



ANJUMAN-I-ISLAM'S

**KALSEKAR TECHNICAL CAMPUS (AIKTC)**

Approved by : All India Council for Technical Education, Council of Architecture, Pharmacy Council of India New Delhi,  
 Recognised by : Directorate of Technical Education, Govt. of Maharashtra, Affiliated to : University of Mumbai  
 & Maharashtra State Board of Technical Education.

- SCHOOL OF ENGINEERING & TECHNOLOGY
- SCHOOL OF PHARMACY
- SCHOOL OF ARCHITECTURE

**Program outcomes (Pos)**

<b>AIKTC-School of Pharmacy (D Pharm Course) w.e.f 2022_23 Program</b>	
Program outcomes (Pos)	
<b>PO1:Pharmacy Knowledge</b>	Possess knowledge and comprehension of core and basic knowledge associated with the profession of pharmacy.
<b>PO2:Modern tool usage</b>	Learn, select and apply appropriate methods and procedures, resources, and modern pharmacy related computing tools with an understanding of the limitation.
<b>PO3: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 and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and wellbeing.
<b>PO4:Professional identity</b>	Understand, analyze and communicate the value of their professional roles in society (e.g. health care professional, promoters of health, educator, managers, employers, employees).
<b>PO5:Pharmaceutical Ethics</b>	Honour personal values and apply ethical principles in professional and contexts. Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frame apply ethical principles while making decisions and take responsibility outcomes associated with the decisions.
<b>PO6: Communication</b>	Communicate effectively with the pharmacy community and with society large, such as, being able to comprehend and write effective reports, and effective presentations and documentation, and give and receive clear instructions.
<b>PO7:The Pharmacist and society</b>	Apply reasoning informed by the contextual knowledge to assess societal health, safety and legal issues and the consequent responsibilities related to the professional pharmacy practice.
<b>PO8: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, sustainable development.
<b>PO9: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 and to satisfy these needs on an ongoing basis.



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**Course outcomes (Cos)**

<b>AIKTC-School of Pharmacy (D Pharm Course) w.e.f 2022-23 Program</b>	
<b>Subject</b>	<b>Course outcomes (Cos)</b>
<b>PHARMACEUTICS THEORY</b>	1: Describe about the different dosage forms and their formulation aspects
	2: Explain the advantages, disadvantages, and quality control tests of different dosage forms
	3: Discuss the importance of quality assurance and good manufacturing practices
<b>PHARMACEUTICS PRACTICAL</b>	1: Calculate the working formula from the given master formula
	2: Formulate the dosage form and dispense in an appropriate container
	3: Design the label with the necessary product and patient information
	4: Perform the basic quality control tests for the common dosage forms
<b>PHARMACEUTICAL CHEMISTRY THEORY</b>	1: Describe the chemical class, structure and chemical name of the commonly used drugs and pharmaceuticals of both organic and inorganic nature
	2: Discuss the pharmacological uses, dosage regimen, stability issues and storage conditions of all such chemical substances commonly used as drugs.
	3: Describe the quantitative and qualitative analysis, impurity testing of the chemical substances given in the official monographs.
	4: Identify the dosage form & the brand names of the drugs and pharmaceuticals popular in the marketplace
<b>PHARMACEUTICAL CHEMISTRY PRACTICAL</b>	1: Perform the limit tests for various inorganic elements and report.
	2: Prepare standard solutions using the principles of volumetric analysis.
	3: Test the purity of the selected inorganic and organic compounds against the monograph standards.
	4: Synthesize the selected chemical substances as per the standard synthetic scheme.
	5: Perform qualitative tests to systematically identify the unknown chemical substances
<b>PHARMACOGNOSY THEORY</b>	1: Identify the important/common crude drugs of natural origin.
	2: Describe the uses of herbs in nutraceuticals and cosmeceuticals
	3: Discuss the principles of alternative system of medicines
	4: Describe the importance of quality control of drugs of natural origin
	1: Identify the given crude drugs based on the morphological characteristics



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<b>PHARMACOGNOSY PRACTICAL</b>	2:Take a transverse section of the given crude drugs
	3:Describe the anatomical characteristics of the given crude drug under microscopical conditions
	4:Carry out the physical and chemical tests to evaluate the given crude drugs
<b>HUMAN ANATOMY AND PHYSIOLOGY THEORY</b>	1:Describe the various organ systems of the human body
	2: Discuss the anatomical features of the important human organs and tissues.
	3. Explain the homeostatic mechanisms regulating the normal physiology in the human system.
	4. Discuss the significance of various vital physiological parameters of the human body.
<b>HUMAN ANATOMY AND PHYSIOLOGY PRACTICAL</b>	1. Perform the haematological tests in human subjects and interpret the results.
	2. Record, monitor and document the vital physiological parameters of human subjects and interpret the results.
	3. Describe the anatomical features of the important human tissues under the microscopical conditions.
	4. Discuss the significance of various anatomical and physiological characteristics of the human body.
<b>SOCIAL PHARMACY THEORY</b>	1. Discuss about roles of pharmacists in the various national health programs.
	2. Describe various sources of health hazards and disease preventive measures.
	3. Discuss the healthcare issues associated with food and nutritional substances.
	4. Describe the general roles and responsibilities of pharmacists in public health.
<b>SOCIAL PHARMACY PRACTICAL</b>	1. Describe the roles and responsibilities of pharmacists in various National health programs.
	2. Design promotional materials for public health awareness.
	3. Describe various health hazards including microbial sources.
	4. Advice on preventive measures for various diseases.
	5. Provide first aid for various emergency conditions.
<b>PHARMACOLOGY THEORY</b>	1. Describe the basic concepts of pharmacokinetics and pharmacodynamics.
	2.Enlist the various classes and drugs of choices for any given disease condition.
	3. Advice the dosage regimen, route of administration and contraindications for a given drug.
	4. Describe the common adverse drug reactions.
	1. Study and report the local anaesthetic, mydriatic and mitotic effects of the given drug on the rabbit eye.



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<b>PHARMACOLOGY PRACTICAL</b>	2. Choose appropriate animal experiment model to study the effects of the given drugs acting on the central nervous system and submit the report.
	3. Perform the effects of given tissues (simulated) on isolated organs / tissues and interpret the results.
	4. Interpret the dose dependent responses of drugs in various animal experiment models.
<b>COMMUNITY PHARMACY AND MANAGEMENT THEORY</b>	1. Describe the establishment, legal requirements, and effective administration of a community pharmacy.
	2. Professionally handle prescriptions and dispense medications.
	3. Counsel patients about the disease, prescription and or non-prescription medicines.
	4. Perform basic health screening on patients and interpret the reports in the community pharmacy settings.
<b>COMMUNITY PHARMACY AND MANAGEMENT PRACTICAL</b>	1. Handle and fill prescriptions in a professional manner.
	2. Counsel patients on various diseases and minor ailments.
	3. Counsel patients on prescription and or non-prescription medicines.
	4. Design and prepare patient information leaflets.
	5. Perform basic health screening tests.
<b>BIOCHEMISTRY &amp; CLINICAL PATHOLOGY THEORY</b>	1. Describe the functions of biomolecules.
	2. Discuss the various functions of enzymes in the human system.
	3. Explain the metabolic pathways of biomolecules in both physiological and pathological conditions.
	4. Describe the principles of organ function tests and their clinical significances.
	5. Determine the biomolecules / metabolites in the given biological samples, both qualitatively and quantitatively.
	6. Describe the clinical pathology of blood and urine.
<b>BIOCHEMISTRY &amp; CLINICAL PATHOLOGY PRACTICAL</b>	1. Qualitatively determine the biomolecules / metabolites in the given biological samples.
	2. Determine the normal and abnormal constituents in blood and urine samples and interpret the results of such testing.
<b>PHARMACOTHERAPEUTICS THEORY</b>	1. Help assessing the subjective and objective parameters of patients in common disease conditions.
	2. Assist other healthcare providers to analyse drug related problems and provide therapeutic interventions.
	3. Participate in planning the rational medicine therapy for common diseases.
	4. Design and deliver discharge counselling for patients.
	1. Write SOAP (Subjective, Objective, Assessment and Plan) notes for the given clinical cases of selected common diseases.



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<b>PHARMACOTHERAPEUTICS PRACTICAL</b>	2. Counsel the patients about the disease conditions, uses of drugs, methods of handling and administration of drugs, life-style modifications, and monitoring parameters.
<b>HOSPITAL &amp; CLINICAL PHARMACY THEORY</b>	1. Explain about the basic concepts of hospital pharmacy administration
	2. Manage the supply chain and distribution of medicines within the hospital settings.
	3. Assist the other healthcare providers in monitoring drug therapy and address drug related problems.
	4. Interpret common lab investigation reports for optimizing drug therapy.
<b>HOSPITAL &amp; CLINICAL PHARMACY PRACTICAL</b>	1. Professionally handle and answer the drug information queries.
	2. Interpret the common laboratory reports.
	3. Report suspected adverse drug reactions using standard procedures.
	4. Understand the uses and methods of handling various medical/surgical aids and devices.
	5. Interpret and report the drug-drug interactions in common diseases for optimizing the drug therapy.
<b>PHARMACY LAW &amp; ETHICS THEORY</b>	1. Describe the history and evolution of pharmacy law in India.
	2. Interpret the act and rules regulating the profession and practice of pharmacy in India.
	3. Discuss the various codes of ethics related to practice standards in pharmacy.
	4. Interpret the fundamentals of patent laws from the perspectives of pharmacy.