


## Syllabus for the Ph.D. Entrance Examination

Name Of the Institute	:	Institute of Pharmacy
Name of Department/Specialization	:	Pharmaceutics, Pharmacology, Pharmaceutical Chemistry, Pharmaceutical Analysis and Pharmacognosy
Academic Year	:	2025-2026

### RESEARCH METHODOLOGY

1. Fundamentals of Research
  - Objective & Types of Research
  - Selecting a research problem
  - Methods, Design and Tools used in research
  - Literature Survey, Primary & Secondary Sources of Information
  - Documentation types and techniques
2. The research Report/Paper writing/thesis writing and Scientific Writing
  - E-Resources
  - Presentation of Experimental Data
  - Ethics in Research & Publication
  - Plagiarism and software to detect plagiarism
  - Writing scientific manuscript
3. Research Grants Writing
  - Overview of various National and International Agencies
  - Types of different Government and Private granting bodies
  - Research Proposal Writing
4. Intellectual property rights (IPR) & Patents
  - IPR: Introduction to patents, copy rights & trademarks
  - Patent : Prior art search, patent filing in India and abroad, patent infringement
5. Statistics in research
  - Fundamentals and applications of mean, median, mode, standard deviation, SEM, Regression and Correlation analysis, hypothesis testing (Z-test, t-test, chi square etc.), ANOVA etc. in pharmaceutical research with its interpretations.

Date: 01/02/2025

  
Dr. Gopal Natesan  
Signature of HoI