

# BHARAT INSTITUTE OF TECHNOLOGY (BIT)

Approved by AICTE, Pharmacy Council of India and Affiliated to JNTUH.

Sponsored by: CHINTA REDDY MADHUSUDHAN REDDY EDUCATIONAL SOCIETY Mangalpally (Village), Ibrahimpatnam (Mandal), Ranga Reddy District - 501510

Accreditated by NAAC

# PROGRAMME OUTCOMES-PHARMACY

- PO1. **Pharmacy knowledge**: Apply the knowledge of Pharmacy core subjects, mathematics, English, basic science fundamentals to the solution of complex pharmacy related problems.
- PO2. **Problem analysis**: Identify, formulate, search literature and analyze complex problems, reaching substantiated conclusions using first principles of Pharmacy subjects, natural sciences and mathematics and related allied subjects
- PO3. **Design/development of solutions**: Design solutions for Pharmacy related problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, the cultural, societal and environmental considerations.
- PO4. **Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of the information to provide valid conclusions.
- PO5. **Modern tool usage**: Create, select and apply appropriate techniques, resources, and modern tools including prediction and modelling to complex activities with an understanding of the limitations.
- PO6. **Pharmacist and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional pharmacy practice.
- PO7. **Environment and sustainability**: Understand the impact of the professional solutions in societal and environmental contexts and demonstrate the knowledge for sustainable development.
- PO8. **Ethics**: Apply ethical principles, commit to professional ethics, responsibilities and norms of the pharmacy practice.
- PO9. **Individual and team work**: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10. **Communication**: Communicate effectively on complex professional activities with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, design documentation, make effective presentations, give and receive clear instructions.
- PO11. **Project management and finance**: Demonstrate knowledge and understanding of the pharmacy profession and management principles, apply these to one's own work, as a member and leader in a team to manage projects and in multidisciplinary environments.
- PO12. **Life-long learning:** 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.

#### PROGRAMME SPECIFIC OUTCOMES-B.PHARM

# PSO<sub>1</sub>

Students are expected to acquire good knowledge and understanding in the core and allied subjects of Pharmacy which prepares them to be a successful pharmacy graduate to enter into various pharmacy professional careers/ sectors.

#### PSO<sub>2</sub>

Students are able to correlate and interrelate the subjects and apply the theoretical and practical knowledge to formulation developments, analysis, pharmacology, clinical pharmacy, herbal drug cultivation and development, commercial production of drugs, screening of drugs for various activities and other related areas including new drug development to succeed in their career

#### PSO<sub>3</sub>

Students will be able to acquire ability to communicate effectively and display leadership qualities and demonstrate sense of social and ethical responsibilities in their professional endeavors

#### PSO<sub>4</sub>

Able to utilize the knowledge in drug laws for entrepreneurship development, marketing and as an official working under government pertaining to drugs and cosmetics/scheduled drugs/maintenance of standard and quality of manufacturing, selling, import, export, laws related to testing and approval of new drugs and other related legal aspects

#### PROGRAMME SPECIFIC OUTCOMES-PHARM D & PHARM D-PB

#### PSO<sub>1</sub>

Understand basic concept of Pharmacology, Clinical Pharmacy, Community Pharmacy, Hospital Pharmacy, Clinical Pharmacotherapeutics, Medicinal Chemistry, Natural products and their applications, Application of statistics in research, etc.

#### PSO<sub>2</sub>

Demonstrate knowledge, awareness and ethical responsibility to the health care system which include patients, physicians, health workers, fellow pharmacy professionals and at large society

#### PSO<sub>3</sub>

Applying modern technology and available tools to provide better patient health care and patient counseling by updating and upgrading the professional knowledge

#### PSO<sub>4</sub>

Abide to the laws of code of conduct with respect of professional of pharmacy in relation to job, trade, profession and medical professionals to support the health care system

#### PROGRAMME SPECIFIC OUTCOMES-M. Pharm Pharmaceutics

#### **PSO1:**

Apply the concept of drug delivery system in the development of sustainable, effective dosage forms and to take on the work with respect to quality control and quality assurance

#### PSO2:

Create, assess, analyze, organize and develop the formulae, protocol and data information with respect production of pharmaceutical dosage forms

#### PSO3:

Assimilate the professional and general ethical principles framed by pharmacy vigilant and regulatory bodies

**PSO4**: Apply innovative ideas and accomplish productive team work in respective areas of their discipline and will be able to set up production units/analytical labs etc

# PROGRAMME SPECIFIC OUTCOMES-M. Pharm Pharmacology

#### PSO1:

Apply the concept of pharmacology and toxicology to develop screening models for various potential molecules and drugs

### PSO2:

Analyze and evaluate toxicity profile of molecules and drug candidate and apply ethical practices in animal and human studies

#### PSO3:

Acquire knowledge to conduct preclinical and clinical studies on various drug candidates /drugs and assimilate professional and general ethical principles framed by pharmacy vigilant and regulatory bodies

**PSO4**: Apply appropriate innovative ideas and achieve productive team work in respective areas of their discipline and will be able to set up pharmacology lab/research lab

# PROGRAMME SPECIFIC OUTCOMES-M. Pharm - Pharmacy Practice

# PSO<sub>1</sub>

Understand basic concept of Pharmacology, Clinical Pharmacy, Community Pharmacy, Hospital Pharmacy, Clinical Pharmacotherapeutics, Medicinal Chemistry, Natural products and their applications, Application of statistics in research, etc.

#### PSO<sub>2</sub>

Demonstrate knowledge, awareness and ethical responsibility to the health care system which include patients, physicians, health workers, fellow pharmacy professionals and at large society

#### PSO<sub>3</sub>

Applying modern technology and available tools to provide better patient health care and patient counseling by updating and upgrading the professional knowledge

## PSO<sub>4</sub>

Abide to the laws of code of conduct with respect of professional of pharmacy in relation to job, trade, profession and medical professionals to support the health care system

# PROGRAMME EDUCATIONAL OBJECTIVES PHARMACY PRACTICE

#### **PEO 1**

Impart knowledge and skills necessary for contribution to quality use of medicines

#### PEO 2

Know the therapeutic approach to the management of various diseases

#### PEO<sub>3</sub>

Know the controversies in drug therapy

#### **PEO 4**

Know the importance of preparation of individualized therapeutic plans based on Diagnosis and laboratory reports

#### **PEO 5**

Appreciate the need to identify the patient-specific parameters relevant in initiating suitable therapy

#### **PHARMACEUTICS**

#### PEO 1

To provide profound knowledge and fundamental concepts of Pharmaceutical Sciences and

#### PEO 2

To make the competent pharmacy graduates to cater the needs of the society with novel and innovative knowledge with a professional touch

#### **PEO 3**

To create skill development, professionalism, strengthen team spirit, moral and ethical professional commitment, leadership qualitative, professional identity and recognition for the betterment of the health care sector and society at large

#### **PEO 4**

To build the students towards the development of health care system by providing the skills of manufacturing, analyzing and assuring the quality dosage forms for better social health care

#### **PHARMACOLOGY**

#### **PEO 1**

To impart core knowledge of pharmacology, toxicology and various clinical aspects

# PEO<sub>2</sub>

To introduce leadership and entrepreneurship capabilities in students

#### PEO<sub>3</sub>

To assimilate practical and theoretical knowledge through participation in forums, conferences and various professional activities

#### **PEO 4**

To widen the horizons of students by project implementation, collaborative research with adepts, participation in training programmes/workshops