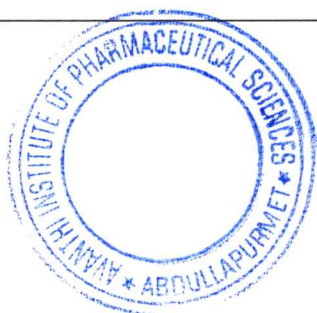





2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all the programmes offered by the Institution are stated and displayed on the website

S NO	Description	Regulation	Year	Semester	Page No
1	POs, COs, PSOs for B Pharmacy	-	-	-	1
2	POs, COs, PSOs for Pharm D	-	-	-	11-12
3	POs, COs, PSOs for M Pharmacy Pharmaceutics & Pharmaceutical Analysis	-	-	-	21-22
Course out comes for B Pharmacy (UG Program)					
4	B Pharmacy	(R22)	I	I	2-3
				II	3-4
			II	I	5
				II	6-7
		(R17)	III	I	7-8
				II	8
			IV	I	9
				II	9-10
Course out comes for Pharm D					
5	Pharm D	PCI(R08)	I	-	12-13
			II	-	14-15




PRINCIPAL
 AVANTHI INSTITUTE OF
 PHARMACEUTICAL SCIENCES
 Gunthapally (V), Abdullapurmet (M),
 R.R. Dist. Telangana.



AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES

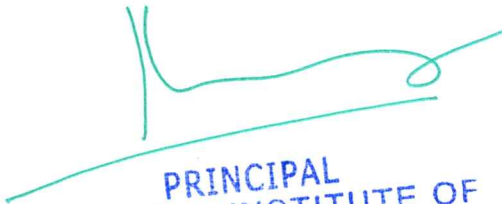
(Approved by PCI, AICTE & Affiliated to JNTUH)

Gunthapally (V), Abdullapurmet (M), R.R. Dist., Near Ramoji Filmcity, Hyderabad - 501 512.



			III	-	15-17
			IV	-	18-19
			V	-	20
Course out comes for M Pharm Pharmaceutics & Pharmaceutical Analysis					
6	M Pharm (pharmaceutics)	R22	I	I	23-24
			II	II	24
		R19	II	I	25
7	M Pharm (Pharmaceutical Analysis)	R22	I	I	26
			II	II	27
		R19	II	I	27




PRINCIPAL
AVANTHI INSTITUTE OF
PHARMACEUTICAL SCIENCES
Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.



2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the Institution are Stated and displayed on website and attainment of Pos and Cos are evaluated

PO 1 Pharmacy Knowledge: Have sound knowledge of fundamental principles and their applications in the area of Pharmaceutical Sciences and Technology.

PO 2 Practical Skill: Develop an ability to use lab equipment and different kinds of simulation software with an in depth knowledge to design synthetic and analytical processes to perform experiments on synthesis, design, pharmaceutical analysis, pharmacological evaluation and formulation problem.

PO 3 Professional Identity: Develop ability for in-depth analytical and critical thinking in order to identify, formulate and solve the issues related to Pharmaceutical Industry, Regulatory Agencies, and Hospital Pharmacy & Community Pharmacy.

PO 4 Problem Solving: Develop an ability to solve, analyze and interpret data generated from Formulation Development, Quality Control & Quality Assurance.

PO 5 Communication: Develop written and oral communication skills in order to communicate effectively the outcomes of the Pharmaceutical problems.

PO 6 Planning Ability: Have an ability to acquire sound knowledge in order to execute the responsibilities successfully towards developing expertise as per the needs of industry and academia.

PO 7 Leadership Skills & Team Work : Develop team spirit, apart from responding to the social needs and professional ethics

PO 8 Life Long Learning: Develop an aptitude for lifelong learning and continuous professional development.


PO 09 The Pharmacist & Society: Develop an understanding for the need of pharmaceutical sciences and technology towards giving quality life to people in society.

PO 10 Environment & Sustainability: Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PSO1: Able to apply the knowledge gained during the course of the program in drug discovery and development, their safety and efficacy and current technologies in Pharmaceutical industry

PSO 2: Able to apply the knowledge of ethical and management principles required to work in a team as well as to lead a team.




PRINCIPAL
AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES
Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.



BPHARMACY I&II SEM COURSE OUTCOMES FOR THE ACADEMIC YEAR 2022-23

S.NO	YEAR/SEM	COURSE NAME	COURSE OUTCOMES
1	I-I	HUMAN ANATOMY AND PHYSIOLOGY-I	CO1: Students would have studied about the gross morphology, structure and functions of cell, skeletal, muscular, cardiovascular system of the human body
			CO2: They would have understood the various homeostatic mechanisms and their imbalances.
			CO3: Students would be able to identify the different types of bones in human body.
			CO4: Students would be able to identify the various tissues of different systems of human body.
2	I-I	PHARMACEUTICAL ANALYSIS I	CO1: Learning this subject content will develop the ideas with the fundamental of analytical chemistry among the pupil.
			CO2: It constructs the fundamental methodology to prepare different strength of solutions.
			CO3: It facilitate the fellow pupil to predict the sources of mistakes and errors.
			CO4: It helps to develop the fundamentals of volumetric analytical skills.
3	I-I	PHARMACEUTICS I	CO1: Upon completion of this program the student will have fundamental knowledge in preparing conventional dosage forms
4	I-I	PHARMACEUTICAL INORGANIC CHEMISTRY	CO1: Well acquainted with the principles of limit tests.
			CO2: Familiar with different classes of inorganic pharmaceuticals and their analysis
			CO3: Identification of different anions, cations and different inorganic pharmaceuticals.
			CO4: Knowledge about the sources of impurities and methods to determine the impurities in inorganic drugs and pharmaceuticals

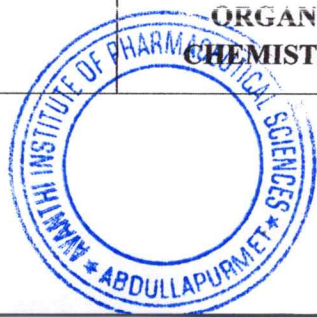


PRINCIPAL
AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES
Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.



5	I-I	COMMUNICATION SKILLS	CO1: Understand the behavioral needs for a Pharmacist to function effectively in the areas of pharmaceutical operation
			CO2: Communicate effectively (Verbal and Non Verbal)
			CO3: Effectively manage the team as a team player
			CO4: Develop interview skills
6	I-I	REMEDIAL MATHEMATICS	CO1: Apply mathematical concepts and principles to perform computations for Pharmaceutical Sciences.
			CO2: Create, use and analyze mathematical representations and mathematical relationships
			CO3: Communicate mathematical knowledge and understanding to help in the field of Clinical Pharmacy
			CO4: Perform abstract mathematical reasoning.

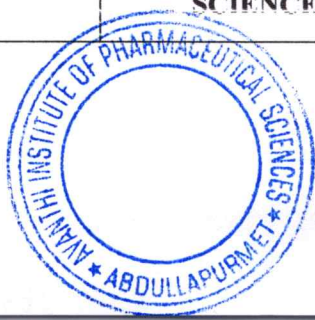
S.NO	YEAR/SEM	COURSE NAME	COURSE OUTCOMES
1	I-II	HUMAN ANATOMY AND PHYSIOLOGY II	CO1: Students would have studied about the gross morphology, structure and functions of nervous, respiratory, urinary and reproductive systems in the human body.
			CO2: They would have studied in detailed about energy and metabolism.
			CO3: Students would able to identify the various organs of different systems of human body.
			CO4: They would have performed and learnt about the experiments like neurological reflex, body temperature measurement
2	I-II	PHARMACEUTICAL ORGANIC CHEMISTRY I	CO1: Write the structure, name of the organic compound
			CO2: Knowledge about the type of isomerism
			CO3: Write the reaction, name the reaction and



PRINCIPAL
AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES
 Gunthapally (V), Abdullapurmet (M),
 R.R. Dist. Telangana.



			orientation of reactions
			CO4: Account for reactivity/stability of compounds
3	I-II	BIOCHEMISTRY	CO1: To understand the importance of metabolism of substrates.
			CO2: Will acquire chemistry and biological importance of biological macromolecules.
			CO3: To acquire knowledge in qualitative and quantitative estimation of the biological macromolecules.
			CO4: To know the interpretation of data emanating from a Clinical Test Lab.
4	I-II	PATHOPHYSIOLOGY	CO1: Describe the etiology and pathogenesis of the selected disease states
			CO2: Knowledge of signs and symptoms of the diseases
			CO3: Identify the complications of the diseases.
			CO4: Know most commonly encountered pathophysiological state(s) and/or disease mechanism(s), as well as any clinical testing requirements
5	I-II	COMPUTER APPLICATIONS IN PHARMACY	CO1: Apply the knowledge of mathematics and computing fundamentals to pharmaceutical applications for any given requirement
			CO2: Design and develop solutions to analyze pharmaceutical problems using computers.
			CO3: Integrate and apply efficiently the contemporary IT tools to all Pharmaceutical related activities
			CO4: Solve and work with a professional context pertaining to ethics, social, cultural and regulations with regard to Pharmacy
6	I-II	ENVIRONMENTAL SCIENCES	CO1: This program shall create an awareness about environmental problems, develop an attitude towards of concern for the environment.



PRINCIPAL
AVANTHI INSTITUTE OF
PHARMACEUTICAL SCIENCES
Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.



S.NO	YEAR/SEM	COURSE NAME	COURSE OUTCOMES
1.	II-I	PHARMACEUTICAL ORGANIC CHEMISTRY – II	CO1: write the structure name and type of isomerism of organic compound
			CO2: write the reaction, name and its orientation
			CO3: account for reactivity/stability of compounds
			CO4: prepare organic compound
2.	II-I	PHYSICAL PHARMACEUTICS - I	CO1: Understand various physicochemical properties of drug molecules in the designing the dosage form
			CO2: Know the principles of chemical kinetics & to use them in assigning expiry date for formulation
			CO3: Demonstrate use of physicochemical properties in evaluation of dosage forms.
			CO4: Appreciate physicochemical properties of drug molecules in formulation research and development
3.	II-I	PHARMACEUTICAL MICROBIOLOGY	CO1: Understand methods of identification, cultivation and preservation of microorganisms
			CO2: Importance of sterilization in microbiology. and pharmaceutical industry
			CO3: Learn sterility testing of pharmaceutical products.
			CO4: Microbiological standardization of Pharmaccuticals.
4.	II-I	PHARMACEUTICAL ENGINEERING	CO1: To know various unit operations used in Pharmaceutical industries
			CO2: To perform various processes involved in pharmaceutical manufacturing process
			CO3: To carry out various test to prevent environmental pollution.
			CO4: To appreciate the various preventive methods used for corrosion control in Pharmaceutical industries.



PRINCIPAL
AVANTHI INSTITUTE OF
PHARMACEUTICAL SCIENCES
Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.



S.NO	YEAR/SEM	COURSE NAME	COURSE OUTCOMES
1.	II-II	PHARMACEUTICAL ORGANIC CHEMISTRY – III	CO1: understand the methods of preparation and properties of organic compounds
			CO2: explain the stereo chemical aspects of organic compounds and stereo chemical reactions
			CO3: know the medicinal uses and other applications of organic compounds
2.	II-II	MEDICINAL CHEMISTRY – I	CO1: understand the chemistry of drugs with respect to their pharmacological activity
			CO2: understand the drug metabolic pathways, adverse effect and therapeutic value of drugs
			CO3: know the Structural Activity Relationship (SAR) of different class of drugs
			CO4: write the chemical synthesis of some drugs
3.	II-II	PHYSICAL PHARMACEUTICS - II	CO1: Understand various physicochemical properties of drug molecules in the designing the dosage form
			CO2: Know the principles of chemical kinetics & to use them in assigning expiry date for Formulation
			CO3: Demonstrate use of physicochemical properties in evaluation of dosage forms.
			CO4: Appreciate physicochemical properties of drug molecules in formulation research and Development
4.	II-II	PHARMACOLOGY - I	CO1: Understand the pharmacological actions of different categories of drugs
			CO2: Explain the mechanism of drug action at organ system/sub cellular/ macromolecular levels
			CO3: Apply the basic pharmacological knowledge in the prevention and treatment of various diseases.
			CO4: Observe the effect of drugs on animals by simulated experiments



PRINCIPAL
AVANTHI INSTITUTE OF
PHARMACEUTICAL SCIENCES
Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.



AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Approved by PCI, AICTE & Affiliated to JNTUH)

Gunthapally (V), Abdullapurmet (M), R.R. Dist., Near Ramoji Filmcity, Hyderabad - 501 512.



5.	II-II	PHARMACOGNOSY AND PHYTOCHEMISTRY - I	CO1: know the techniques in the cultivation and production of crude drugs
			CO2: know the crude drugs, their uses and chemical nature
			CO3: know the evaluation techniques for the herbal drugs
			CO4: carry out the microscopic and morphological evaluation of crude drugs

S.NO	YEAR/SEM	COURSE NAME	COURSE OUTOMES
1.	III-I	PHARMACEUTICAL MICROBIOLOGY	CO1: know the anatomy, identification & cultivation of microorganisms
			CO2: Perform sterilization of various pharmaceutical products, equipment, culture media etc.
			CO3: Perform sterility testing of pharmaceutical products.
			CO4: Perform microbiological assay of antibiotics, Vitamins and amino acids
2.	III-I	PHARMACEUTICAL TECHNOLOGY – I	CO1: Student would know the pre formulation parameters in designing the dosage form, ICH guidelines, preparation and evaluation of semisolids, ophthalmic and cosmetics.
3.	III-I	PHARMACOLOGY – I	CO1: Student would Understand the pharmacological aspects of drugs, importance of pharmacology subject as a basis of therapeutics and correlate the knowledge therapeutically.
4.	III-I	PHARMACOGNOSY – II	CO1: Student would able to know about the phytopharmaceuticals of commercial significance and the various applications of the crude drugs in the preparation of formulations as medicaments and excipients (Flavors, perfumes, sweeteners and colorants).
5.	III-I	DRUG REGULATORY AFFAIRS	CO1: Student would able to know the clear information about the regulations in India and abroad is gained by the students.



PRINCIPAL
AVANTHI INSTITUTE OF
PHARMACEUTICAL SCIENCES
Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.



6.	III-I	PROFESSIONAL ETHICS	CO1: The students would be able to understand the importance of Values and Ethics in their personal lives and professional careers. The students will learn the rights and responsibilities as an employee, team member and a global citizen.
----	-------	----------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

S.NO	YEAR/SEM	COURSE NAME	COURSE OUTCOMES
1.	III-II	MEDICINAL CHEMISTRY – II	CO1: Student would be able to gain good knowledge about the usage of medicinal substances, the synthesis and drug-drug interactions, so that they can get involved with confidence in the patient counseling
2.	III-II	PHARMACEUTICAL TECHNOLOGY – II	CO1: The students would be able to know various aspects of pharmaceutical product preparations and evaluations of tablets, capsules etc.
3.	III-II	PHARMACOLOGY – II	CO1: Student would be able to understand the pharmacological aspects of drugs, importance of pharmacology subject as a basis of therapeutics and correlate the knowledge therapeutically
4.	III-II	CHEMISTRY OF NATURAL PRODUCTS	CO1: Student would be able to know The knowledge of the students is enhanced with the clear information about the natural products which are having medicinal importance
5.	III-II	DRUG DESIGN AND DISCOVERY	CO1: The students would be in a position to identify lead for new drug design, to design and discover the novel drug with the knowledge they gained through the study of the various topics of the syllabus.



PRINCIPAL
AVANTHI INSTITUTE OF
PHARMACEUTICAL SCIENCES
Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.



S.NO	YEAR/SEM	COURSE NAME	COURSE OUTOMES
1.	IV-I	PHARMACOGNOSYIII	CO1: Student would able to gain good knowledge about the therapeutically important crude drugs and phytopharmaceuticals also biologically important molecules from marine sources & neutraceuticals
2.	IV-I	BIOPHARMACEUTICS AND PHARMACOKINETICS	CO1: The students would able to get fundamental knowledge of Biopharmaceutics and Pharmacokinetics And also know how the adsorption , distribution , metabolism , excretion takes place .
3.	IV-I	PHARMACOLOGY – III	CO1: Student would able to understands the pharmacological aspects of drugs, therapeutics of various diseases and pathophysiology of common diseases and their management.
4.	IV-I	MEDICINAL CHEMISTRY-III	CO1:The students would be in a position to identify lead for new drug design and information about various antibiotic and their chemotherapeutic agents.
5.	IV-I	PHARMACY ADMINISTRATION	CO1: The students would be able to gain knowledge about aspect of business administration in new economic environment & know social and behaviour aspects of Pharmacy.

S.NO	YEAR/SEM	COURSE NAME	COURSE OUTOMES
1.	IV-II	NOVEL DRUG DELIVERY SYSTEMS & REGULATORY AFFAIRS	CO1: Student would able to gain knowledge on controlled drug delivery system and different regulatory agencies act on release of NDA & ANDA
2.	IV-II	PHARMACEUTICAL BIOTECHNOLOGY	CO1: The students would able to get fundamental knowledge various techniques employed in biotechnology
3.	IV-II	PHARMACEUTICAL	CO1: Student would able to know various



PRINCIPAL
AVANTHI INSTITUTE OF
PHARMACEUTICAL SCIENCES
Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.



AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES

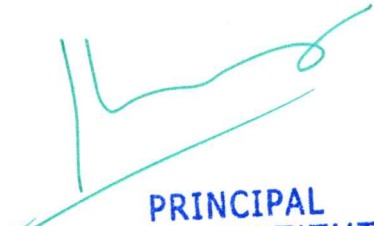
(Approved by PCI, AICTE & Affiliated to JNTUH)

Gunthapally (V), Abdullapurmet (M), R.R. Dist., Near Ramoji Filmcity, Hyderabad - 501 512.



		ANALYSIS-II	advanced instrumental techniques for analysis of various Pharmaceutical substances.
4.	IV-II	HUMAN VALUES AND PROFESSIONAL ETHICS	CO1: The students would be able to understand the importance of Values and Ethics in their personal lives and professional careers.
5.	IV-II	CLINICAL PHARMACY PRACTICE	CO1: The students would be able to know the use of medicines and their therapeutics of disease management




PRINCIPAL
AVANTHI INSTITUTE OF
PHARMACEUTICAL SCIENCES
Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.