

Principal: Dr. S. B. Bari M.Pharm. Ph.D., D.I.M.F.J.C.

## **Programme Educational Objectives and Program Outcomes**

## **Programme Educational Objectives**

- PEO 1: <u>Academic Excellence:</u> To provide sound knowledge of fundamental principles and their applications in the area of Pharmaceutical Sciences and Technology.
- PEO 2: <u>Competency and Inventiveness</u>: To produce pharmacy graduates with strong fundamental concepts and high technical competence in pharmaceutical sciences with innovative approaches.
- PEO 3: <u>Traits Improvement and Professionalism</u>: To introduce regulation, professionalism, team spirit, communication skills, social and ethical commitment in the graduates in order to embellish leadership roles facilitating improvement in healthcare sector with a distinct professional identity, business acumen, global recognition and sustainable development.
- PEO 4: <u>Social Contribution</u>: To train the students to contribute towards health care system
  by counselling for prophylaxis and prevention of diseases and creating awareness about
  healthcare issues.



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## Program Outcomes (B. Pharm)

- PO 1: <u>Pharmacy Knowledge</u>: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioural, social, and administrative pharmacy sciences; and manufacturing practices.
- PO 2: <u>Planning Abilities</u>: Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.
- PO 3: <u>Problem analysis:</u> Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyse, evaluate and apply information systematically and shall make defensible decisions.
- PO 4: Modern tool usage: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.
- PO 5: <u>Leadership skills:</u> Understand and consider the human reaction to change, motivation issues, leadership and team building when planning changes required for fulfilment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and wellbeing.
- PO 6: <u>Professional Identity</u>: Understand, analyse and communicate the value of their professional roles in society (e.g., health care professionals, promoters of health, educators, managers, employers, employees).
- PO 7: Pharmaceutical Ethics: Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behaviour that recognizes cultural and personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.

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- PO 8: <u>Communication</u>: Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.
- PO 9: <u>The Pharmacist and society:</u> Apply reasoning informed by the contextual knowledge
  to assess societal, health, safety and legal issues and the consequent responsibilities relevant
  to the professional pharmacy practice.
- PO 10: Environment and sustainability: Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO 11: <u>Life-long learning</u>: 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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## Program Outcomes (M. Pharm)

- PO 1: <u>Advanced Pharmaceutical Knowledge:</u> Possess advanced knowledge and understanding of pharmaceutics, quality assurance, and pharmaceutical chemistry, including formulation development, drug delivery systems, quality control, quality assurance principles, analytical techniques, and chemical synthesis.
- PO 2: Research and Development: Acquire research skills to design and conduct experiments, analyse data, interpret research findings, and contribute to the development of novel drug formulations, dosage forms, and analytical methods.
- PO 3: <u>Drug Formulation and Development:</u> Demonstrate proficiency in developing and optimizing various dosage forms, such as tablets, capsules, parenteral formulations, transdermal systems, and inhalation products, considering factors like stability, bioavailability, and patient acceptability.
- PO 4: <u>Quality Control and Quality Assurance</u>: Understand and apply quality control
  and quality assurance principles, including good manufacturing practices (GMP), quality
  management systems (QMS), validation protocols, and regulatory requirements, to ensure
  the safety, efficacy, and quality of pharmaceutical products.
- PO 5: <u>Analytical Techniques:</u> Gain expertise in a wide range of analytical techniques, including spectroscopy, chromatography, dissolution testing, particle size analysis, and microbiological testing, to evaluate drug substances and products for their identity, purity, potency, and stability.
- PO 6: <u>Drug Stability Studies:</u> Design and conduct stability studies to assess the
  degradation mechanisms, shelf-life, and storage conditions of pharmaceutical products,
  ensuring their quality and efficacy throughout their shelf life.
- PO 7: <u>Pharmaceutical Synthesis:</u> Develop skills in chemical synthesis, understanding reaction mechanisms, optimizing synthetic routes, and purifying pharmaceutical compounds, ensuring the synthesis of pure and safe drug substances.
- PO 8: Regulatory Compliance: Understand and comply with regulatory requirements and guidelines related to pharmaceutics, quality assurance, and pharmaceutical chemistry, ensuring adherence to relevant legal and ethical standards in drug development, manufacturing, and distribution.

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- PO 9: Quality Auditing and Compliance: Demonstrate the ability to perform audits and
  inspections of pharmaceutical manufacturing facilities, assess compliance with regulatory
  standards, identify and rectify quality-related issues, and contribute to continuous
  improvement in quality systems.
- PO 10: <u>Professional Communication and Collaboration</u>: Communicate effectively
  with diverse stakeholders, including healthcare professionals, regulatory authorities, and
  manufacturing personnel, demonstrating teamwork, leadership, and ethical conduct to
  achieve common goals in pharmaceutical research, development, and quality assurance.
- PO 11: <u>Lifelong Learning and Professional Development</u>: Recognize the importance
  of continuous professional development, engage in lifelong learning, and stay updated
  with emerging trends, new therapies, and advancements in pharmaceutical sciences,
  ensuring competence and excellence in pharmacy practice.



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