



Dr. Bhimrao Ambedkar University, Agra

A State University of Uttar Pradesh (Paliwal Park, Agra -282004)

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A Documentary Support

for

Matric No. – 1.1.1

Programme Outcomes & Course Outcomes

under the

Criteria – I

(Curriculum Design and Development)

Key Indicator - 1.1

in

Matric No. – 1.1.1

DOCTOR OF PHARMACY (PHARM. D.)


Registrar
Dr. B.R.A. University, Agra

Mapping:



Local Need



Regional



National



Global Need

- **PO1-Pharmacy knowledge** : Possess knowledge and comprehension of the core and **basic knowledge** pertaining to the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; **clinical practices**.
- **PO2-Clinical Pharmacy Practice** : Develop competency in analysing and interpretation skills in medical emergency and provide high quality therapy in all areas of clinical care and monitoring including structure based therapeutic evaluation. appreciate the concept of **Rational drug** therapy in diverse therapeutic intervention. Provide high quality evidence based patient-centric care with clinician.
- **PO3-Problem Analysis** : **Develop ability to utilize the principles of** scientific enquiry and improves critical thinking in order to identify, formulate and solve the issues related to Patient care.
- **PO4-Modern tool Usage** : Learn, **select and apply appropriate techniques**, and efficient utilization of resources, softwares for overcoming the limitations of conventional practices.
- **PO5-Communication skills** : **Communicate effectively regarding issues** related to **patient specific** with the pharmacy community and society.
- **PO6-Professional Identity** : Act in consultative position with other healthcare team and **contribute to the training of pharmacy** students and the growth and success of pharmacy profession.
- **PO7-Pharmaceutical Ethics** : **Honour personal values** and apply ethical values in professional and social context. Demonstrate high degree of professional, ethical and legal manners, conforming with all national, state and local rules and regulations related to pharmacy practice.
- **PO8-Planning Abilities** : Develop and apply skills for time management and utilization of resources and implement them to complete the task to meet deadlines.
- **PO9-Leadership skills** : **Inculcate leadership abilities** for competent team-centric approaches to improve and facilitate the health and well-being of society.
- **PO10-Environment and sustainability** : Understand the impact of the professional pharmacy solution in societal and environmental perspectives, and demonstrate the knowledge for sustainable development.
- **PO11-Life-long learning** : Recognize the need to engage independent and life long learning to update the practice to keep in pace with the ever-changing technological aspects. **Self-assessment** along with feedback analysis to identify the grey areas for improvement of diverse skills as a continuous process.

Programme outcome of Pharm.D After completion graduate are ready to	
PO1-Pharmacy knowledge	Possess knowledge and comprehension of the core and basic knowledge pertaining to the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; clinical practices
PO2-Clinical Pharmacy Practice	Develop competency in analysing and interpretation skills in medical emergency and provide high quality therapy in all areas of clinical care and monitoring including structure based therapeutic evaluation. appreciate the concept of Rational drug therapy in diverse therapeutic intervention. Provide high quality evidence based patient-centric care with clinician.
PO3-Problem Analysis	Develop ability to utilize the principles of scientific enquiry and improves critical thinking in order to identify, formulate and solve the issues related to Patient care.
PO4-Modern tool Usage	Learn, select and apply appropriate techniques, and efficient utilization of resources, software's for overcoming the limitations of conventional practices.
PO5-Communication skills	Communicate effectively regarding issues related to patient specific with the pharmacy community and society.
PO6-Professional Identity	Act in consultative position with other healthcare
PO7-Pharmaceutical Ethics	Honour personal values and apply ethical values in professional and social context. Demonstrate high degree of professional, ethical and legal manners, conforming with all national, state and local rules and regulations related to pharmacy practice.
PO8-Planning Abilities	Develop and apply skills for time management and utilization of resources and implement them to complete the task to meet deadlines.
PO9-Leadership skills	Inculcate leadership abilities for competent team-centric approaches to improve and facilitate the health and well-being of society.
PO10-Environment and sustainability :	Recognize the need to engage independent and lifelong learning to update the practice to keep in pace with the ever-changing technological aspects. Self-assessment along with feedback analysis to identify the grey areas for improvement of diverse skills as a continuous process.
PO11-Life-long learning	Recognize the need to engage independent and life long learning to update the practice to keep in pace with the ever-changing technological aspects. Self-assessment along with feedback analysis to identify the grey areas for improvement of diverse skills as a continuous process.

NAME OF SUBJECT :	Human Anatomy & Physiology
SUBJECT CODE :	22 PD 11T
BRANCH	Pharmacy
SEMESTER/YEAR	1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	They would have learnt the gross anatomy, histology and physiology of various organs of the human body.	L1, L2
CO2	They would identify the various tissues and organs associated with the different organ systems with help of charts and specimens.	L2, L3
CO3	They would have studied the coordination in functioning of different organs of each system.	L2, L3
CO4	They would have understood the several physiological homeostatic mechanisms and their imbalances in human body.	L2, L3
CO5	They would have learnt the interlinked mechanisms in the maintenance in normal and physical exercise conditions.	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 11.1	✓			✓
CO PD 11.2	✓		✓	✓
CO PD 11.3	✓	✓	✓	✓
CO PD 11.4		✓	✓	✓
CO PD 11.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4
Avg.														

NAME OF SUBJECT :	Pharmaceutics
SUBJECT CODE :	22 PD 12T
BRANCH	Pharmacy
SEMESTER/YEAR	1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Upon completion of this program the student will know different dosages aspects	L1, L2
CO2	Different dosage forms	L2, L3
CO3	Different pharmaceutical calculation	L2, L3
CO4	The importance of good formulation for effectiveness.	L2, L3
CO5	Preparation, handling and storage of dosage forms	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 12.1	✓			✓
CO PD 12.2	✓		✓	✓
CO PD 12.3	✓	✓	✓	✓
CO PD 12.4		✓	✓	✓
CO PD 12.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4
Avg.														

NAME OF SUBJECT :	Medicinal Biochemistry
SUBJECT CODE :	22 PD 13T
BRANCH	Pharmacy
SEMESTER/YEAR	1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	To understand the importance of metabolism of substrates.	L1, L2
CO2	Will acquire chemistry and biological importance of biological macromolecules.	L2, L3
CO3	To acquire knowledge in qualitative and quantitative estimation of the biological macromolecules.	L2, L3
CO4	To know the interpretation of data emanating from a Clinical Test Lab.	L2, L3
CO5	To know how physiological conditions influence the structures and reactivity's of biomolecules..	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 13.1	✓			✓
CO PD 13.2	✓		✓	✓
CO PD 13.3	✓	✓	✓	✓
CO PD 13.4		✓	✓	✓
CO PD 13.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4
Avg.														

NAME OF SUBJECT :	Pharmaceutical Organic Chemistry
SUBJECT CODE :	22 PD 14T
BRANCH	Pharmacy
SEMESTER/YEAR	1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	To be able to give systematic names to simple organic compounds and poly functional group.	L1, L2
CO2	To achieve an understanding of the behavior of organic compounds and to establish a foundation for studies into natural and synthetic products of pharmaceutical interest.	L2, L3
CO3	To acquire the knowledge and understanding of the basic experimental principles of pharmaceutical organic chemistry.	L2, L3
CO4	To draw the structures and synthesize simple pharmaceutically active organic compounds.	L2, L3
CO5	To describe detailed mechanisms for common reactions.	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 14.1	✓			✓
CO PD 14.2	✓		✓	✓
CO PD 14.3	✓	✓	✓	✓
CO PD 14.4		✓	✓	✓
CO PD 14.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4
Avg.														

NAME OF SUBJECT :	Pharmaceutical Inorganic Chemistry
SUBJECT CODE :	22 PD 15T
BRANCH	Pharmacy
SEMESTER/YEAR	1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Well acquainted with the principles of limit tests.	L1, L2
CO2	Understand the principles and procedures of analysis of drugs and also regarding the application of inorganic pharmaceutical.	L2, L3
CO3	Knowledge about the sources of impurities and methods to determine the impurities in inorganic drugs and pharmaceuticals	L2, L3
CO4	Appreciate the importance of inorganic pharmaceuticals in preventing and curing the disease.	L2, L3
CO5	To have been introduced to a variety of inorganic drug classes.	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 15.1	✓			✓
CO PD 15.2	✓		✓	✓
CO PD 15.3	✓	✓	✓	✓
CO PD 15.4		✓	✓	✓
CO PD 15.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4
Avg.														

NAME OF SUBJECT :	Remedial Mathematics/Biology
SUBJECT CODE :	22 PD 16T
BRANCH	Pharmacy
SEMESTER/YEAR	1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Apply mathematical concepts and principles to perform computations for Pharmaceutical Sciences.	L1, L2
CO2	Create, use and analyze mathematical representations and mathematical relationships	L2, L3
CO3	Cell biology (Basic Nature of Plant cell and Animal cell)	L2, L3
CO4	Classification System of both Plants & Animals	L2, L3
CO5	Various tissue system and organ system in plant and animals	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 16.1	✓			✓
CO PD 16.2	✓		✓	✓
CO PD 16.3	✓	✓	✓	✓
CO PD 16.4		✓	✓	✓
CO PD 16.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4
Avg.														

NAME OF SUBJECT :	Pathophysiology
SUBJECT CODE :	22 PD 21T
BRANCH	Pharmacy
SEMESTER/YEAR	2 nd
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Students will define the basic pathogenesis of human disease.	L1, L2
CO2	Students will define and explore the most common etiologies and predisposing factors associated with human disease	L2, L3
CO3	Students understands the basis for some laboratory tests and other diagnostic procedures	L2, L3
CO4	Students will make correlations between pathophysiology and clinical skills they are learning in their allied health science programs.	L2, L3
CO5	Students will understand how the various organ systems are interrelated, and use this understanding to promote a holistic approach towards the evaluation and treatment of patients	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 21.1	✓			✓
CO PD 21.2	✓		✓	✓
CO PD 21.3	✓	✓	✓	✓
CO PD 21.4		✓	✓	✓
CO PD 21.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2													3	3
3													2	2
4													2	3
5													3	4
Avg.														

NAME OF SUBJECT :	Pharmaceutical Microbiology
SUBJECT CODE :	22 PD 22T
BRANCH	Pharmacy
SEMESTER/YEAR	2 nd
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Students can able to demonstrate an understanding at an advanced level of microbial virulence mechanisms and host response to infection; application of molecular techniques to medical microbiology; microbial susceptibility and resistance to antimicrobial agents; replication of viruses , viral immunology and pathogenesis, detection of viruses	L1, L2
CO2	Students can able to understanding of various infections (microbial causes, pathogenesis, transmission of infection, diagnosis, prevention and treatment) by being able to identify a unknown organisms in clinical samples, and describe the pathogenesis of important pathogens	L2, L3
CO3	Students Demonstrate a basic understanding of the pathogenesis of some important fungal infections of humans , and be able to identify and isolate them from clinical samples	L2, L3
CO4	Students Work cooperatively as part of a small group and Critically assess and interpret scientific literature	L2, L3
CO5	Students can Analyze and report on complex research questions , and solve problems, plan a work program or diagnostic strategy and learn independently	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 22.1	✓			✓
CO PD 22.2	✓		✓	✓
CO PD 22.3	✓	✓	✓	✓
CO PD 22.4		✓	✓	✓
CO PD 22.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3

5												3	4
Avg.													

NAME OF SUBJECT :	Pharmacognosy & Phytopharmaceuticals
SUBJECT CODE :	22 PD 23T
BRANCH	Pharmacy
SEMESTER/YEAR	2 nd
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Herbs and their Science	L1, L2
CO2	Classification of Medicinal Plants, Phytochemistry, Carbohydrates, Lipids	L2, L3
CO3	Terpenes, Polyphenols, Alkaloids, Pharmacology, Toxicity, Formulations and Preparations of Herbal Medicines	L2, L3
CO4	How herbs influence our physiology and can be helpful against several disorders.	L2, L3
CO5	Relations between Phyto-therapy and the Elderly, Phytotherapy and Children, Understanding Herbal Action, and Understanding the Materia Medica.	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 23.1	✓			✓
CO PD 23.2	✓		✓	✓
CO PD 23.3	✓	✓	✓	✓
CO PD 23.4		✓	✓	✓
CO PD 23.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4
Avg.														

NAME OF SUBJECT :	Pharmacology I
SUBJECT CODE :	22 PD 24T
BRANCH	Pharmacy
SEMESTER/YEAR	2 nd
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	The student would have learnt about the different drugs used with an emphasis on its classification, Pharmacodynamic and pharmacokinetic aspects, adverse effects, Therapeutic uses.	L1, L2
CO2	They would have studied, dose, route of administration, precautions, and contraindications.	L2, L3
CO3	They would have understood the pharmacological aspects of drugs used to treat ailment of different organ systems of the body.	L2, L3
CO4	They would appreciate the importance of drug discovery by preclinical and clinical trials.	L2, L3
CO5	They would appreciate the importance of pharmacology	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 24.1	✓			✓
CO PD 24.2	✓		✓	✓
CO PD 24.3	✓	✓	✓	✓
CO PD 24.4		✓	✓	✓
CO PD 24.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4
Avg.														

NAME OF SUBJECT :	Community Pharmacy
SUBJECT CODE :	22 PD 25T
BRANCH	Pharmacy
SEMESTER/YEAR	2 nd
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Students will provide patient centered care to diverse patients using the best available evidence and in consideration of patients' circumstances to devise, modify, implement, document and monitor pharmacotherapy care plans, either independently or as part of healthcare team	L1, L2
CO2	Students will demonstrate knowledge of the business and professional practice management skills in community pharmacies.	L2, L3
CO3.	Students will educate patients through counselling & provide health screening services to public	L2, L3
CO4	Students will identify symptoms of minor ailments and provide appropriate medication	L2, L3
CO5	Students will participate in prevention programs of communicable diseases	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 25.1	✓			✓
CO PD 25.2	✓		✓	✓
CO PD 25.3	✓	✓	✓	✓
CO PD 25.4		✓	✓	✓
CO PD 25.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2

4														2	3
5														3	4
Avg.															

NAME OF SUBJECT :	Pharmacotherapeutics I
SUBJECT CODE :	22 PD 26T
BRANCH	Pharmacy
SEMESTER/YEAR	2 nd
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Students will be able to describe the pathophysiology and management of cardiovascular, respiratory and endocrine diseases	L1, L2
CO2	Students will be developing Patient case based Assessment Skills	L2, L3
CO3	Students will be able to describe the quality use of medicines issues surrounding the therapeutic agents in the treatment of these diseases	L2, L3
CO4	Students will have developed clinical skills in the therapeutic management of these conditions	L2, L3
CO5	Continue to develop communication skills.	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 26.1	✓			✓
CO PD 26.2	✓		✓	✓
CO PD 26.3	✓	✓	✓	✓
CO PD 26.4		✓	✓	✓
CO PD 26.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	3
2													3	2
3													2	3
4													3	4
5														
Avg.														

NAME OF SUBJECT :	Pharmacotherapeutics III
SUBJECT CODE :	22 PD 41T
BRANCH	Pharmacy
SEMESTER/YEAR	PB 1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Initiate drug therapy and the anticipated therapeutic goals by therapeutic intervention	L1, L2
CO2	Know the effective use of non-pharmacological therapeutic interventions in the treatment of specific diseases, conditions and symptoms.	L2, L3
CO3	Demonstrate the ability to effectively communicate and work collaboratively together with others in the small group setting	L2, L3
CO4	Have moral reasoning, ethical judgement and professionalism	L2, L3
CO5	Students will have developed clinical skills in the therapeutic management of these conditions	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 41.1	✓			✓
CO PD 41.2	✓		✓	✓
CO PD 41.3	✓	✓	✓	✓
CO PD 41.4		✓	✓	✓
CO PD 41.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4

Avg.																			
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NAME OF SUBJECT :	Hospital Pharmacy
SUBJECT CODE :	22 PD 42T
BRANCH	Pharmacy
SEMESTER/YEAR	PB 1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Know Various Drug Distribution Methods;	L1, L2
CO2	Know The Professional Practice Management Skills In Hospital Pharmacies;	L2, L3
CO3	Provide Unbiased Drug Information To The Doctors;	L2, L3
CO4	Know The Manufacturing Practices Of Various Formulations In Hospital Set Up;	L2, L3
CO5	Appreciate The Practice Based Research Methods	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 42.1	✓			✓
CO PD 42.2	✓		✓	✓
CO PD 42.3	✓	✓	✓	✓
CO PD 42.4		✓	✓	✓
CO PD 42.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4

Avg.																			
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NAME OF SUBJECT :	Biopharmaceutics & Pharmacokinetics
SUBJECT CODE :	22 PD 45T
BRANCH	Pharmacy
SEMESTER/YEAR	PB 1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Broader understanding about the concepts of biopharmaceutics and pharmacokinetics.	L1, L2
CO2	Ability to calculate the various pharmacokinetic parameters by using various mathematical models.	L2, L3
CO3	Ability to design a basic protocol for the conduct of BA/BE study and the interpretation of the BA/BE data	L2, L3
CO4	Preparedness to use the concepts of pharmacokinetic principles in the clinical contexts.	L2, L3
CO5	Ability to design and perform <i>in-vitro</i> dissolution studies for various drugs as per the standards of official monographs	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 45.1	✓			✓
CO PD 45.2	✓		✓	✓
CO PD 45.3	✓	✓	✓	✓
CO PD 45.4		✓	✓	✓
CO PD 45.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
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1															2	
2																3
3															3	2
4															2	3
5															3	4
Avg.																

NAME OF SUBJECT :	Clinical Toxicology
SUBJECT CODE :	22 PD 46T
BRANCH	Pharmacy
SEMESTER/YEAR	PB 1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	Developing general working knowledge of the principles and practice of clinical toxicology	L1, L2
CO2	Demonstrating an understanding of the health implications of toxic exposures and commonly involved chemicals for toxicity	L2, L3
CO3	Demonstrating and applying an understanding of general toxicology principles and clinical management practice	L2, L3
CO4	Demonstrating and applying an understanding of the history, assessment, and therapy considerations associated with the management of a toxic exposure	L2, L3
CO5	Demonstrating and apply an understanding of the characteristics of and treatment guidelines for specific toxic substances	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 46.1	✓			✓
CO PD 46.2	✓		✓	✓
CO PD 46.3	✓	✓	✓	✓
CO PD 46.4		✓	✓	✓
CO PD 46.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1													2	
2														3
3													3	2
4													2	3
5													3	4
Avg.														

NAME OF SUBJECT :	Pharmacotherapeutics I & II
SUBJECT CODE :	22 PD 47T
BRANCH	Pharmacy
SEMESTER/YEAR	PB 1 st
SESSION	2022-2023
FACULTY NAME	Dr. Gaurav Rajauria

CO STATEMENT: The student will be able to		Level
CO1	The pathophysiology of selected disease states and the rationale for drug therapy.	L1, L2
CO2	The therapeutic approach to management of these diseases.	L2, L3
CO3	The controversies in drug therapy.	L2, L3
CO4	The importance of preparation of individualized therapeutic plans based on diagnosis.	L2, L3
CO5	Needs to identify the patientspecific parameters relevant in initiating drug therapy, and monitoring therapy (including alternatives, time-course of clinical and laboratory indices of therapeutic response and adverse effects).	L2, L3, L4

Alignment/Mapping of COs & PSOs (Course Articulation Matrix)

(a) CO Mapping with Assessment tools

Course Outcomes	Sessional 1	Sessional 2	Sessional 3	End Term Exam
CO PD 47.1	✓			✓
CO PD 47.2	✓		✓	✓
CO PD 47.3	✓	✓	✓	✓
CO PD 47.4		✓	✓	✓
CO PD 47.5		✓		✓

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
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1														2	
2															3
3														3	2
4														2	3
5														3	4
Avg.															

6