	Generating the reports based on knowledge gained through assignment and field visit.

20226T Pharmacy Law and Ethics (Theory)	
CO ID	Course Outcomes
20226T.CO1	Understand the history and evolution of pharmacy laws, Acts, Code of ethics.
20226T.CO2	Discuss various acts, the rules, code of ethics related to pharmacy profession.
20226T.CO3	Learn various act, D and C Act, rules, regulatory authorities and agencies governing practice of Pharmacy Profession.
20226T.CO4	Describe D and C act, the powers of Inspectors, the sampling procedures and formalities in obtaining licenses under the rule, regulatory bodies.
20226T.CO5	Define fundamentals of patent laws, bioethics, basic aspects related to pharma manufacture, disposal, medical waste at homes, pharmacies, hospitals in perspective of pharmacy
20226T.CO6	Explain documentation, licenses ,renewals, e-governance related to pharmacy, basics related to manufacture, disposal, categorization of pharmaceuticals.





**PES MODERN COLLEGE OF PHARMACY(FOR LADIES) MOSHI,PUNE.**  
**COURSE OUTCOMES**  
**D.PHARMACY 2020-21 (S-SCHEME) (ER-91)**

<b>805T Pharmaceutics (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
805T.CO1	Learn the different dosage forms and their calculations by metrology, Packaging of pharmaceuticals, and Size Separation of Pharmaceutical powders.
805T.CO2	Discuss the different dosage forms and their calculations by metrology, Packaging of pharmaceuticals, and Size Separation of Pharmaceutical powders.
805T.CO3	Know the concepts behind Mixing, homogenization, filtration, extraction, Distillation, and evaporation along with the drying process.
805T.CO4	Explain the concepts behind Mixing, homogenization, filtration, extraction, Distillation, and evaporation along with the drying process.
805T.CO5	Understand the solid dosage forms, sterilization, and aseptic techniques for the preparation and evaluation of sterile dosage forms.
805T.CO6	Describe the solid dosage forms, sterilization, and aseptic techniques for the preparation and evaluation of sterile dosage forms.

<b>805P Pharmaceutics (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
805P.CO1	Define and give preparations of various pharmaceutical dosage forms along with examples.
805P.CO2	Discuss and differentiate between various pharmaceutical dosage forms and their advantages and disadvantages.
805P.CO3	Compute pharmaceutical formulations and dispense them in an appropriate container.
805P.CO4	Analyze the basic quality control tests for prepared pharmaceutical dosage forms.

<b>806T Pharmaceutical Chemistry-I (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
806T.CO1	Write the physical and chemical properties, medicinal and pharmaceutical uses, storage conditions and chemical incompatibility of Acids, bases and buffers, Antioxidants, GI Agents, Topic agents and Topical Agents.
806T.CO2	Explain about the monograph of Acids, bases and buffers, Antioxidants, GI Agents, Topic agents and Topical Agents.
806T.CO3	Learn about the Antimicrobials & Astringents, Dental Products, Respiratory stimulants, Expectorants & Emetics and Antidotes.
806T.CO4	Describe the physical and chemical properties, medicinal and pharmaceutical uses, storage conditions and chemical incompatibility of Antimicrobials & Astringents, Dental Products, Respiratory stimulants, Expectorants and Emetics and Antidotes.
DP806T.CO5	Define Major Intra and Extra cellular electrolytes, Inorganic official compounds, Radio pharmaceuticals and contrast media, Quality control of Drugs and pharmaceuticals and Identification tests.
DP806T.CO6	Describe about Major Intra and Extra cellular electrolytes, Inorganic official compounds, Radio pharmaceuticals and contrast media, Quality control of Drugs and pharmaceuticals and Identification tests.





<b>805P Pharmaceutics (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
806P.CO1	Understand the identification test, limit test and assay of inorganic pharmaceuticals.
806P.CO2	Explain about the identification test, limit test and assay of inorganic pharmaceuticals.
806P.CO3	Analyse the assay of inorganic compounds by acid base titration, redox titration, precipitation titration, complexometric titration.
806P.CO4	Determine limit test for chloride, Sulfate, Arsenic, Iron and Heavy metals and identification test for inorganic pharmaceuticals.

<b>807T Pharmacognosy (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
807T.CO1	Define Pharmacognosy, indigenous systems and classification of crude drugs
807T.CO2	Describe adulteration, pharmacopoeial standards and brief outline of plant metabolites.
807T.CO3	Explain Pharmacognostic study of different categories of crude drugs with therapeutic efficacy
807T.CO4	Discuss Pharmacognostic study of different categories of crude drugs with therapeutic efficacy of oxytocic, vitamins, enzymes, perfuming and flavouring agents.
807T.CO5	Learn and explain important natural products, their origin, cultivation, collection properties and Pharmacological activity.
807T.CO5	Know cultivation collection and gross anatomical studies of crude drugs of natural origin.

<b>807P Pharmacognosy(Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
807P.CO1	Describe and identify different given crude drugs based on morphological characteristics.
807P.CO2	Explain and discuss different evaluation parameters for identification of drugs of natural origin.
807P.CO3	Examine given powdered drug with the help of physical and chemical tests.
807P.CO4	Investigate the anatomical characteristics of the given crude drug under microscopical conditions

<b>808T Biochemistry and Clinical Pathology (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
808T.CO1	Describe the chemistry and role of carbohydrates, proteins and amino acids.
808T.CO2	Understand the biological role of lipids along with its abnormalities.
808T.CO3	Explain the role of vitamins, coenzymes, minerals and water in life processes.
808T.CO4	Evaluate the catalytic role of enzymes with its therapeutic and diagnostic applications.
808T.CO5	Know the pathology of blood and urine with their role in health and diseases.
808T.CO6	Apply the knowledge and skills associated with clinical pathology to correlate these with clinical signs and symptoms.





<b>805P Biochemistry and Clinical Pathology (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
808P.CO1	Detection of different biomolecules in the given sample.
808P.CO2	Identify the various normal and abnormal constituents of blood and urine.
808P.CO3	Understand microscopic and staining examination of sputum and faeces.
808P.CO4	Learn technique of withdrawal of blood and injecting drugs by various routes.

<b>809T Human Anatomy and Physiology (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
809T.CO1	Define and discuss the various terminology of the human body.
809T.CO2	Execute the study of anatomical features of the human organs, tissues along with the homeostatic mechanism regulating the normal physiology in human system.
809T.CO3	Define the Cardiovascular,Respiratory,Digestive,Skeletal and Nervous System.
809T.CO4	Analyze and Evaluate the significances of various vital physiology parameters of the human body/system.
809T.CO5	Understand the basic concepts of nervous system,sensesorgan,urinarysystem,endocrine and reproductive system.
809T.CO6	Analyze and evaluate the significance of various vital physiology parameters of the human system.

<b>809T Human Anatomy and Physiology(Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
809P.CO1	Define and understand the hematological tests and skeletal system in human subjects.
809P.CO2	Discuss the significances of various anatomical and physiological characteristic of the human body.
809P.CO3	Know the important human tissues under the microscopical condition and human skeleton.
809P.CO4	Record, monitor and document the vital physiological parameters of human subject and interpret the results.

<b>8010T Health Education and Community Pharmacy (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
8010T.CO1	Define and learn concept of health, nutrition and first aid treatment for emergency various condition.
8010T.CO2	Describe concept of health and nutrition along with the first aid treatment for emergency conditions.
8010T.CO3	Understand the fundamental principles of microbiology health and environment along with communicable diseases.
8010T.CO4	Explain the causative agent, mode of transmission and prevention for communicable disease and fundamental principle of microbiology along with environment and health.
DP8010T.CO5	Know the non communicable diseases, surface, arthropod, sexually transmitted infection and epidemiology.
DP8010T.CO6	Discuss the concept of immunity ,epidemiology and non communicable diseases along with arthropod, surface and sexually transmitted infections.





<b>8011T Pharmaceutics-II (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
8011T.CO1	Understand the prescriptions, incompatibilities in prescriptions, solid dosage forms, and posology of dosage forms.
8011T.CO2	Describe the prescriptions, incompatibilities in prescriptions, solid dosage forms, and posology of dosage forms.
8011T.CO3	Learn the monophasic and biphasic liquid dosage forms and semi-solid Dosage forms along with their excipients and stability studies.
8011T.CO4	Explain the monophasic and biphasic liquid dosage forms and semi-solid Dosage forms along with their excipients and stability studies.
8011T.CO5	Know the concept behind dental and Sterile dosage forms such as parenteral along with their sterilization techniques.
8011T.CO6	Discuss the concept behind dental and Sterile dosage forms such as parenteral along with their sterilization techniques.

<b>8011P Pharmaceutics-II (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
8011P.CO1	Define and give preparations of various pharmaceutical dosage forms along with examples.
8011P.CO2	Discuss and differentiate between various pharmaceutical dosage forms and their advantages and disadvantages.
8011P.CO3	Compute pharmaceutical formulations and dispense them in an appropriate container.
8011P.CO4	Analyze the basic quality control tests for prepared pharmaceutical dosage forms.

<b>8012T Pharmaceutical Chemistry-II (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
8012T.CO1	Understand in detail the monograph of anti-infective agents, tranquilizer, hypnotics, and general anesthetics drugs.
8012T.CO2	Explain in detail about the monograph of anti-infective agents, tranquilizer drugs, hypnotics drugs, and general anesthetics drugs.
8012T.CO3	Learn about the monograph of ANS, Diuretics, CVS, Hypoglycemic Agents, Coagulants and Anti-coagulants, local anesthetics and antidepressants.
8012T.CO4	Discuss in detail about the ANS drugs, Diuretics drugs, CVS drugs, Hypoglycemic Agents, Coagulants and Anti-coagulants, local anesthetics and antidepressants.
8012T.CO5	Learn about the monograph of histamine and anti-histaminic agents, NSAIDs, Thyroxine and Antithyroid, Diagnostic Agents, Anticonvulsants, cardiac glycosides, Antiarrhythmic, Antihypertensive & Vitamins. Steroidal Drugs, Anti-Neoplastic Drugs.
8012T.CO6	Describe about the detail monograph of histamine and anti-histaminic agents, NSAIDs, Thyroxine and Antithyroid, Diagnostic Agents, Anticonvulsants, cardiac glycosides, Antiarrhythmic, Antihypertensive & Vitamins. Steroidal Drugs, Anti-Neoplastic Drugs.





<b>8012P Pharmaceutical Chemistry (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
8012P.CO1	Define and give preparations of various pharmaceutical dosage forms along with examples.
8012P.CO2	Discuss and differentiate between various pharmaceutical dosage forms and their advantages and disadvantages.
8012P.CO3	Compute pharmaceutical formulations and dispense them in an appropriate container.
8012P.CO4	Analyze the basic quality control tests for prepared pharmaceutical dosage forms.

<b>8013T Pharmacology and Toxicology (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
8013T.CO1	Define and understand scope of pharmacology along with drug acting on CNS and eye.
8013T.CO2	Describe the basic concept of pharmacology and drug acting on CNS and eye.
8013T.CO3	Learn the concept of drug acting on Respiratory, Cardiovascular, Renal system and understand the physiological role of autocooids.
8013T.CO4	Explain the drugs acting on Cardiovascular, Respiratory, Renal along with physiological role of autocooids.
8013T.CO5	Know the concept of hormone and its antagonist and drug acting on digestive system along with understand chemotherapeutic agent of microbial diseases ,disinfectant and antiseptic.
8013T.CO6	Analyze the effect of hormone, hormone antagonist, disinfectant ,antiseptic and drug acting on digestive system and also describe the chemotherapy of microbial disease.

<b>8013T Pharmacology and Toxicology (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
8013P.CO1	Define and understand the effect of local anaesthetic, drug acting on eye, CNS, CVS and effect of pyrogen using experimental animals.
8013P.CO2	Discuss uses of experimental animal models in different pharmacological study.
8013P.CO3	Examine the effect of drugs in animal and illustrate the preclinical experiments.
8013P.CO4	Evaluate the effect of different drugs using the experimental animal models.

<b>8014T Pharmaceutical Jurisprudences (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
8014T.CO1	Recall and understand the objectives, scope of pharmaceutical legislation.
8014T.CO2	Explain principles, significance of professional ethics and pharmacy act.
8014T.CO3	Discuss about drugs and cosmetics act and the rules there under.
8014T.CO4	Describes the powers of inspectors, the sampling procedures and the formalities in obtaining licences under the rule
8014T.CO5	know about objectives, definitions, offences and penalties of different acts
8014T.CO6	Discuss defferent acts, objectives, advertisement of magic remedies, NDPS.





<b>8015 T Drug Store and Business Management (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
DP8015T.CO1	Introduction to trade and commerce, economics and business organizations including channels of distribution and concepts of convection accounting
DP8015T.CO2	Execute about drug house management along with legal requirements and concepts of convection accounting.
DP8015T.CO3	Understand codification, inventory control, ABC, VED analysis and general ledger and trial balances.
DP8015T.CO4	Analyze and evaluate the surplus disposals, sales promotion and market research and profit and loss account and balance sheet.
DP8015T.CO5	Understand about recruitments, training and compensation of pharmacist and techniques of financial statement.
DP8015T.CO6	Analyze and evaluate the knowledge of accounting, budgeting and finances.

<b>8016T Hospital Clinical Pharmacy (Theory)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
8010T.CO1	Learn the basic concepts of hospital, hospital pharmacy and drug distribution system in hospital.
8010T.CO2	Discuss and described the basic concepts of hospital, hospital pharmacy and drug distribution system in hospital.
8010T.CO3	Understand the concept of surgical dressing, hospital formulary system and clinical pharmacy.
8010T.CO4	Apply the concept of surgical dressing, hospital formulary system and clinical pharmacy.
8010T.CO5	Remember and understand drug interaction, ADR, Clinical toxicity and pathophysiology of various diseases.
8010T.CO6	Analyse drug interaction, ADR, Clinical toxicity and pathophysiology of various diseases.

<b>8016T Hospital Clinical Pharmacy (Practical)</b>	
<b>CO ID</b>	<b>Course Outcomes</b>
8016P.CO1	Defined and discussed the hospital and clinical pharmacy, raw material and their evaluation, preparation of transfusion fluid, evaluation of surgical dressing, demonstration of hospital supplies and handling of data processing equipment.
8016P.CO2	Analyse the raw material and various transfusion fluids.
8016P.CO3	Execute and apply the evaluation of surgical dressing, demonstration on sterile of hospital supplies and handling of processing equipment.
8016P.CO4	Evaluate the concepts of hospital and clinical pharmacy.

