

M.PHARMACY

Programme Outcomes (POs)

- **Pharmaceutical Sciences knowledge:** Apply the knowledge of mathematics, science, pharmaceutical physical properties of the different pharmaceutical ingredients and the factor influencing them is very valuable for pharmaceutical dosage form design. Enables the students to learn about different packaging materials used in the pharmaceutical industry and the factors governing their use.
- **Unit Operations:** Pharmaceutical engineering renders knowledge about the basic unit operations that are taking place in the pharmaceutical industry and the different factors associated with it. This information is useful for both pharmaceutics and pharmaceutical engineering.
- **Entrepreneurship:** The knowledge on different pharmaceutical dosage forms is imparted to students. This knowledge comes while handling a pharmacy or a manufacturing unit or in the further courses.
- **Design/Development of solutions:** The information on solid dosage forms like tablets and capsules, their formulation, and quality control serves as an important prerequisite for dosage form design.
- **Application-oriented Knowledge:** The knowledge of biopharmaceutics enables the students to visualize the effect of pharmacokinetic (ADME) parameters on the biological effect of the drug. The correlation of pharmacokinetics and pharmacodynamics is thus introduced and is experimentally explained to them.
- **Conduct investigations of complex problems:** To understand biopharmaceutical principles and pharmacokinetic principles through different compartment models, multiple dosage regimens, non-linear pharmacokinetics, and assessment of bioavailability and bioequivalence
- **Effective Citizenship:** Demonstrate empathetic social concern equity-centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.



- **Ethics:** Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.
- **Environment and Sustainability:** Understand the issues of environmental contexts and sustainable development.
- **Self-directed and Life-long Learning:** Acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological changes.

Program Specific Outcomes (PSOs)

- To impart knowledge and skills on criteria for selection of drugs, dose calculations, dose adjustments by applying biopharmaceutics theories, pharmacokinetics, and bioequivalence models which gives technical skill knowledge in In-vitro and In-vivo studies using computer simulations, population modeling's, potential clinical pharmacokinetics, and problem analysis, selection of polymers and various preformulation elements, pilot plant scale-up techniques, industrial management, GMP considerations, stability testing, sterilization, formulation, evaluation and packaging of dosage forms in the manufacture of novel drug delivery systems.
- To create a talent pool by involving students in research projects and to make students to undertake research projects under faculty guidance for publication. Also to foster ambitious desire among students to undertake higher studies, career growth, and life-long learning.

