KIET School of Pharmacy

Academic Session: Even 2023-24

Course Code: BP201T

Year: I

Semester:

П

Course Coordinator Name:

Dr. Praveen K. Dixit

After comp	oletion of the course, the student will be able to	Relevant POs	Revised Bloom's Level (BL)	Knowledge Category (KC
CO No.	Statement of Course Outcome	1 ( 0 11	Understand	Factual & Conceptual
CO1	Understand the anatomy and physiology of the Nervous system.	1, 6, 9, 11		Factual & Conceptual
CO2	Illustrate anatomy and physiology of Digestive System and energetics (ATP, Creatinine Phosphate).	1, 6, 9, 11	Apply	4
	Explore the structure and functions of Respiratory System and Urinary	1, 6, 9, 11	Analyze	Factual & Conceptual
CO3	System.  Illustrate the anatomical and physiological aspects of the Endocrine	1, 6, 9, 11	Apply	Factual & Conceptual
CO4	System	1, 6, 9, 11	Analyze	Factual & Conceptual
CO5	Infer the structural and functional aspects of Reproductive System and Genetics		7 shary ze	

	,				Progra	mme Outco	ome (PO)				1000
CO No.				1	5	6	- 7	8	9	10	11
COTIO	1	2	3	4				1000	1		2
CO1			es es 23 %	10171222	14 11 12 11		1111111	2 2 2 2 2 3 3 7 7 7	1		2
CO2	3	å,				1			1		2
CO3	3				-	1			1		2
CO4	3					1			1		2
CO5	3			A CONTRACTOR		1		C	**************************************		2
PO Target	3	- 81				1		the Course	1	Signatur	e

**Faculty Members Teaching the Course** Signature **Faculty Members Teaching the Course** Mrs. Priya Bansal Longe Barrand Praveen Dr. Praveen K. Dixit

Signature of Course Coordinator

Program Name: B. Pharm

Course Name: HAP-II

Assoc./ Asst. Head DOC

Signature of Addl. HoD

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### KIET School of Pharmacy

Program Name: B. Pharm

Course Name: P. Organic Chemistry-I

**Course Outcomes** 

Academic Session: Even 2023-24

Course Code: BP202T

Year:

Semester:

Course Coordinator Name: Dr. Abhay Bhardwaj

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	<b>Knowledge Category</b>
CO No.	Statement of Course Outcome	PROPERTY OF THE STATE OF THE ST	Level (BL)	(KC)
CO1	Illustrate the chemistry and isomerism of Organic Compounds.	1, 3, 4,6,7,9,11	Apply	Factual & Conceptual
CO2	Illustrate the chemistry and applications of Alkanes, Alkenes and Conjugated dienes.	1, 3, 4,6,7,9,11	Apply	Factual & Conceptual
CO3	Understand the chemistry and applications of Alkyl halide and Alcohols	1,3,4,6,7,9,11	Apply	Factual & Conceptual
CO4	Understand about chemistry and applications of Carbonyl compounds.	1, 3, 4,6,7,9,11	Apply	Factual & Conceptual
CO5	Describe chemistry and applications of Carboxylic acids and Amines.	1, 3, 4,6,7,9,11	Apply	Factual & Conceptual

CO No.	(5)	Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11		
COI	3.	_	2	2	-	2	1	987	2	(4)	3		
CO2	3	-	2	2	-	2	1	The co <del>l</del> ection	2	-	3		
CO3	3	-	2	2	-	2	1	-	2		3		
CO4	- 3	<b>a</b> , -	2	2	-	2	1	-	2	-	3		
CO5	3		2	2		2	1	-	2		3		
PO Target	3		2	2		. 2	1	<del>-</del>	2	150	3		

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Abhay Bhardwaj	Charle	Dr. Şmriti	Insil lahr

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 – 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIET School of Pharmacy**

Program Name: B. Pharm Course Name: Biochemistry

**Course Outcomes** 

Academic Session: Even 2023-24

Course Code: BP203T

Year: I

Semester: II

Course Coordinator Name: Pragati Gupta

After comp	oletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category
CO No.	Statement of Course Outcome		Level (BL)	(KC)
CO1	Apply the concepts of biomolecules and bioenergetics.		Apply	Factual & Conceptual
CO2	Explore the knowledge of carbohydrate metabolism and biological oxidation and underlying diseases.	1,9,10,11	Apply	Factual & Conceptual
CO3	Analyze the concepts of lipid and amino acid metabolism and their role in various diseases.	1,6,9,10,11	Analyze	Factual & Conceptual
CO4	Illustrate the concept of nucleic acid metabolism and transfer of genetic information.	1,3,4,6,9,10,11	Analyze	Factual & Conceptual
CO5	Classify various types of enzymes and their role as diagnostic and therapeutic applications	1,2,3,4,6,7,8,10,11	Analyze	Conceptual & Procedural

		Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	. 7	8	9	10	11		
	3	11112111	FF NEAT EST E	11121111		110417	1114111	1011-011	21272111	1:1:1::::	2 / 2 / 3 / 5		
CO2	3	_	-	-	•		-	(18)	2	1	2		
CO3	3			82	-	1	-	749	2	1	2		
CO4	3	- '	3	2	· ·-	2	-	-	2	1	2		
CO5	3	1		1		1	. 1	2	1	1	2		
PO Target	3.00	1.00	2.00	1.50	-	1.33	1.00	2.00	1.75	1.00	2.00		

<b>Faculty Members Teaching the Course</b>	Signature	Faculty Members Teaching the Course	Signature
Ms. Pragati Gupta	tagar	· Mr. Surya Prakash	Spi

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

**KIET School of Pharmacy** 

Program Name: B. Pharm

Course Name: Pathophysiology

Academic Session: Even 2023-24 Course Code: BP204T

Year: I

Semester: II

Course Coordinator Name: Dr. Roma Ghai

**Course Outcomes** 

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category
CO No.	Statement of Course Outcome		Level (BL)	(KC)
CQ1	Understand the basic mechanisms involved in the process of injury and inflammation.	1, 11	Understand	Factual & Conceptual
CO2	Illustrate the pathological mechanisms involved in the development of cardiovascular, renal, and respiratory diseases.	1,9,115	Apply	Factual & Conceptual
CO3	Explore the mechanisms of development of diseases associated with the blood, endocrine, nervous, and gastrointestinal systems.	1,9,11	Analyze	Factual & Conceptual
CO4	Illustrate the development and progression of inflammatory diseases along with cancer.	1,9,11	Apply	Factual & Conceptual
CO5	Infer the etiology and pathogenesis of infectious and sexually transmitted diseases.	1,9,11	Analyze	Factual & Conceptual

003		Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	7	8	9	10	11	
CO1	3	ė,			5		4				2	
CO2	3				A 1			4	2		2	
CO3	3	2							2		2	
CO4	3	e le ce ce ce c		4 60	THE REST				2		2	
CO5	3								2		2	
PO Target	3						10 2 10		2	4	2	

Signature **Faculty Members Teaching the Course Faculty Members Teaching the Course** Signature Dr. Roma Ghai Dr. Praveen Kumar Dixit Whai

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

**KIET School of Pharmacy** 

Academic Session: Even 2023-24

Year: I

Semester: II

Course Name: Computer Applications in Pharmacy

Program Name: B. Pharm

development.

**Course Outcomes** 

Course Code: BP205T

**Course Coordinator Name:** 

Ms. Sakshi Garg

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category (KC
CO No.	Statement of Course Outcome	Recevant 1 Os	Level (BL)	Knowledge Category (RC
CO1	Understand the concept of number systems and information systems.	3,4,8,11	Understand	Factual & Conceptual
CO2	Interpret various web technologies and databases.	1,2,3,4,5,10,11	Evaluate	Factual & Conceptual
CO3	Illustrate the various types of application of computers in pharmacy.	1,2,3,4,5,6,7,8,11	Apply	Factual & Conceptual
CO4	Explore the objective, concept, and impact of Bioinformatics	1,2,3,4,6,7,8,9,11	Analyze	Factual & Conceptual
CO5	Acquire the application of computers in data analysis in Preclinical	1,2,3,4,5,6,7,8,10,11	Apply	Conceptual & Procedural

CON	* :	Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	7	8	9	10	11	
CO1	-	-	2	3	W (**	-		2	-	- 1	3	
CO2	2	2 4 4 4 2	2 1111	3	2 2	73 F3 F3 F3		1 f 1 f <u>1</u> f 1 f 1	111111111	2 11111	3 1 1 1 1	
CO3	3	<b>a.</b> 3	2	3	2	2	3	3	-	-	3	
CO4	3	2 .	2	3	3 S = 2	2	3	2	3	-	3	
CO5	3	3	2	2	2	. 2	2	2	-	2	2	
PO Target	2.75	2.5	2	2.8	2	2	2.6	2.25	3	2	2.8	

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Ms. Sakshi Garg	Caluli	2	

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIET School of Pharmacy**

Program Name: B. Pharm

**Course Name: Environmental Sciences** 

**Course Outcomes** 

Academic Session: Even 2023-24

Course Code: BP206T

Year: I

**Course Coordinator Name:** 

Semester: II

Mr. Sanjeev Chauhan

	After completion of the course, the student will be able to	Relevant POs	Revised Bloom's Level	Knowledge Category
CO No.	Statement of Course Outcome		(BL)	(KC)
CO1	Understand the concept of environmental studies with its natural resources.	2,3,5,6,7,8,9,10,11	Understand	Factual & Conceptual
CO2	Determine the concept of ecosystem and its structural and functional components with its classification.	2,3,5,6,7,8,9,10,11	Understand	Conceptuai
CO3	Illustrate the concept of environmental pollution, its impacts and mitigation measures.	2,3,5,6,7,8,9,10,11	Analyze	Conceptual & Factual

CON	15 E				Prograi	nme Outc	ome (PO)	2			*
CO No.	J No.	2	3	4	5	6	7	. 8	9	10	11
CO1	(f. )	1	1		1	2	1	1	3	3	3
CO2		2	1	United Name of Street,	1	1	1	1	2	3	3
CO3		3	3		1	2	1	1	3	3	3
PO Target		2	1.66		1	1.66	1	1	2.66	3	3

Faculty Members Teaching the Course *	Signature	Faculty Members Teaching the Course	Signature
Mr. Sanjeev Chauhan	Stra	Mr. Balwan Singh	Brugh

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

- The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.
- The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIE1 School of Pharmacy**

Program Name: B. Pharm

Course Name: HAP-II (Practical)

**Course Outcomes** 

Academic Session: Even 2023-24 **Course Code: BP207P** 

Year: I

Semester:

Course Coordinator Name: Dr. Praveen K. Dixit

After con	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category
CO No.	Statement of Course Outcome	Reievant 1 Os	Level (BL)	(KC)
CO1	Understand the anatomy and physiology of CNS, Digestive system, Respiratory system, urinary system, endocrine system and reproductive system using models and charts.	1,8,11	Understand	Conceptual
CO2	Illustrate the practical aspects related to reflex activity, body temperature recording, lung capacities, BMI and their importance.	1,8,9,11	Apply	Conceptual, Procedural
CO3	Understand the different mechanisms of responses related to sense organs and nervous system.	1,8,11	Understand	Conceptual

CON					Progran	ıme Ou	tcome (P	0)			
CO No.	1	1 2	3	4	5	6	7	8	9	10	11
CO1	3		la la					1			2
CO2	3 11 113		The results	of the transport		182 001 102 3	3 2 3 2 3 3 7 7 2	la del ne na tra	2	t the total and the total	2
CO3	3							1			2
PO Target	3					()		1	2		2

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature .
Dr. Praveen Kumar Dixit	Praveen	Mrs. Priya Bansal	Langer Banaras

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 – 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 5 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

**KIET School of Pharmacy** 

Program Name: B. Pharm

Course Name: Organic Chemistry Practical

**Course Outcomes** 

Academic Session: Even 2023-24

Year: I

Semester: II

Course Code: 208 P

**Course Coordinator Name:** 

Dr. Smriti Sahu

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	
CO No.	Statement of Course Outcome	Y THE TOTAL THE TAXABLE PARTY.	Level (BL)	(KC)
COI	Create hands-on laboratory skills necessary for performing organic chemistry experiments, including proper handling of laboratory equipment and adherence to safety protocols.	1,2,3, 4,6,7,8,9,10,11	Create	Conceptional & Procedural
CO2	Apply Synthetic Techniques to prepare pharmaceutical compounds, gaining proficiency in common laboratory procedures for the synthesis of organic molecules.	1,2,3, 4,6,7,9,10,11	Apply	Conceptional & Procedural
CO3	<b>Explore</b> methods for the isolation and purification of organic compounds, including techniques such as extraction, distillation, and chromatography.	1,2,3, 4,6,7,8,9,10,11	Apply	Conceptional & Procedural

	* 1	Programme Outcome (PO)									
CO No.	1	2	3	4	. 5	6	7	8	9	10	11
CO1	3	3	3	3		2	3	2	2	2	2
CO2	3	3	3	3		2	2	a ya 25 151 161	2	2	2
CO3	3	3	3	3		2	2	2	2	2	2
PO Target	3	* 3	3	3		2	2.33	2	2	2	2

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Smriti Sahu	Smrt Jahr	by. Abhay Shondway	Mo

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of Hol

- The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.
- The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### KIET School of Pharmacy

Program Name: B. Pharm
Course Name: Biochemistry
Course Name: Biochemistry

Course Outcomes

Academic Session: Even 2023-24 Course Code: BP209P Year: I

Semester: II

Course Coordinator Name: Surya Prakash

After comp	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's		
CO No.	Statement of Course Outcome		Level (BL)	(KC)	
CO1	Analyze different carbohydrates, pretains, and abnormal constituents of urine.	1,2,3,4,6,7,,9,10,11	Analyze	Conceptual & Procedural	
CO2	Estimation of blood creatinine, Salivary amylase, blood sugar and serum total cholesterol.	1,2,3,4,6,7,,9,10,11	Analyze	Conceptual & Procedural	
CO3	Quantitative analysis of reducing sugars (DNSA method) and Proteins	1,2,3,4,6,7,,9,10,11	Evaluate	Conceptual & Procedural	

CON	Programme Outcome (PO)										
CO No.	ı,	2	3	4	5	6	7	8	9	10	11
CO1	3	3	2	3		1	2	2	2	2	3
CO2	3	3	- 2	3		1	2	2	2	2	3
CO3	3	3	2	3		1	2	2	2	2, , , , , , ,	3
PO Target	3	3	2	3		1	. 2	2	2	2	3

<b>Faculty Members Teaching the Course</b>	Signature	Faculty Members Teaching the Course	Signature
Surya Prakash	SP	Pragati Gupta	- Varjoth

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

- The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.
- The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

**KIET School of Pharmacy** 

Course Code: BP210 P

Program Name: B. Pharm/M. Pharm

Course Name: Computer Applications in Pharmacy

**Course Outcomes** 

Academic Session: Even 2023-24

Year: I

Semester: II

Course Coordinator Name: Ms. Sakshi Garg

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category	
CO No.	Statement of Course Outcome	Activant 1 03	Level (BL)	(KC)	
. , .CO1 , ,	Apply the knewledge of computing fundamentals to pharmaceutical applications for any given requirement.	1,2,3,4,6,8,9,11	Apply	Factual and Conceptual	
CO2	Analyse the contemporary IT tools(web technologies and databases) with Pharmaceutical activities.	1,2,3,4,5,6,7,9,10,11	Analyze	Procedural	
CO3	Interpret the various application of databases in pharmacy.	1,4,6,7,8,9,10,11	Understand	Procedural and Conceptual	

CON	Programme Outcome (PO)											
CO No.	1 ,	2	3	4	5	6	7	8	9	10	11	
CO1	3	2	2	2		2	-	3	2	-	3	
CO2	3	2	2	3	2	2	2	14.75	2	2	3	
CO3	3			2	-	2	- 2	2	3	2	3	
PO Target	7 - 3 - 1 - 1	2: : :	2:17:7	2.3	2 : : : :	2	2 2	2.5	2.3	<b>2</b>	3: :::	

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Ms. Sakshi Garg	Salute		

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

- The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.
- The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIET School of ?harmacy**

Program Name: B. Pharm

Academic Session: Even 2023-24

Year: II

Semester: IV

Course Name: Pharmaceutical Organic Chemistry-III

Course Code: BP401T

Course Coordinator Name: Ms. Shipra Singhal

Course Outcomes

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category
CO No.	Statement of Course Outcome	Transparation in the contract of the contract	Level (BL)	(KC)
COI	Illustrate about Stereo isomerism, Optical isomerism.	1, 2, 3, 7, 11	Apply	Factual & Conceptual
CO2	Illustrate about Geometrical isomerism and Conformational isomerism.	1, 2, 3, 7, 11	Apply	Factual & Conceptual
CO3	Outline the nomenclature, classification, synthesis and reaction of some heterocyclic compounds.	1, 2, 3, 6, 7, 9, 11	Apply	Conceptual
CO4	Summarize the Synthesis, reactions and medicinal uses of some heterocyclic compounds.	1, 2, 3, 7, 9, 11	Apply	Conceptual
CO5	Outline some important synthetic name reactions.	1, 2, 3, 7, 9, 11	Apply	Conceptual

CON	Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11	
CO1	3	1	2	925		14	3	-	-	20	2	
CO2	3	1, 1, 1, 1, 1, 1	2				3	i na na <sup>2</sup> ra na	a ca farra		2	
CO3	3	1	2	-	-	2	3	-	2	17.	2	
CO4	3	1 .	2	-	-	-	3	-	2	-	2	
CO5	3	1	2	-	-	S=1	3	-	2	-	2	
PO Target	3	1	2		an gara	2	3		2	11111 <u>1</u> 1111111	2	

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Ms. Shipra Singhal	shipme.	Mr. Surya Prakash	St.

Signature of Course Coordinator

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIET School of Pharmacy**

Program Name: B. Pharm

Academic Session: Even 2023-24

Year: II

Semester: IV

Course Name: Medicinal Chemistry -I Theory

Course Code: BP402T Course Coordinator Name: Dr. Lalit Mohan Nainwal

**Course Outcomes** 

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category	
CO No.	Statement of Course Outcome		Level (BŁ)	(KC)	
CO1	Understand basics of medicinal chemistry, physicochemical and stereochemical properties in relation to drug design and drug metabolism.	1, 2, 3, 6, 7, 9, 10, 11	Understand	Factual and Conceptual	
CO2	Explore the chemistry of drugs acting on adrenergic system.	1, 2, 3, 6, 7, 9, 10, 11	Apply	Factual and Conceptual	
CO3	Explore the chemistry of drugs acting on cholinergic system.	1, 2, 3, 6, 7, 9, 10, 11	Apply	Factual and Conceptual	
CO4	Il!ustrate the chemistry of drugs acting on CNS such as sedative, hypnotics, antipsychotics and anticonvulsants.	1, 2, 3, 6, 7, 9, 10, 11	Apply	Conceptual	
CO5	Explain the chemistry of general anesthetics, narcotic & non-narcotic analgesics and anti-inflammatory agents	1, 2, 3, 6, 7, 9, 10, 11	Apply	Conceptual	

CON					Progra	mme Outc	ome (PO)				
CO No.	ĺ	2	3	4	5	6	7	8	9	10	11
CO1	3,	1	. 1	180181111		3	3	tot and Total a	3,	2	3, , ,
CO2	3	1	1	-	-	3	1	-	3	1	2
CO3	3	1	1	-	-	3	1	-	3	1	2
CO4	3	1	1	*		3	1	8	3	1	2
CO5	3	1	1		i is n <del>e</del> m s	3	1	5 2-15	3	1	2
PO Target	3	1 4	1 .	-	-	3	1.4	-	3	1.2	2.2

<b>Faculty Members Teaching the Course</b>	Signature	Faculty Members Teaching the Course	Signature	
Dr. Lalit Mohan Nainwal	Aur.	Ms. Shipra	ship	Ź

Signature of Course Coordinator

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 – 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIET School of Pharmacy**

Program Name: B. Pharm

Course Name: Physical Pharmaceutics-II Theory

Academic Session: Even 2023-24 Course Code: BP403T

Year: II Semester: IV

Course Coordinator Name: Mr. Debaprasad Ghosh

**Course Outcomes** 

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category	
CO No.	Statement of Course Outcome	Relevant 1 Gs	Level (BL)	(KC)	
CO1	Examine the types, general characteristics, and effect of various factors on Colloidal dispersions.	1, 3, 4.	Apply	Factual, Procedural.	
CO2	Identify the rheological behavior of fluids and the principles of deformation of solids.	1, 3, 4, 11.	Analyze	Conceptual, Procedural.	
CO3	Analyze the theories, types, various properties, and stability of Coarse dispersions like suspensions and emulsions.	1, 3, 4, 11.	Analyze	Conceptual, Procedural.	
CO4	Analyze various aspects of micrometrics.	1, 3, 4.	Analyze	Conceptual, Procedural.	
CO5	Analyze the effects of kinetics, degradation factors and common reactions on the stability of drugs including accelerated stability studies and their prevention.	1, 2, 3, 4, 6, 7, 8, 9, 10, 11.	Analyze	Conceptual, Procedural.	

CON	Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	- 7	8	9	10	11	
CO1	3 1 1 3	a sa ra ra r	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 4 4 4 3	11111111	******		n Kar			2 2 3 5 0 7 0 7	
CO2	3	à,	2	3							2	
CO3	3		2	2							2	
CO4	3		2	3								
CO5	3	2	2	3	3 3 7 3 6 3	2	2	2	2	2	2 ,	
PO Target	3.00	2.00	2.00	2.80		2	2	2	2	2	2.00	

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Mr. Debaprasad Ghosh	Dehaborand whesh DDDT	Prof. (Dr.) N.G. Raghavendra Rao	Comment
Signature of Course Coordin	Assoc./ Asst.	the Head DOC Signature of Add	I. HoD Signature of HoD

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIET School of Fharmacy**

Program Name: B. Pharm

Academic Session: Even 2023-24

Year: II

Semester: IV

Course Name: Pharmacology-I

Course Code: BP404T

Course Coordinator Name: Dr. Shardendu Kumar Mishra

**Course Outcomes** 

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	0 0 .	
CO No.	Statement of Course Outcome		Level (BL)	(KC)	
CO1	Acquire concept of general pharmacology and pharmacokinetics.	1,3,6,7,8,9,11	Apply	Factual & Conceptual	
CO2	Analyze the mechanism of action of drugs, related adverse drug reaction, and drug interactions.	1,3,6,7,8,9,11	Analyze	Factual & Conceptual	
CO3	Apply the implications of peripheral nervous system in treatment of associated diseases.	1,3,6,7,8,9,11	Apply	Conceptual & Procedural	
CO4	Apply the implications of central nervous system in treatment of neurological diseases.	1,3,6,7,8,9,11	Apply	Factual & Conceptual	
CO5	Audit the significance of drugs in pharmacotherapy of various diseases and management of adverse effects.	1,3,6,7,8,9,11	Analyze	Conceptual & Procedural	

CON	Programme Outcome (PO)											
CO No.	ĺ	2	. 3	4	5	6	7	8	9	10	11	
CO1	3		2			3	3	, , , , , , , , , , , , , , , , , , , ,	2		3, , , ,	
CO2	3		2			3	3	2	2		3	
CO3	3	<b>å</b> ,	2			3	3		2		3	
CO4	3		2			3	3		2		3	
CO5	3		2			. 3	3	2	2		3	
PO Target	3	- 14	2			3	. 3	2	2		3	

Signature **Faculty Members Teaching the Course Faculty Members Teaching the Course** Signature Dr. Shardendu Kumar Mishra

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HdD

Please Note (Reference: OBE Guidelines wef. Session 2021 – 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIET School of Pharmacy**

Program Name: B. Pharm

Course Name: Pharmacognosy & Phytochemistry I

Academic Session: Even 2023-24 Course Code: BP 405T

Year: II

Semester: IV

Course Coordinator Name: Dr. Deepti Katiyar

**Course Outcomes** 

After cor	npletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category	
CO No.	Statement of Course Outcome	ittite vant 1 05	Level (BL)	(KC)	
CO1	Appraise the sources, classification and quality control of herbal drugs.	1, 11	Evaluate	Factual, Conceptual & Procedural	
CO2	Attain the knowledge of the cultivation & production of crude drugs and conservation of medicinal plants.	1, 3, 7, 10, 11	Apply	Factual; Conceptual & Procedural	
CO3	Illustrate the concepts of Plant Tissue Culture and to describe properties of edible vaccines.	1, 3, 4, 10, 11	Analyze	Conceptual & Procedural	
CO4	Acquire the knowledge of traditional systems of medicine and to summarize properties of various secondary metabolites.	1, 3, 6, 11	Apply	Factual & Conceptual	
CO5	Explore the properties and applications of plant fibers, hallucinogens, carbohydrates, lipids, proteins, enzymes and marine products.	1, 3, 6, 11	Analyze	Factual & Conceptual	

GON		Programme Outcome (PO)										
CO No.	1,	2	3	4	5	6	7	8	9	10	11	
CO1	3						*				2	
CO2	1113111		2::::	111111111	23 23 23 23 24	1111111	2		11111111	2	112111	
CO3	3		2	3						2	2	
CO4	3	s,	2			2					2	
CO5	3		2			2		4			2	
PO Target	3.00		2.00	3.00		2.00	2.00		11 11 11 11 11 11	2.00	2.00	

<b>Faculty Members Teaching the Course</b>	Signature	Faculty Members Teaching the Course	Signature
Dr. Deepti Katiyar	Degli	Dr. Richa Goel	Richa

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### KIET School of Pharmacy

Program Name: B. Pharm

Academic Session: Even 2023-24

Year: II

Semester: IV

Course Name: Medicinal Chemistry-I Practical

Course Code: BP406P

Course Coordinator Name: Ms. Shipra Singhal

**Course Outcomes** 

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category (KC)	
CO No.	Statement of Course Outcome	10001000	Level (BL)		
CO1	Illustrate the synthesis of some heterocyclic drugs or intermediates.	1, 2, 3, 4, 6, 7, 8, 9, 10, 11	Apply	Conceptual & Procedural	
CO2	Analyze the purity of some heterocyclic drugs.	1, 2, 3, 4, 6, 7, 8, 9, 11	Analyze	Conceptual & Procedural	
CO3	Analyze the partition coefficient of some drugs.	1, 2, 7, 8, 9, 10	Analyze	Conceptual & Procedural	

CO.V.	Programme Outcome (PO)											
CO No.	1 .	2	3	4	5	6	7	8	9	10	11	
CO1	3	2	1	1	-	1	2	2	2	2	3	
CO2	3	2	1	1	-	1	3	2	2		3	
CO3	3	2			8 <del>5</del> 2 50 70 70 70 70 70 70 70 70 70 70 70 70 70	_	2	2	2	2,,,,,,,,		
PO Target	3	2	1	1	: <b>-</b>	1	2.3	2	2	2	3	

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature		
- in the second second	ich.	MS. SHIKHA KAUSHIK/	· Na		
Ms. Shipra Singhal	skilone.	Mr. Surya Prakash	Short		

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIET School of Pharmacy**

Program Name: B. Pharm

Course Name: Physical Pharmaceutics-II Practical

**Course Outcomes** 

Academic Session: Even 2023-24

Course Code: BP407P

Year: 2nd

Semester: IV

Course Coordinator Name: Prof. (Dr.) N. G. R. Rao

After co	mpletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category (KC)	
CO No.	Statement of Course Outcome	Relevant 1 0s	Level (BL)		
CO1	Evaluate Particle size, Pticle size distribution, and derived properties of the powder.	1, 2, 3, 4, 7, 9, 10, 11	Evaluate	Conceptual and Procedural	
CO2	Calculate the viscosity of viscous samples using different methods.	1, 2, 3, 4, 7, 9, 10, 11	Evaluate	Conceptual and Procedural	
CO3	Evaluate the prepared suspension and emulsion formulations and kinetics of chemical reactions with stability studies	1, 2, 3, 4, 7, 9, 10, 11	Evaluate	Conceptual and Procedural	

CON	Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11	
CO1	3	2	2	3			1		1	1	1	
CO2	3 *	2	2	3			1		1	1	1	
CO3	3	2	2	3			2		1	1	2	
PO Target	3.00	2.00	2.00	3.00	52 25 2 7 7 1 E E	101211	1.3	enezenea bar sea.	1.00	1.00	1.3	

Faculty Members Teaching the Course	Signature,	Faculty Members Teaching the Course	Signature
Prof. (Dr.) N.G. Raghavendra Rao	Comme	Mr. Debaprasad Ghosh	De 19/03/24

Signature of Course Coordinator

Assoc / Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

**KIET School of Pharmacy** 

Academic Session: Even 2023-24

Year: II

Semester: IV

Course Code: BP408P

Course Coordinator Name: Dr. Vinay Kumar

Course Name: Pharmacology I - Practical **Course Outcomes** 

Program Name: B. Pharm

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category
CO No.	Statement of Course Outcome	Relevant POS	Level (BL)	(KC)
CO1	Understand the instruments and laboratory animals as per CPCSEA guidelines used in experimental pharmacology.	1,2,3,4,6,7,8,9,11	Understand	Conceptual & Procedural
CO2	Understand the different routes of drug administration in mice/rats and various laboratory techniques used for animal studies.	1,2,3,4,6,7,8,9,11	Understand	Conceptual & Procedural
CO3	Understand the effect of enzyme inducers on sleeping time in mice and the effect of drugs on ciliary motility in frogs.	1,2,3,4,6,7,8,9,11	Understand	Conceptual & Procedural
CO4	Understand the role of muscle various drugs acting on CNS and PNS in experimental pharmacology.	1,2,3,4,6,7,8,9,11	Understand	Conceptual & Procedural
CO5	Apply the concept of anticatatonic, anxiolytic activity and study of local anaesthetic agents in rats.	1,2,3,4,6,7,8,9,11	Apply	Conceptual & Procedural

CO No.					Progra	mme Outc	ome (PO)				
CO No.	1	2	3	4	5	6	. 7	8	9	10	11
CO1	3	10000000	2	2	1 1 1 2 7 9 7 7 7 7	2	2	2	3, , , ,	77777777	3
CO2	3	1	2	2	-	2	2	2	3		3
CO3	3	1	2	2	-	2	2	2	3		3
CO4	3	1	2	2		2	2	2	3		3
CO5	3	1	2	2		2	2	2	3	71 2012.1	3
PO Target	3	1 1	2 .	2	-	2	2	2	3		3

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Vinay Kumar	Dun		1

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIET School of Pharmacy**

Program Name: B. Pharm

Academic Session: Even 2023-24

Year: II

Semester: IV

Course Name: **Course Outcomes** 

Pharmacognosy I- Practical

Course Code: BP409P

Course Coordinator Name: Dr. Richa Goel

After comp	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category (KC)	
CO No.	Statement of Course Outcome	Relevant 1 Os	Level (BL)	Knowledge Category (Re	
CO1	Describe the tools used in quantitative microscopy and understand the concepts behind the procedures used.	1,2,3,4,6,11	Understand	Conceptual & Procedural	
CO2	Evaluate the crude drugs on the basis of WHO guidelines.	1,2,3,4,6,7,11	Evaluate	Conceptual & Procedural	
CO3	Analyze the specified phytoconstituents utilizing the standardized parameters.	1,2,3,4,6,11	Analyze	Conceptual & Procedural	

CON					Pro	gramme Ou	itcome (PO	).			
CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	2	2	2	2		1					3
CO2	3	3	. 3	3		3	3				3
CO3	3	3	3	3		3					3
PO Target	2.6	2.6	2.6	2.6	ar the the thorib	2.3	3	er mir mir mer i			3

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Richa Goel	Richa	Dr. Deepti Katiyar	Deepli

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

- The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.
- \* The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### KIET School of Pharmacy

Program Name: B. Pharm Course Name: Medicinal Chemistry-III Course Code: BP601T

Academic Session: Even 2023-24

Year: III

Semester: Vi Dr. Garima Kapoor

Course Outcomes

Course Coordinator Name:

After completion of the course, the student will be able to Revised Bloom's Knowledge Category Relevant POs CO No. Statement of Course Outcome Level (BL) (KC) Illustrate classification, nomenclature, mechanism of CO1 1, 3, 9, 11 action, SAR and uses of different classes of antibiotics. Apply Conceptual Illustrate classification, mechanism of action and SAR of CO<sub>2</sub> Antimalarials, Anti-tubercular, Urinary tract anti-infective, 1, 3, 9, 11 Conceptual Apply Antifungal, Anti-protozoal Agents and Anthelmintics. Illustrate classification, mechanism of action and SAR of CO3 1, 3, 9, 11 different categories of Antiviral agents. Apply Conceptual Illustrate classification, mechanism of action and SAR of CO4 1, 3, 9, 11 Sulphonamides and Sulfones, Folate reductase inhibitors. Conceptual Apply CO<sub>5</sub> Analyze the concept of Drug Design, and Combinatorial Chemistry. Factual & 1, 3, 4, 6, 9, 11 Analyza Conceptual

CO No.					Progra	mme Outco	ome (PO)											
	1	2	3	4	5	6	7	8	9	10	11							
CO1	3	ALMES .	2		OF CASE CARRELL	0.1083008	C. FREEK		2		2							
CO2	3		2						2		2							
CO3	3		2						2		2							
CO4	3		2						2		2							
CO5	3		3	2		2			2		2							
PO Target	3		2.2	2		2			•		2.2							

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature	
Dr. Garima Kapoor	A CO	Dr. Lalit Mohan Nainwal	Fry.	

Signature of Course Coordinator

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef, Session 2021 - 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria

#### KIET School of Pharmacy

Program Name: B. Pharm. Course Name: Pharmacology-III

Academic Session: Even 2023-24 Course Code: BP602T

Year: III

Semester: VI

Course Coordinator Name: Dr. Shardendu Kumar Mishra

	Course	Outcomes
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After comp	letion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category	
CO No.	Statement of Course Outcome		Level (BL)	(KC)	
CO1	Acquire the knowledge of pharmacotherapy of respiratory and GIT diseases.	1,2,4,6,7,8,9,10,11	Apply	Conceptual & Procedural	
CO2	Analyze the utility of antimicrobial agents used for curing infections.	1,2,4,6,7,8,9,10,11	Analyze	Conceptual & Procedural	
CO3	Illustrate the various mechanisms by which chemotherapeutic agents act and their applications in infection management.	1,2,4,6,7,8,9,10,11	Analyze	Conceptual & Procedural	
CO4	Express the pharmacological profiles of anti-microbial agents and immunomodulators.	1,2,4,6,7,8,9,10,11	Apply	Conceptual & Procedural	
CO5	Infer the principles of toxicology and chronopharmacology.	1,2,3,4,6,7,8,9,10,11	Analyze	Conceptual & Procedural	

PARTY AND ADDRESS OF THE PARTY AND ADDRESS OF					Progra	mme Outc	ome (PO)				
CO No.	1	2	3	4	5	6	7	8	9	10	11
COI	3	2		2		2	1	1	3	2	3
CO2	3	2	-	2	THE PERSON	2	1	1	3	2	3
CO3	3	2		2		2	1	1	3	2	3
CO4	3	2		2		2	1	1	3	2	3
CO5	3	2	2	2		2	1	1	3	2	3
PO Target	3	2	2	2		2	1	1	3	2	3

**Faculty Members Teaching the Course** Signature **Faculty Members Teaching the Course** Signature Dr. Abhishek Kumar Dr. Shardendu K Mishra

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

KIET School of Pharmacy

Program Name: B. Pharm Course Name: Herbal Drug Technology - Theory Course Outcomes

Academic Session: Even 2023-24 Course Code: BP603T

Year: III

Semester: VI

Course Coordinator Name: Mr. Balwan Singh

CO No.	Statement of G	Polomont DO	Revised Bloom's	V	
cor	Understand the Indian system of medicines and fundamentals of traditional herbal raw materials for the system of traditional herbal raw materials for the system of the sy	Relevant POs	Level (BL)	Knowledge Category (KC)	
COI	the help of biodynamic agriculture	1,9,10,11	Understand		
CO2	Explore the demand and need of nutraceuticals in various diseases and their interaction behavior.		Onderstand	Factual, Conceptual	
CO3	Sent total	1,6, 9,10,11	Analyze	Factual, Conceptual	
CO4	Apply the National and International regulatory guidelines for the	1,3, 4, 10,11	Analyze	Conceptual, Procedural	
CO5	Explore the Current Good Manufacturing Provide Green	1, 6,7, 8,9,10,11	Apply	Factual, Conceptual	
	drug industry.	1,2, 3, 6,7,10,11	Analyze	Factual, Conceptual	

CO No.		1			Progr	amme Out	come (PO)				
	1	2	3	4	5	6	7	100		_	
CO1	3	Ta Pane	1022 -0 110				/	8	9	10	11
CO2	3		1	I NAME OF	FILEROPEA	transfer sy	Holla Fey	15.1.4 4 5 5 5	2	3	2
CO3	3		3	2		2			2	3	2
CO4	3		1	3						3	2
						2	2	3	2	2	2
CO5	3	2	3			2	2	T- W.	-	3	2
PO Target	3	2	3			- 4	2		2	3	2
ty Members Teachi			3	3		2	2	3	-	3	

Faculty Members Teaching the Course Signature **Faculty Members Teaching the Course** Mr. Balwan Singh Signature Dr. Daksh Bhatia

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2023 - 24)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

K'ET School of Pharmacy

Program Name: B. Pharm

Academic Session: Even 2023-24

Semester:

Year: III

Course Name: Biopharmaceutics & Pharmacokinetics

Course Code: BP604T

Course Coordinator Name: Dr. Ashu Mittal

**Course Outcomes** 

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Vacadada Cata a (VC)
CO No.	Statement of Course Outcome	Relevant FOS	Level (BL)	Knowledge Category (KC)
CO1	Illustrate the mechanisms and factors of drug absorption and drug distribution.	4	Apply	Factual ar.3-Conceptual
CO2	Analyze the processes of drug elimination, bioavailability and bioequivalence.	1, 3,7,8,2	Analyze	Conceptual and procedural
CO3	Appraise the principles of pharmacokinetics in the context of various compartment models, non-compartment models, and physiological models, with a specific emphasis on the one-compartment open model.	1,3,4,6,9,11	Evaluate	Conceptual and procedural
CO4	Analyze the principles of pharmacokinetics to comprehend concepts related to multicompartment models.	1,3,4,6,9,11	Analyze	Conceptual and procedural
CO5	Demonstrate a comprehensive understanding of nonlinear pharmacokinetics.	1,3,4,6,9,11	Apply	Conceptual and procedural

CO No.		Programme Outcome (PO)											
es an accept to be a	:::: <b>::::</b>	2	3	4	5	6	7	8	9	10	11		
CO1	3												
CO2	3		2				2	2			2		
CO3	3	American and	2	2	*	2			2		2		
CO4	3		2	2		2	24220		2		2		
CO5	3		2	2		2			2		2		
PO Target	3		2	2		2	2	2	2	A	,		

Faculty Members Teaching the Course
Prof. (Dr.) Ashu Mittal

Prof. (Dr.) Ashu Mittal

Faculty Members Teaching the Course
Mr. Sanjeev Chauhan

Signature
Mr. Sanjeev Chauhan

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

KIET School of Pharmacy

Academic Session: Even 2023-24

Course Code: BP605T

Year: III

Semester: VI

Course Coordinator Name: Dr. Monika Kauray

Program Name: B. Pharm.
Course Name: Pharmaceutical Biotechnology

**Course Outcomes** 

After comp	eletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category
CO No.	Statement of Course Outcome	Relevant POs	Level (BL)	(KC)
CO1	Explain significance of biotechnology in pharmaceutical products development.	1,9,10,11	Understand	Factual and Conceptual
CO2	Analyze the recombinant DNA technology and its application in pharmaceuticals production.	1,4,6,7,10	Analyze	Conceptual and Procedural
CO3	Demonstrate immunity and various immunological products and their production methods.	1,3,4,6,7,10	Apply	Conceptual and Procedural
CO4	Analyze various immune assay techniques for determination of immunological products.	1,3,4,6,7,10	Analyze	Conceptual and Procedural
CO5	Apply different fermentation techniques in production of various fermentation products.	1,3,4,6,7,10	Apply	Conceptual and Procedural

CO No.	Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11	
CO1	<b>3</b>	t not not not n	201 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2	8 103 103 103 103 1	3 13 20 19	3 2 7 7 7 7 7 7	F 8 F 8 F 8 F 8 F 8	1112111	11112::::::	2::::	
CO2	3			2		2	- 2			3		
CO3	3		2	1		2	2			2	2	
CO4	3		2	1		2	2	Į8		2	2	
CO5	3		2	1		2	2			2	2	
PO Target	3		14. 2	1.4		2	2		2	2.2	2	

<b>Faculty Members Teaching the Course</b>	Signature	Faculty Members Teaching the Course	Signature
Dr. Monika Kaurav	Mawav	Mr. Debaprasad Ghosh	08

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### KIET School of Pharmacy

Program Name: B. Pharm

Course Name: Quality Assurance

**Course Outcomes** 

Academic Session: Even 2023-24

Course Code: BP606T

Year: III

Semester: VI

Course Coordinator Name: Dr. Lakshmi

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category	
CO No.	Statement of Course Outcome	Acievani 103	Level (BL)	(KC)	
CO1	Understand major guidelines and principles related to Quality Assurance and Quality Management.	1,2,4,5,6,7,8,9,10,11	Understand	Factual, Conceptual, Procedural	
CO2	Acquire knowledge of GMP guidelines in the pharmaceutical industry.	1,2,3,5,6,7,8,9,10,11	Apply	Factual, Conceptual,	
CO3	Select procedures for quality control of packing materials and GLP guidelines	1,2,3,5,6,7,8,9,10,11	Evaluate	Factual, Conceptual, Procedural	
CO4	Analyze various documents relevant to the pharmaceutical Industry.	1,2,3,5,6,7,8,9,10,11	Analyze	Factual, Conceptual, Procedural	
CO5	Apply general principles of analytical method Validation, calibration, and qualification of commonly used equipment	1,2,3,4,5,6,7,8,9,10,11,	Apply	Factual, Conceptual, Procedural	

CO No.	Programme Outcome (PO)											
O IN TOTAL DE LE LIFE DE LA	n : 1	2	3	4.,,	5	6	7 7	8	9	10	11	
CO1	3	2		2	1	1	3	1	2	1	2	
CO2	3	2	1		1	1	3	2	2	2	2	
CO3	3	2	1		1	1	3	1	2	1	1	
CO4	3	2	2		1	1	3	1	2	1	1	
CO5	3	2	1	2	1	1	3	1	2	1	1	
PO Target	3.00	2.00	1.25	2	1,00	1.00	3.00	1.20	2.00	1.20	1.40	

**Faculty Members Teaching the Course** Signature **Faculty Members Teaching the Course** Signature Dr. Snigdha

Dr. Lakshmi

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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- The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

KIET School of Pharmacy

Program Name: B. Pharm

Academic Session: Even 2023-24

Year: III

Semester: VI

Course Name: Medicinal Chemistry -III Practical

Course Code: BP607P

Course Coordinator Name: Dr. Lalit Mohan Nainwal

**Course Outcomes** 

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category	
CO No.	Statement of Course Outcome	Relevantios	Level (BL)	(KC)	
CO1.	Prepare intermediate compounds and drugs of medicinal importance	1, 2, 3, 4, 7, 8, 10, 11	Create	Conceptual, Procedural	
CO2	Analyze and determine the purity of drug present in the bulk and dosage forms.	1, 2, 3, 4, 7, 8, 11	Analyze	Conceptual, Procedural	
CO3	<b>Determine</b> the physicochemical and druglike properties of drugs using drug design softwares (ChemDraw).	1, 2, 3, 4, 6, 7, 8, 9,11	Evaluate	Conceptual, Procedural	

CO No	Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11	
CO1	3 *	2	3	2	-2	2	3	2	-	3	3	
CO2	3	2	3	2	-	-	. 3	3	-	-	1	
CO3		3	3, , , ,	3		2	2	2	3	TTTT TAKEN	3	
PO Target	3	2.33	3	2.33	-	2	2.66	2.33	3	3	2.33	

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Lalit Mohan Nainwal	Duz.	Dr. Garima Kapoor	Galoro.	Ms. Pragati	Kepth

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 – 22)

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

<sup>\*</sup> The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

#### **KIET School of Pharmacy**

Program Name: B. Pharm

Course Name: Pharmacology-III Practical

Academic Session: Even 2023-24 Course Code: BP608P

Year: III

Semester: VI

Course Coordinator Name: Dr. Abhishek Kumar

Course Outcomes

After com	pletion of the course, the student will be able to	Relevant Pos	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome		11111111111111111111111	Conceptual & Procedural
CO1	Understand the methods for dose calculation for experimental animals.	1,2,3,7,8,10,11	Understand	
	Demonstrate the knowledge of experiment design and bioassay process	1,2,3,4,7,8,10,11	Apply	Conceptual & Procedural
	by experimental pharmacology on living tissue and simulation software.  Demonstrate the method of biochemical, pharmacokinetic, toxicity	1,2,3,4,7,8,10,11	Apply	Conceptual & Procedural
CO3	studies and biostatistical analysis.	or color services		1 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

					Progra	mme Oute	come (PO)		S Y		,
CO No.			2	4	5	6	7	. 8	9	10	11
	1	Z	3	7				1		1	3
CO1	3	1	1				2	1		i	3
CO2	3	1	1	2			2	1		1	3
CO3	3"	1	1	2			2	1		1 00	3.00
PO Target	3.00	1.00	1.00	2.00			2.00	1.00		1.00	3.00

aculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
acting Members reaching and		Dr. Shardendu Kumar Mishra	1 2 /
Dr. Abhishek Kumar	Helma	18.	

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

- The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.
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**KIET School of Pharmacy** 

Program Name: B. Pharm

Course Name: Herbal Drug Technology Practical

**Course Outcomes** 

Academic Session: Even 2023-24

Year: 3

Semester: VI

Course Code: BP609P

Course Coordinator Name: Dr. Daksh Bhatia

After com	pletion of the course, the student will be able to	Relevant	Revised Bloom's	Knowledge Category	
CO No.	Statement of Course Outcome	POs	Level (BL)	(KC)	
CO1	analyze the phytocomposition of crude drugs using various chemical tests.	1,2,3,11	Analyze	Conceptual, Procedura	
CO2	evaluate the marketed Ayurvedic/Herbal formulations on various parameters given in pharmacopoeia.	1,2,3,4,11	Evaluate	Conceptual, Procedura	
CO3	apply the knowledge of herbs and excipients to develop and evaluate the herbal formulations.	1,2,3,10,11	Create	Conceptual, Procedura	
CO4	perform the analysis and evaluation of crude drugs on the basis of pharmacopoeial standards.	1,2,3,4,11	Evaluate	Conceptual, Procedura	

CO No.	Programme Outcome (PO)										
CO 110.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	2	2								2
CO2	3	2	2	3							2
CO3	3	2	2							1	2
CO4	3	2	2	3						4	2
PO Target	3	2	2	3						-	2

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Daksh Bhatia	18	BALWAN SINFH	Birms

Course Coordinator

Assoc./ Asst. Head

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

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The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

KIET School of Pharmacy

Academic Session: Even 2023-24 Program Name: B. Pharm Course Name: Biostatistics & Research Methodology

Course Code: BP801T

Year: IV Semester: VIII

Course Coordinator Name: Dr. Richa Agarwal

CourseOutcomes

After com	pletion of the course, the student will be able to	RelevantPOs	Revised Bloom's	Knowledge Category	
CONo.	Statement of Course Outcome	***************************************	Level (BL)	(KC)	
CO1	Interpret the basic concepts of biostatistics and general research methodology	1,2,3,4,8,9	Understand	Conceptual, and Procedural	
CO2	Explain the appropriate statistical methods required for a particular research design	1,2,3,4,8,9	Apply	Conceptual, and Procedural	
CO3	Adapt the appropriate research design and develop appropriate research hypothesis for a research project	1,2,3,4,6,7,8,10,11	Understand	Conceptual, and Procedural	
CO4	Evaluate the methods while working on a research project work	1,2,3,4,5,8,9,11	Apply	Conceptual, and Procedural	
CO5	Explain the various types of research design and create an appropriate framework for research studies	1,3,4,9	Understand	Conceptual, and Procedural	

60 N					Progra	mme Outc	ome (PO)				
CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	1	1	3	T	塩	2	2	1	1	-	*
CO2	1	2	3	2	100		[2](32)(53)	participation of the	1	1012 0 341	-
CO3	1	2	3	2	7/44	1	1	1	2	1	1
CO4	1	1	3	3	2	27	227	1	1		1
CO5	1	2	3	3	-	:=1:		-	1	(F)	-
POTarget	1.00	1.50	3.00	2.20	2.00	1.00	1.00	1.00	1.20	1.00	1.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Richa Agarwal	Paper	Dr Deepti Seth	PTR

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

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#### KIET School of Pharmacy

Program Name: B. Pharm

Academic Session: Even 2023-24

Year:

Semester: VIII

Course Name: Social and Preventive Pharmacy

Course Code: BP802T

Course Coordinator Name: Ms. Sheena Mehta

**Course Outcomes** 

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category
CO No.	Statement of Course Outcome	Relevant 1 03	Level (BL)	(KC)
CO1	Examine the various concepts of health and diseases with reference to public health	1, 3, 6, 7, 8, 9, 11	Apply	Factual & Conceptual
CO2	To acquire the knowledge of general principles for prevention and control of various diseases in light of social and preventive medicine	1, 3, 6, 7, 8, 9, 11	Apply	Factual & Conceptual
CO3	Outline the important attributes of various National Health Programmes in context with its objectives, functions and outcomes	1, 3, 6, 7, 8, 9, 11	Analyze	Factual & Conceptual
CO4	Explore various National Health Programmes and role of WHO in Indian health program in context with public health	1, 3, 6, 7, 8, 9, 11	Analyze	Factual & Conceptual
CO5	Determine the role of community services in rural, urban and school health	1, 3, 6, 7, 8, 9, 11	Apply	Conceptual

66 N	* -	Programme Outcome (PO)									
CO No.	1,	2	3	4	5	6	7	8	9	10	11
CO1	3	-	3	_	-	3	. 3	3	3	-	3
CO2		en filme full	3	r recent	en i <del>s</del> eri en	3 - 3	3 : : :	3 : : :	3	<del>.</del>	3:11
CO3	3	-	3	-	-	3	3	3	3	-	3
CO4	3	*	3	-	-	3	3	3	3	100	3
CO5	3	-	3	-		3	3	3	3	-	3
PO Target	3.00	D 1 10 FT	3.00			3.00	3.00	3.00	3.00	1 1 1 1 1	3.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Ms. Vidhu Saxena	Non	Ms. Sheena Mehta	Gleta:

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

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**KIET School of Pharmacy** 

Program Name: B. Pharm

Academic Session: Even 2023-2024
ement Course Code: BP803ET

Year: IV

Semester: VIII

Course Coordinator Name: Ms. Shikha Kaushik

Course Name: Pharmaceutical Marketing Management

**Course Outcomes** 

After comp	letion of the course, the student will be able to	Relevant POs	Revised Bloom's Level (BL)	Knowledge Category (KC)	
CO No.	Statement of Course Outcome	ATELINE THE THE REPORT OF THE PERSON OF THE	Level (BL)	THE RESERVE OF THE PARTY OF THE	
CO1	Analyze the basic concepts of marketing and their application in pharmaceutical marketing.	1,2,3,5,6,7,8,9,11	Analyze	Conceptual	
CO2	Explore product management in the pharmaceutical industry.	1,2,4,5,6,7,8,9,10,11	Apply	Conceptual	
CO3	Assess various promotional techniques for pharmaceutical products.	1,2,3,4,5,6,7,8,9,11	Evaluate	Conceptual	
CO4	Acquire knowledge about various pharmaceutical marketing channels.	1,2,3,5,7,8,9,10,11	Apply	Conceptual	
CO5	Ascertain the objectives and importance of price management in the pharmaceutical industry.	1,3,4,6,7,8,9,11	Apply	Conceptual	

2.0	Programme Outcome (PO)										
CO No.	1	2	. 3	4	5	6	7	8	9	10	11
CO1	2	3	3	nevers of 13	3	3	3	2	2		2
CO2	3	3	2	121	3	3	3	3	2	-	3
CO3	2	<b>6</b> <sub>4</sub> 3	3	-	1	3	3	3	2	-	3
CO4	2	3 ·	3	-	, 3	2	3	3	2	-	3
CO5	3	2	3	-	2	3	3	3	2	-	3
PO Target	2.40	2.80	2.80	-	2.40	2.80	3.00	2.80	2.00	-	2.80

Faculty Members Teaching the Course Signature Faculty Members Teaching the Course Ms. Vidhu Saxena Ms. Vidhu Saxena

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.

should have 8 to 10 humber of COs.

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#### **KIET School of Pharmacy**

Program Name: B. Pharm Course Name: Computer Aided Drug Design Academic Session: Even 2023-24

Course Code: BP807ET

Year: IV

Semester: VIII

Course Coordinator Name: Dr. Garima Kapoor

**Course Outcomes** 

After comp	oletion of the course, the student will be able to	Relevant POs	Revised Bloom's	Knowledge Category
CO No.	Statement of Course Outcome	Relevant FOS	Level (BL)	(KC)
CO1	Describe the basic concepts of CADD and rational approaches to drug design	3, 4, 6, 8, 9, 11	Understand	Factual/Conceptual
CO2	Understand the concept of QSAR, descriptors and various approaches.	1, 4, 8, 9, 11	Understand	Conceptual
CO3	Acquire knowledge of virtual screening techniques and molecular docking.	4, 11	Apply	Conceptual
CO4	Explore about bioinformatics and cheminformatics in pharmaceutical drug discovery	1, 3, 4, 5, 6, 11	Apply	Conceptual
CO5	Explore objectives and importance of molecular mechanics and quantum mechanics in drug discovery.	1, 3, 4, 11	Apply	Conceptual

CON		Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	. 7	8	9	10	11	
CO1	3	3	3	2		3	erenne envie	2	3	3	3	
CO2	2	<b>5.</b> ,	2	3	3	3	2	3	3	3	2	
CO3				3	(4 t)			1			3	
CO4	2		3	2	3	.2					3	
CO5	3		3	3			4				3 '	
PO Target	2	0.6	2.2	2.6	1.2	1.6	0.4	1	1.2	1.2	2.8	

Signature **Faculty Members Teaching the Course Faculty Members Teaching the Course** Signature Dr. Garima Kapoor

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Please Note (Reference: OBE Guidelines wef. Session 2021 - 22)

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KIET School of Pharmacy

Academic Session: Even 2023-24 Course Code: BP809ET

Year: IV Course Coordinator Name: Dr. Monika Kaurav

Semester: VIII

**Course Outcomes** 

Program Name: B. Pharm.

Course Name: Cosmetic Science

After com	pletion of the course, the student will be able to	Relevant POs	Revised Bloom's Level	Knowledge Category
CO No.	Statement of Course Outcome		(BL)	(KC)
CO1	Illustrate the structures of skin, hair, and oral cavity with associated problems and the classification & applications of the cosmetic product with different excipients used to manufacturing of cosmetic products	1,3,5,6,7,9,11	Apply	Factual and Conceptual
CO2	Explain the skincare products, antiperspirants and deodorants, and hair care products.	1,3,5,6,7,9,11	Apply	Factual Conceptual, and Procedural
CO3	Demonstrate the role of herbs in cosmetics, analytical cosmetics.	1,3,7,9,10,11	Apply	Factual Conceptual, and Procedural
CO4	Analyze the principles of cosmetic evaluation.	1,3,4,5,6,7,10,11	Analyze	Factual Conceptual, and Procedural
CO5	Determine the cosmetic problems associated with Hair and scalp and skin.	1,3,5,7,9,10,11	Apply	Factual Conceptual, and Procedural

CON	Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	. 7	8	9	10	11	
CO1	3		3	******	3	2	2	er er er er e	2		2	
CO2	3		2		2	2	2		2		2	
CO3	3	-	2				2		1	1	1	
CO4	3		2		3 2	2	2 -			2	2	
CO5	3		2		2	¥	2		2	1	2	
PO Target	3	3	2.2		2.33	2	- 2		1.4	1.33	1.8	

<b>Faculty Members Teaching the Course</b>	Signature	Faculty Members Teaching the Course	Signature
Dr. Monika Kaurav	Mawav	Mr Anuij Pathak	Ams.

Signature of Gourse Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

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