

KIET SCHOOL OF PHARMACY

Minutes of Meeting held on 15th October 2024 in KSOP Department

Agenda:

Discussion and approval of CO statements, CO-PO mapping, target benchmark for B. Pharm 3rd, 5th, and 7th semester and Program Outcomes approval for M. Pharm for session 2024-25 Odd semester

Time: 12:30 P.M.

Chair: Dr. K. Nagarajan (Principal-KSOP)

BoS Members Present:

1. Dr. N.G. Raghavendra Rao *N.G. Rao*
2. Dr. Roma Ghai *Roma*
3. Dr. Richa Goel *Richa*
4. Dr. Shardendu Kumar Mishra *Shardendu*
5. Dr. Snigdha Bhardwaj *Snigdha*

Topics Discussed:

1. The BoS members reviewed and approved the CO statements and CO-PO mapping per IQAC requirements for the 2024-25 Odd semester session.
2. As per the discussion on the IQAC audit report, BoS decided to keep the same target benchmark (internal and external) for the odd semester 2023-24 for the odd semester for session 2024-25.
3. The CO statements, CO-PO mapping, and target benchmarks were handed over to the OBE team for approval by higher authorities. Afterwards, they will be uploaded on the KIET MsERP Portal through the respective CO-coordinator.
4. The BoS members reviewed and approved the new Program Outcome statement for the M. Pharm program for the 2024-25 session.
5. The approved PO statements were handed over to the OBE team for further processing and approval from higher authorities.

24/10/24
Prof. (Dr.) K. Nagarajan
Principal,
KIET School of Pharmacy

16/10/24
Prof. (Dr.) Anil K. Ahlawat
Director Academics,

24/10/24
Prof. (Dr.) Preeti Bajaj
Director General

*It needs further review but
at same time can implement the
24/10/24*

KIET SCHOOL OF PHARMACY
KIET GROUP OF INSTITUTIONS
GHAZIABAD

Minutes of Meeting held on 26th October 2024 AT KIET Group of Institution

Agenda:

Discussion and approval of CO statements, CO-PO mapping, target benchmark for B. Pharm 1st, 3rd, 5th, and 7th semester and Program Outcomes approval for M. Pharm for session 2024-25 Odd semester

Time: 11:30 A.M.

Chair: Dr. K. Nagarajan (Principal-KSOP)

Topics Discussed:

1. The External BoS members reviewed and approved the CO statements and CO-PO mapping per IQAC requirements for the 2024-25 Odd semester session.
2. As per the discussion on the IQAC audit report, BoS decided to keep the same target benchmark (internal and external) for the odd semester 2023-24 for the odd semester for session 2024-25.
3. The CO statements, CO-PO mapping, and target benchmarks were handed over to the OBE team for approval by higher authorities. Afterwards, they will be uploaded on the KIET MsERP Portal through the respective CO-coordinator.
4. The BoS members reviewed and approved the new Program Outcome statement for the M. Pharm program for the 2024-25 session.
5. The approved PO statements were handed over to the OBE team for further processing and approval from higher authorities.

BoS Members Present:

S No.	Name	Appointment	Signature
1.	Prof. (Dr.) Preeti Bajaj	Special Invitee	
2.	Prof. Prof. (Dr. Javed Ali)	External Subject Expert	<i>Dr. Javed Ali</i>
3.	Prof. (Dr.) Shyam S. Sharma	External Subject Expert	<i>online</i>
4.	Prof. (Dr.) P. K. Sahoo	Expert nominated by Vice Chancellor	<i>P. K. Sahoo</i>
5.	Dr. Bhausaheb Patil	Representatives from Industry	<i>Online</i>
6.	Dr. Kapil Joshi	Representatives from Industry	<i>Dr. Kapil Joshi</i>

7.	Prof. (Dr.) Anil K. Ahlawat	Special Invitee	
8.	Dr. Abhinav Juneja	Special Invitee	
9.	Dr. N.G. Raghavendra Rao	Internal Subject Expert	<i>[Signature]</i>
10.	Dr. Roma Ghai	Internal Subject Expert	<i>[Signature]</i>
11.	Dr. Daksh Bhatia	Internal Subject Expert	
12.	Mr. Nazakat Ali	Alumni Entrepreneur nominated by Director General	<i>[Signature]</i>

[Signature]
Prof. (Dr.) K. Nagarajan
 Principal,
 KIET School of Pharmacy



KIET SCHOOL OF PHARMACY

Minutes of Meeting held on 25th November 2024 in KSOP Department

Agenda:

Discussion and approval of CO statements, CO-PO mapping and target benchmark for M. Pharm (Pharmaceutics, Pharmacology, Pharm. Quality Assurance) 1st semester for session 2024-25 Odd semester

Time: 2:00 P.M.

Chair: Dr. K. Nagarajan (Principal-KSOP)

BoS Members Present:

1. Dr. N.G. Raghavendra Rao
2. Dr. Roma Ghai
3. Dr. Richa Goel
4. Dr. Shardendu Kumar Mishra
5. Dr. Snigdha Bhardwaj

Topics Discussed:

1. The BoS members reviewed and approved the CO statements and CO-PO mapping per IQAC requirements for the 2024-25 Odd semester session.
2. As per the discussion on the IQAC audit report, BoS decided to keep the same target benchmark (internal and external) for the odd semester 2023-24 for the odd semester for session 2024-25.
3. The CO statements, CO-PO mapping, and target benchmarks were handed over to the OLE team for approval by higher authorities. Afterwards, they will be uploaded on the KIET MsERP Portal through the respective CO-coordinator.

Prof. (Dr.) K. Nagarajan
Principal,
KIET School of Pharmacy

Prof. (Dr.) Anil K. Ahlawat
Director Academics,

Prof. (Dr.) Preeti Bajaj
Director General

KSOP Subject Allocation Odd Sem, 2024-25

17-07-2024

KSOP Subject Allocation Odd Sem, 2024-25						17-07-2024	
Yr	Subject	Theory (Sec-A) THEORY	CLASS COORDINATOR	Theory (Sec-B)	CLASS COORDINATOR		
I-Yr	Human Anatomy and Physiology	Dr. Praveen Kr. Dixit	Dr. Praveen Kr. Dixit/ Ms. Pragati Gupta	Ms. Priya Bansal	Mr. Shikha Kaushik/ Ms. Sakshi Garg-2		
	Pharmaceutics I	Mr. Sanjeev Chaudhan		Ms. Sakshi Garg-2			
	Pharmaceutical Analysis I	Dr. Smriti		Dr. Abhay Bhardwaj			
	Pharmaceutical Inorganic Chemistry	Ms. Pragati Gupta		Ms. Shikha Kaushik			
	R. Biology	Dr. Richa/Ms. Sheena		NA			
	Communication Skills	Ms. Jigyasa Chaudhary		Ms. Jigyasa Chaudhary			
	R. Mathematics	Dr. Dinkha Rohangi		Dr. Richa Agarwal			
II-Yr	Pharmaceutical Engineering	Mr. Balwan Singh	Mr. Balwan Singh/ Dr. Monika Kaurav	Mr. Sanjeev Chaudhan	Mr. Sanjeev Chaudhan/ Mr. Debaprasad Ghosh		
	Physical Pharmaceutics I	Mr. Debaprasad Ghosh		Mr. Debaprasad Ghosh			
	Pharmaceutical Microbiology	Dr. Monika Kaurav		Dr. Monika Kaurav			
	Pharmaceutical Organic Chemistry II	Mr. Surya Prakash		Ms. Shipra Singhal			
	Universal Human Values and Professional Ethics	Mr. Surya Prakash		Dr. Praveen Kr. Dixit			
	MINOR SPECIALIZATION (DRA)	Dr. Ashu Mittal		Ms. Sakshi Garg2			
	Industrial Pharmacy I	Dr. Ashu Mittal		Mr. Anuj Pathak		Dr. Snigdha Bhardwaj/ Dr. Garima Kapoor	
Pharmaceutical Jurisprudence	Dr. Garima Kapoor	Dr. Snigdha Bhardwaj					
Pharmacology II	Dr. Abhishek Kumar	Dr. Roma Ghai					
Medicinal Chemistry II	Ms. Pragati Gupta	Dr. Garima 3.5 Units Dr. Nagarajan 1.5-Unit					
Pharmacognosy and Phytochemistry	Dr. Richa Goel	Dr. Daksh Bhatia					
IV-Yr	Instrumental Methods of Analysis	Dr. Lalit 4-Units/ Dr. Nagarajan 1-Unit	Ms. Vidhu Saxena/ Dr. Lakshmi	Ms. Shipra Singhal	Mr. Balwan Singh/ Ms. Shipra Singhal		
	Novel Drug Delivery System (NDDS)	Dr. Lakshmi		Dr. N. G. R. Rao			
	Industrial Pharmacy II	Ms. Vidhu Saxena		Mr. Balwan Singh			
	Pharmacy Practice	Dr. Shardendu Kumar Mishra		Ms. Priya Bansal			
	Python Programming*	Dr. Piyush Pant		Dr. Piyush Pant			
	Corporate Quality Skills*	Ms. Sheena/Ms. Surbhi		Dr. Lalit/ Ms. Nidhi			
	MAT PG-QA	Dr. K. Nagamjan		Dr. Smriti Sahu			
Quality Management System PG-QA	Dr. Smriti Sahu						
Quality Control and Quality Assurance PG-QA	Dr. Lakshmi						
Product Development and Technology Transfer PG-QA	Ms. Surbhi Kamboj						
PG-Pharmaceutics	Drug Delivery System PG-Pharmaceutics	Dr. N. G. R. Rao	Dr. Snigdha Bhardwaj				
	Modern Pharmaceutics	Dr. Snigdha Bhardwaj					
	Regulatory Affairs PG-Pharmaceutics	Mr. Anuj Pathak					
	MAT PG-Pharmaceutics	Dr. Abhay Bhardwaj					
PG-Pharmacology	Pharmacological and Toxicological Screening Methods-I	Dr. Roma Ghai	Dr. Roma Ghai				
	Advanced Pharmacology-I PG-Cology	Dr. Abhishek					
	MAT PG-Cology	Dr. Parul Grover					
	Cellular and Molecular Pharmacology PG-Cology	Dr. Shardendu Kumar Mishra					
III SEM	RESEARCH METHODOLOGY AND BIostatISTICS	Dr. Ajay Dixit/Ms. Nidhi	Ms. Nidhi				
D.Pharm-I	Pharmacognosy - Theory D.Pharm-I	Dr. Deepti Katiyar	Dr. Deepti Katiyar/ Mr. Priya Ranjan Bhidonia				
	Social Pharmacy - Theory D.P-I	Mr. Priya Ranjan Bhidonia					
	Pharmaceutics - Theory D.P-I	Mr. Shubham Sharma					
	Pharmaceutical Chemistry - Theory D.Pharm-I	Ms. Shikha Kaushik					
	Human Anatomy & Physiology - Theory D.Pharm-I	Mr. Kapil Sachan					
D.Pharm-II	Pharmacy Law & Ethics D.P-II	Mr. Shubham Sharma	Mr. Shubham Sharma/ Mr. Kapil Sachan				
	Community Pharmacy & Management D.Pharm-II	Ms. Konika Rao					
	Environmental Education and Disaster Management	Ms. Konika Rao					
	Biochemistry & Clinical Pathology D.Pharm-II	Ms. Sheena Mehta					
	Pharmacotherapeutics D.Pharm-II	Mr. Kapil Sachan					
	Pharmacology D.P-II	Ms. Nidhi					
	Hospital & Clinical Pharmacy D.Pharm-II	Mr. Priya Ranjan Bhidonia					

* Advanced tools in AI including corporate Quality Skills



KSOP CO-COORDINATOR Odd Sem, 2024-25

Sem.	SUBJECT Code	Name of the SUBJECT	CO-COORDINATOR
1	BP101T	Human Anatomy and Physiology- Theory	Dr. Praveen Kr. Dixit
1	BP102T	Pharmaceutical Analysis I - Theory	Dr. Abhay Bhardwaj
1	BP103T	Pharmaceutics I - Theory	Mr. Sanjeev Chauhan
1	BP104T	Pharmaceutical Inorganic Chemistry- Theory	Ms. Pragati Gupta
1	BP105T	Communication Skills - Theory	Mr. Himanshu Saxena (HSS)
1	BP106RBT	Remedial Biology	Ms. Sheena
1	BP106RMT	Mathematics - Theory	Dr. Sonal (AS-1)
1	BP107P	Human Anatomy and Physiology - Practical	Ms. Priya Bansal
1	BP108P	Pharmaceutical Analysis I - Practical	Ms. Pallavi Barik
1	BP109P	Pharmaceutics I - Practical	Ms. Sakshi Garg
1	BP110P	Pharmaceutical Inorganic Chemistry- Practical	Ms. Shikha Kaushik
1	BP111P	Communication Skills - Practical	Mr. Himanshu Saxena (HSS)
1	BP112RBP	Remedial Biology- Practical	Ms. Sheena
1	24VA113	Emerging Technologies in Pharmacy-AI, Data Science, Cloud, IOT, 3D Printing	Ms. Sakshi Garg
3	BP301T	Pharmaceutical Organic Chemistry II - Theory	Ms. Shipra Singhal
3	BP302T	Physical Pharmaceutics I - Theory	Mr. Debaprasad Ghosh
3	BP303T	Pharmaceutical Microbiology - Theory	Dr. Monika Kaurav
3	BP304T	Pharmaceutical Engineering - Theory	Mr. Sanjeev Chauhan
3	BP305P	Pharmaceutical Organic Chemistry II - Practical	Mr. Surya Prakash
3	BP306P	Physical Pharmaceutics I - Practical	Mr. Debaprasad Ghosh
3	BP307P	Pharmaceutical Microbiology- Practical	Dr. Monika Kaurav
3	BP308P	Pharmaceutical Engineering - Practical	Mr. Sanjeev Chauhan
3	KVE301	Universal Human Values and Professional Ethics	Dr. Praveen Kr. Dixit
3		MINOR SPECIALIZATION (DRA)	Ms. Sakshi Garg
5	BP501T	Medicinal Chemistry II - Theory	Dr. Garima Kapoor
5	BP502T	Industrial Pharmacy I - Theory	Dr. Ashu Mittal
5	BP503T	Pharmacology II - Theory	Dr. Abhishek Kumar
5	BP504T	Pharmacognosy and Phytochemistry	Dr. Richa Goel
5	BP505T	Pharmaceutical Jurisprudence - Theory	Mr. Balwan Singh
5	BP506P	Industrial Pharmacy I- Practical	Dr. Lakshmi
5	BP507P	Pharmacology II - Practical	Dr. Shardendu Kumar Mishra
5	BP508P	Pharmacognosy and Phytochemistry II - Practical	Dr. Daksh Bhatia
5	BP509P	Report on Hospital Training-I	Mr. Kapil Sachan
7	BP701T	Instrumental Methods of Analysis - Theory	Dr. Lalit
7	BP702T	Industrial Pharmacy II - Theory	Mr. Balwan Singh
7	BP703T	Pharmacy Practice - Theory	Ms. Priya Bansal
7	BP704T	Novel Drug Delivery System (NDDS) - Theory	Dr. Lakshmi
7	BP705P	Instrumental Methods of Analysis/ NDSS - Practical	Dr. Garima Kapoor
7	BP706PS	Practice School	Mr. Debaprasad Ghosh
7	BP707P	Report on Hospital Training-II	Ms. Vidhu Saxena
7		AI and Corporate Quality Skills	Ms. Nidhi
PG-QA	MQA101T (New)	Modern Pharmaceutical Analytical Techniques	Dr. K. Nagarajan
	MQA102T (New)	Quality Management System	Dr. Smriti Sahu
	MQA103T (New)	Quality Control and Quality Assurance	Dr. Lakshmi
	MQA104T (New)	Product Development and Technology Transfer	Ms. Surbhi Kamboj
	MQA105P (New)	Pharmaceutical Quality Assurance Practical I	Ms. Surbhi Kamboj
PG-Pharmaceutics	MPH101T	Modern Pharmaceutical Analytical Techniques	Dr. Abhay Bhardwaj
	MPH102T	Drug Delivery System	Dr. N. G. R. Rao
	MPH103T	Modern Pharmaceutics	Dr. Snigdha Bhardwaj
	MPH104T	Regulatory Affairs	Mr. Anuj Pathak
	MPH105P	Pharmaceutics Practical I	Dr. Snigdha Bhardwaj
PG-Pharmacology	MPL101T	Modern Pharmaceutical Analytical Techniques	Dr. Smriti Sahu
	MPL102T	Advanced Pharmacology-I	Dr. Abhishek
	MPL103T	Pharmacological and Toxicological Screening Methods-I	Dr. Roma Ghai
	MPL104T	Cellular and Molecular Pharmacology	Dr. Shardendu Kumar Mishra
	MPL105P	Experimental Pharmacology - I	Dr. Roma Ghai
PG-III SEM	MRM301T	RESEARCH METHODOLOGY AND BIOSTATISTICS	Ms. Nidhi



TARGET BENCHMARK B.PHARM ODD SEM 2024-25 please put the average of the last three years as the theory external target benchmark. If there is any deviation, you need to justify the same to BoS)

S.NO.	SUBJECT CODE	SUBJECT NAME	SUBJECT TYPE	FACULTY NAME	Internal Target	External Target
1	BP101T	HUMAN ANATOMY AND PHYSIOLOGY-Theory	THEORY	Dr. Praveen Kr. Divil	60	58
2	BP102T	PHARMACEUTICAL ANALYSIS I-Theory	THEORY	Dr. Abhay Bhardwaj	55	53
3	BP103T	PHARMACEUTICS I -Theory	THEORY	Mr. Debaprasad Ghosh	54	52
4	BP104T	PHARMACEUTICAL INORGANIC CHEMISTRY	THEORY	Ms. Shikha Kaushik	57	55
5	BP105T	COMMUNICATION SKILLS -Theory	THEORY	Dr. Priyanka	58	55
6	BP106R31T	REMEDIAL BIOLOGY -Theory	THEORY	Ms. Sheena Mehra	57	55
7	BP106RMT	REMEDIAL MATHEMATICS -Theory	THEORY	Dr. Richa Aggarwal/Dr. Barka	58	55
8	BP107P	IBAP PRACTICAL	LAB	Ms. Priya Bansal	70	70
9	BP108P	P ANALYSIS PRACTICAL	LAB	Dr. Neha Rana	70	70
10	BP109P	PHARMACEUTICS PRACTICAL	LAB	Mr. Pankaj Bhatt	70	70
11	BP110P	IPC PRACTICAL	LAB	Ms. Pragati Gupta	70	70
12	BP105T	COMMUNICATION SKILLS PRACTICAL	LAB	Dr. Priyanka	70	70
13	BP112RBP	REMEDIAL BIOLOGY PRACTICAL	LAB	Ms. Sheena Mehra	70	70
14	BP-301T	PHARMACEUTICAL ORGANIC CHEMISTRY-II	THEORY	Ms. Shipra Singhal	60	55
15	BP-302T	PHYSICAL PHARMACEUTICS-I	THEORY	Dr. Kiran Sharma	63	61
16	BP-303T	PHARMACEUTICAL MICROBIOLOGY	THEORY	Dr. Monika Kaurav	58	56



17	BP-304T	PHARMACEUTICAL ENGINEERING	THEORY	Mr. Balwan Singh	54	55
18	BP-305P	PHARMACEUTICAL ORGANIC CHEMISTRY-II PRAC	LAB	Mr. Surya Prakash	70	70
19	BP-306P	PHYSICAL PHARMACEUTICS-I PRACTICAL	LAB	Ms. Sakshi Garg	70	70
20	BP-307P	PHARMACEUTICAL MICROBIOLOGY PRACTICAL	LAB	Dr. Monika Kaurav	70	70
21	BP-308P	PHARMACEUTICAL ENGINEERING PRACTICAL	LAB	Mr. Sanjeev Chaudhan	70	70
22	KVE-301	UNIVERSAL HUMAN VALUES & PROFESSIONAL ETHICS	THEORY	Dr. Garima Kapoor	67	65
23	BP410VA	MINOR SPECIALIZATION (DRA)	VALUE ADDED COURSE	Dr. Deepthi Kariyar	60	55
24	BP-501T	MEDICINAL CHEMISTRY-II	THEORY	Ms. Pragati Gupta	57	55
25	BP-502T	INDUSTRIAL PHARMACY-I	THEORY	Dr. Ashu Mital	56	54
26	BP-503T	PHARMACOLOGY-II	THEORY	Dr. Abhishek Kumar	59	57
27	BP-504T	PHARMACOGNOSY-II	THEORY	Dr. Daksh Bhatia	60	55
28	BP-505T	PHARMACEUTICAL JURISPRUDENCE	THEORY	Mr. Pankaj Bhatt	57	55
29	BP-506P	INDUSTRIAL PHARMACY-I PRACTICAL	LAB	Ms. Surbhi Kamboj	70	70
30	BP-507P	PHARMACOLOGY-II PRACTICAL	LAB	Dr. Roma Ghai	70	70
31	BP-508P	PHARMACOGNOSY-II PRACTICAL	LAB	Dr. Richa Goel	70	70
32	BP-701T	INSTRUMENTAL METHODS OF ANALYSIS THEORY	THEORY	Dr. Vaishali Manikao Patil	63	61
33	BP-702T	INDUSTRIAL PHARMACY II THEORY	THEORY	Mr. Anuj Pathak	61	59
34	BP-703T	PHARMACY PRACTICE THEORY	THEORY	Dr. Shardendu Kumar Mishra	63	61
35	BP-704T	NOVEL DRUG DELIVERY SYSTEM (NDDS) THEORY	THEORY	Dr. Lakshmi	64	62



36	BP-705P	INSTRUMENTAL METHODS OF ANALYSIS PRACTICAL	LAB	Dr. Garima Kapoor	70	70
37	..	Advances in Computer including AI and Corporate Quality Skills	VALUE ADDED COURSE	Ms. Vidhu Saxena	50	50
38	BP-706PS	PS- PHYTOMEDICINE	LAB	Mr. Dehprasad Ghosh	70	70
39	BP-706PS	PS- FORMULATION DEVELOPMENT	LAB			
40	BP-706PS	PS- DRUG DESIGN AND PROCESS CHEMISTRY	LAB			
41	BP-706PS	PS- QUALITY CONTROL AND QUALITY ASSURANCE	LAB			
42	BP-706PS	PS- ALTERNATIVE MEDICINE	LAB			
43	BP-706PS	PS- ARTIFICIAL INTELLIGENCE	LAB			

PRINCIPAL
KSOP



Program Name: B. Pharm	Academic Session: Odd 2024-25	Semester: I
Course name: HAP-I	Course Code: BP101T	Faculty: Dr. Praveen K. Dixit

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Understand the basics of human body parts including cell, tissue and various types of cellular communication pathways.	Understand	Factual & Conceptual
CO2	Illustrate the structural and functional characteristics of bones and muscles of the human body.	Apply	Factual & Conceptual
CO3	Compare the composition and functions of Blood and Lymph.	Analyze	Factual & Conceptual
CO4	Illustrate the anatomical and physiological aspects of peripheral nervous system and sense organs.	Apply	Factual & Conceptual
CO5	Illustrate the structural and functional aspects of heart and ECG in correlation with related disorders.	Apply	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

HAP-I (BP101T)

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	-	-	-	-	1	1	1	-	2
CO-2	3	-	-	-	-	-	1	1	1	-	2
CO-3	3	-	-	-	-	-	1	1	1	-	2
CO-4	3	-	-	-	-	-	1	1	1	-	2
CO-5	3	-	-	-	-	-	1	1	1	-	2
PO Target	3	-	-	-	-	-	1	1	1	-	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The statement of a CO must be formed considering a proper structure and Criteria
- ❖ The statement of a CO must be formed considering a proper structure and Criteria

g credits less than 3 should have 4 number of COs, and optional parts. The mandatory parts are Action & Knowledge

Program Name: B. Pharm	Academic Session: Odd 2024-25	Semester: I
Course name: Pharm. Analysis-I	Course Code: BP102T	Faculty: Dr. Abhay Bhardwaj

Tagging COs with BLs & KCs	Statement of Course Outcome	Pharm's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	Understand the basic concepts of pharmaceutical analysis, its techniques and errors	Understand	Factual, Conceptual
CO2	Demonstrate the basic concepts of acid base and non-aqueous titrations and its applications	Apply	Factual, Conceptual
CO3	Outline the basic and concepts of precipitation, complexometric, gravimetry and diazotisation titration	Analyse	Factual, Conceptual
CO4	Acquire the basic concepts of redox titration along with its applications	Apply	Factual, Conceptual
CO5	Interpret the basics and concepts of electrochemical method of analysis.	Evaluate	Factual, Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix										
Pharm. Analysis-I (BP102T)										
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO-1	3	-	2	3	-	1	1	-	2	-
CO-2	3	-	2	2	-	1	1	-	2	1
CO-3	3	-	2	3	-	1	1	-	2	1
CO-4	3	-	2	3	-	1	1	-	2	1
CO-5	3	-	2	3	-	1	1	-	2	1
PO Target	3	-	2	2.8	-	1	1	-	2	1

Signature of HoD

Signature of Addl. HoD

Signature of Course Coordinator

Please Note (Reference: OBE Guidelines wof. Session 2023-24)
❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 number of COs.
❖ The statement of a CO must be formed considering a proper sentence having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

Program Name: B. Pharm	Academic Session: Odd 2024-25	Semester: I
Course name: Pharmaceutics-I	Course Code: BP103T	Faculty: Mr. Sanjeev Chauhan

Tagging COs with BLs & KCs		Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO No.	After completion of the course, the student will be able to			
CO1	Discuss the rational and concept behind the pharmacy profession, definition and types of dosage forms, pharmacopoeia, prescription & Posology.	Understand	Factual & Conceptual	
CO2	Apply different types of calculations involved in the pharmaceuticals, pharmaceutical powders and liquid dosage forms.	Apply	Conceptual & Procedural	
CO3	Analyze the different monophasic liquid dosage forms and biphasic liquid dosage forms like suspension and emulsions.	Analyze	Conceptual & Procedural	
CO4	Identify the formulation requirements of suppositories and different types of incompatibilities.	Analyze	Conceptual & Procedural	
CO5	Illustrate the concept and preparation of semisolid dosage forms.			

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Pharmaceutics-I (BP103I)											
Mapping of Course outcomes with POs											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	1	1		1	1	1	1	1		2
CO-2	3	1	2			1	1				2
CO-3	3	1	1	2		1	1				2
CO-4	3	1	2			1	1				2
CO-5	3	1	1	2		1	1	1	1		2
PO Target	3	1	1.4	2	1	1	1	1	1		2

[Signature]

Signature of HoD

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 Criterion.

Program Name: B. Pharm	Academic Session: Odd 2024-25	Semester: I
Course name: Inorganic Pharm. Chemistry	Course Code: BP104T	Faculty: Ms. Pragati Gupta

Tagging COs with BLs & KCs		
CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)
After completion of the course, the student will be able to		
CO1	Understand the sources & types of impurities and different limit tests for inorganic compounds in pharmaceuticals.	Understand
CO2	Explore buffers, electrolytes in replacement therapy & dental products and calculate isotonicity.	Apply
CO3	Illustrate the various inorganic gastrointestinal agents & antimicrobials.	Apply
CO4	Acquire knowledge of expectorants, emetics, hematinic, & antidotes used in inorganic pharmaceuticals.	Apply
CO5	Explore the radiopharmaceuticals, their handling & precautions.	Analyze
		Knowledge Category (KC)
		Factual & Conceptual
		Conceptual & Procedural
		Conceptual
		Conceptual
		Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix										
Inorganic Pharm. Chemistry (BP104T)										
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10 PO-11
CO-1	1	-	-	-	-	-	-	-	2	3 1
CO-2	1	-	-	-	-	-	-	-	2	2 1
CO-3	1	-	-	-	-	-	-	-	2	1 1
CO-4	1	-	-	-	-	-	-	-	2	- 1
CO-5	1	2	-	-	-	-	-	-	2	3 1
PO Target	1	2	-	-	-	-	-	-	2	2.25 1

Signature of Course Coordinator  Signature of Addl. HoD  Signature of HoD 

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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.

Program Name: B. Pharm	Academic Session: Odd 2024-25	Semester: I
Course name: Communication Skills	Course Code: BP105T	Faculty: Mr. Himanshu Saxena (HSS)

Tagging COs with BLs & KCs			Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO No.					
After completion of the course, the student will be able to					
CO1	Understand the communication strategies and principles along with the various perspectives at workplace.			Understand	Conceptual
CO2	Interpret the verbal & Non-verbal communication skills including the cognition of various communication styles.			Understand	Conceptual
CO3	Attain self-confidence with improved command over listening, and writing skills.			Apply	Conceptual
CO4	Exercise the key principles of effective presentation techniques.			Apply	Conceptual
CO5	Acquire communication tactics for diverse day-to-day events and situation with cohesive arguments to reach a consensus.			Apply	Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Course Code	Communication Skills (BP105T)										
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	-	-	-	-	1	-	-	3	1	1	2
CO-2	-	-	-	-	-	-	-	3	1	1	2
CO-3	-	-	-	-	2	-	-	3	1	1	2
CO-4	-	-	-	-	-	-	-	3	2	1	2
CO-5	-	-	-	-	3	-	-	3	1	1	2
PO Target	-	-	-	-	2	-	-	3	1.2	1	2

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Signature of Course Coordinator

[Signature]

Signature of Addl. HoD

[Signature]

Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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: Odd 2024-25	Semester: I
Course name: Remedial Biology	Course Code: BP106RBT	Faculty: Ms. Sheena Mehra

Tagging COs with BLs & KCs		Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO No.	After completion of the course, the student will be able to			
CO1	Understand the basic components of anatomy & morphology of plants		Understand	Factual, Conceptual
CO2	Illustrate the concept of Body fluids, circulatory system, digestive system and respiration system.		Apply	Factual, Conceptual
CO3	Relate the basic concepts of excretory system, human reproduction system, neural, chemical control and coordination		Apply	Factual, Conceptual
CO4	Understand the basic concept of plant nutrition and nitrogen metabolism with the process of photosynthesis		Understand	Conceptual
CO5	Discover the plant cell and tissues with the mechanism of plant respiration, its growth and development		Apply	Factual, Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Remedial Biology (BP106RBT)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3						1	1		1	3
CO-2	3						1	1	3		3
CO-3	3						1	1	3		3
CO-4	3						1	1		1	3
CO-5	3						1	1		1	3
PO Target	3						1	1	3	1	3

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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	Semester: I
Course name: Remedial Mathematics	Academic Session: Odd 2024-25
	Faculty: Dr. Sonal (AS)
	Course Code: BP106RMT

Tagging COs with BLs & KCs	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO No.			
After completion of the course, the student will be able to			
CO1	Apply the concepts of partial fractions, logarithms, real valued functions, limits and continuity in chemical kinetics and Pharmacokinetics.	Apply	Conceptual, Procedural
CO2	Apply the concepts of determinants and matrices in solving Pharmacokinetic equations.	Apply	Conceptual, Procedural
CO3	Apply the concepts of derivatives of a function of one variable to find extrema at a point	Apply	Conceptual, Procedural
CO4	Apply the concepts of co-ordinate geometry integration in pharmaceutical problems.	Apply	Conceptual, Procedural
CO5	Apply the concepts of Differential equations and Laplace transformations in solving Chemical kinetics & Pharmacokinetic equations.	Apply	Conceptual, Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Remedial Mathematics (BP106RMT)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	2	-	-	-	-	-	1	-	1	-	1
CO-2	2	1	1	1	-	-	1	-	1	-	1
CO-3	2	1	2	-	-	-	1	-	1	-	1
CO-4	2	1	1	-	-	-	1	-	-	-	1
CO-5	2	1	2	-	-	-	1	-	1	-	1
PO Target	2	1	4.5	1	-	-	1	-	1	-	1

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Signature of Course Coordinator

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Signature of Addl. HoD

[Signature]
Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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

Program Name: B. Pharm	Academic Session: Odd 2021-22	Semester: I
Course name: Human Anatomy & Physiology-I Practical	Course Code: BP107P	Faculty: Ms. Priya Bansal

Tagging COs with BLs & KCs	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	After completion of the course, the student will be able to Illustrate the microscopical characteristics of different types of cells and tissues in human body under the light of microscopic techniques.	Analyze	Conceptual & Procedural
CO2	Identify various types of bones and joints under the background of their anatomical correlation.	Analyze	Conceptual & Procedural
CO3	Assess the methods and techniques to measure the various components of blood.	Evaluate	Conceptual & Procedural
CO4	Demonstrate the process of recording of blood pressure, pulse rate and heart rate.	Apply	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Human Anatomy & Physiology-I Practical (BP107P)										
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10 PO-11
CO-1	3	-	-	2	-	-	-	1	2	2
CO-2	3	-	-	2	-	-	-	1	2	2
CO-3	3	-	1	2	-	-	-	1	2	3
CO-4	3	-	-	2	-	-	-	1	2	3
PO Target	3	-	1	2	-	-	-	1	2	2.5

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Signature of Course Coordinator

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Signature of Addl. HoD

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Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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
- The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge

Program Name: B. Pharm	Academic Session: Odd 2024-25	Semester: I
Course name: Pharm Analysis Practical	Course Code: BP108P	Faculty: Dr. Smriti Sahu

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	After completion of the course, the student will be able to Determine the qualitative and quantitative analysis of molecules in pharmaceuticals by volumetric analysis.	Apply	Conceptual & Procedural
CO2	Analyze the standardization of the given strength of molecules in pharmaceuticals.	Analyze	Conceptual & Procedural
CO3	Investigate the assay of given samples of pharmaceutical molecules.	Analyze	Conceptual & Procedural
CO4	Analyze the electroanalytical methods for determination of normality.	Analyze	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Pharm Analysis Practical (BP108P)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	3	1	-	-	-	-	3	3	3
CO-2	3	-	3	1	-	-	-	-	3	2	3
CO-3	3	-	3	1	-	-	1	-	3	1	3
CO-4	3	-	3	1	-	-	-	-	3	-	3
PO Target	3	-	3	1	-	-	1	-	3	3	3

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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.

Program Name: B. Pharm	Academic Session: Odd 2024-25	Semester: I
Course name: : Pharmaceutics-I (Practical)	Course Code: BP109P	Faculty: Ms. Sakshi Garg

Tagging COs with BLs & KCs		Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome		
CO1	After completion of the course, the student will be able to Demonstrate the preparation and dispensing of monophasic liquid dosage forms (syrups, elixirs, linctuses, gargles, mouthwashes and solutions).	Apply	Conceptual and Procedural
CO2	Illustrate the preparation and dispensing of biphasic liquid dosage forms (suspensions and emulsions).	Apply	Conceptual and Procedural
CO3	Illustrate the preparation and dispensing of pharmaceutical powders and granules.	Apply	Conceptual and Procedural
CO4	Demonstrate the preparation and dispensing of suppositories and semisolid dosage forms such as ointments and gels.	Apply	Conceptual and Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Pharmaceutics-I (Practical) (BP109P)										
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10 PO-11
CO-1	3	1	1	2	-	2	1	-	-	2
CO-2	3	1	1	2	-	2	1	-	-	2
CO-3	3	1	1	2	-	2	1	-	-	2
CO-4	3	1	2	2	-	2	1	-	-	2
PO Target	3	1	1.25	2	-	2	1	-	-	

Signature of Addl. HoD

Signature of Course Coordinator

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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

Program Name: B. Pharm	Academic Session: Odd 2024-25	Semester: I
Course name: Pharmaceutical Inorganic Chemistry Practical	Course Code: BP110P	Faculty: Ms. Shikha Kaushik

Tagging COs with BLs & KCs		Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome		
	After completion of the course, the student will be able to	Apply	Conceptual & Procedural
CO1	Examine the sources of impurities with limit test for inorganic molecules and pharmaceuticals	Apply	Conceptual & Procedural
CO2	Demonstrate the identification test and test for purity of inorganic molecules in pharmaceuticals	Apply	Conceptual & Procedural
CO3	Demonstrate on the preparation of inorganic pharmaceuticals and their assays	Apply	Conceptual & Procedural
CO4	Examine the test for purity of inorganic molecules in pharmaceuticals.	Apply	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Pharmaceutical Inorganic Chemistry Practical (BP110P)										
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10
CO-1	3	1	3	1	-	-	1	1	3	3
CO-2	3	1	3	1	-	-	1	1	3	2
CO-3	3	1	3	1	-	-	1	1	3	1
CO-4	3	1	3	1	-	-	1	1	3	1
PO Target	3	1	3	1	-	-	1	1	3	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

Program Name: B. Pharm	Academic Session: Odd 2024-25	Semester: I
Course name: Communication Skills Practical	Course Code: BP111P	Faculty: Mr. Himanshu Saxena (HSS)

Tagging COs with BLs & KCs	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	After completion of the course, the student will be able to Attain the cognizance to exhibit interest and participate in the synergy & team work with the help of good interpersonal skills.	Apply	Conceptual
CO2	Apply the pronunciation etiquette to build the self-confidence with improved command over the mechanics of English language.	Apply	Procedural
CO3	Attain both formal effective verbal and non-verbal communication skills to make information more accessible to the audience.	Apply	Procedural
CO4	Design well-structured written content, including emails and professional documents, by implementing advanced writing skills and etiquette for formal communication.	Apply	Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Course Code	Course Name (Course Code)										
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	-	-	-	-	-	-	-	3	-	-	1
CO-2	-	-	-	-	-	-	-	3	-	-	1
CO-3	-	-	-	-	3	-	-	3	-	-	1
CO-4	-	-	-	-	3	-	-	3	-	-	1
PO Target	-	-	-	-	3	-	-	3	-	-	1

[Signature]

Signature of Course Coordinator

[Signature]

Signature of Addl. HoD

[Signature]

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 number of COs.
- The courses having credits less than 3 should have 4 number of COs. The mandatory parts are Action & Knowledge
- The statement of a CO must be formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge

Program Name: B. Pharm	Academic Session: Odd 2024-25	Semester: I
Course name: Remedial Biology (Practical)	Course Code: BP112P	Faculty: Ms. Sheena Mehta

Tagging COs with BLs & KCs		Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome		
	After completion of the course, the student will be able to		
CO1	Understand the structure of cell and its inclusions.	Understand	Conceptual and Procedural
CO2	Demonstrate microscope, section cutting, mounting and staining of slides.	Apply	Procedural
CO3	Contrast cell, stem, root, leaf, seed, fruit, flower and their modifications	Understand	Conceptual and Procedural
CO4	Determine the blood group, blood pressure and tidal volume in human.	Apply	Conceptual and Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Remedial Biology (Practical) (BP112P)										
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10
CO-1	3	-	-	2	-	-	1	-	-	3
CO-2	3	-	-	2	-	-	1	-	-	3
CO-3	3	-	3	2	-	-	1	-	-	3
CO-4	3	-	-	2	-	-	1	1	1	3
PO Target	3	-	3	2	-	-	1	1	1	-

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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

Program Name: B. Pharm
Course name: Emerging Technologies in Pharmacy

Semester: I
Faculty: Ms. Sakshi Garg

Academic Session: Odd 2024-25
Course Code: BPPI 113

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
	After completion of the course, the student will be able to		
CO1	Understand the concept of Artificial intelligence in drug discovery and development.	Understand	Factual & Conceptual
CO2	Understand various data science tools to address healthcare needs.	Understand	Factual & Conceptual
CO3	Understand the concepts of cloud computing and applications in pharmacy.	Understand	Factual & Conceptual
CO4	Understand the concepts of IoT in healthcare.	Understand	Factual & Conceptual
CO5	Understand basic concepts, principles and applications of 3D printing in Pharmacy.	Understand	Factual & Conceptual
	Understand the basic concepts and applications of 3D printing in Pharmacy.		

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Mapping of Course outcomes with Program outcomes in Pharmacy (B.Ph. 1st Year)											
Course Code	Emerging Technologies in Pharmacy										PO-10
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9		
CO-1	3	-	1	1	1	-	2	2	3	1	3
CO-2	3	-	2	2	1	-	2	2	2	1	3
CO-3	3	-	1	2	1	-	2	-	-	-	3
CO-4	3	-	2	2	1	2	2	2	2	-	3
CO-5	3	-	-	2	1	2	2	2	2	-	3
PO Target	3	-	1.5	1.8	1	2	2	2	2.3	1	3


Signature of HoD

Signature of HoD

Signature of Addl. HoD

Signature of Course Coordinator

Please Note (Reference: OBE Guidelines wef. Session 2023-24)
The courses having credits less than 3 should have 4 number of COs.
The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 number of COs. The mandatory parts are Action & Knowledge

KIET Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Year: II Semester: III

Academic Session: Odd 2024-25

Course Coordinator Name: Shipra Singhal

Program Name: B. Pharm
Course Name: Pharmaceutical Organic Chemistry-II

Course Code: BP301T

Course Outcomes

After completion of the course, the student will be able to

CO No.	Statement of Course Outcome	Relevant POs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO1	Illustrate the structure, properties, chemical reactions and uses of benzene and its derivatives.	PO-1,3,6,7,9, 10, 11	Apply	Factual & Conceptual
CO2	Examine the structure, properties, chemical reactions and uses of phenols, aromatic amines and aromatic acids.	PO-1,3,6,7,9, 10, 11	Apply	Factual & Conceptual
CO3	Determine the structure, chemical reactions and analytical constants and significance of oil and fats.	PO-1,3,6,7,9, 10, 11	Apply	Factual & Conceptual
CO4	Illustrate the structure, synthesis, chemical reactions and medicinal uses of polynuclear hydrocarbons.	PO-1,3,6,7,9, 10, 11	Apply	Factual & Conceptual
CO5	Illustrate the structure, properties, chemical reactions and uses of cycloalkanes.	PO-1,3,6,7,9,10, 11	Apply	Factual & Conceptual

Programme Outcome (PO)

CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	-	2	-	-	2	1	-	2	1	1
CO2	3	-	2	-	-	2	1	-	2	1	1
CO3	3	-	2	-	-	2	1	-	2	1	1
CO4	3	-	2	-	-	2	1	-	2	1	1
CO5	3	-	2	-	-	2	1	-	2	1	1
PO Target	3.00	-	2.00	-	-	2.00	1.00	-	2.00	1.00	1.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Mr. Surya Prakash		2. Ms. Shipra Singhal	

Signature of Course Coordinator

Assoc./ ASST. Head DOC

Signature of Addl. HoD

Signature of HoD

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

- The theory courses/ project having credits 3 to 6 should have 3 number of COs. The laboratory course 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 are Action & Knowledge and optional parts are Condition and Criteria.

of industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits

KIET Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm
Course Name: Physical Pharmaceutics-I
Academic Session: Oct 2024-25
Year: II
Semester: III
Course Coordinator Name: Mr. Debaprasad Ghosh
Course Code: BP302T

Course Outcomes

After completion 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			
CO1	Illustrate the parameters related to solubility of the drugs.	PO-1,2,3,4,8,9,11.	Apply	Factual, Conceptual
CO2	Analyze states of matter, properties, and physicochemical properties of drug molecules.	PO-1,2,3,4,8,9,11.	Analyze	Factual, Conceptual
CO3	Explore about surface and interfacial phenomenon.	PO-1,2,3,4,8,9,11.	Apply	Factual, Conceptual
CO4	Illustrate the fundamental principles behind complexation and protein binding with proper examples.	PO-1,2,3,4,8,9,11.	Analyze	Factual, Conceptual
CO5	Illustrate the concepts of pH, buffers, and isotonic solutions along with their measurements and/or adjustments.	PO-1,2,3,4,7,8,9,11	Analyze	Conceptual, Procedural

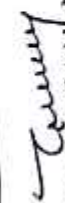
Programme Outcome (PO)

CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	1	2	1				1	1		2
CO2	3	1	2	1				1	1		2
CO3	3	1	2	2				1	1		2
CO4	3	1	2	2				1	1		2
CO5	3	1	2	1			3	1	1		2
PO Target	3	1.00	2.00	1.4			3.00	1.00	1.00		2.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Mr. Debaprasad Ghosh		Mr. Debaprasad Ghosh	

Signature of Course Coordinator

 Assoc./ Assf. Head DOC

Signature of Addl. HOD


Signature of HoD


Please Note (Reference: CBC Guidelines w.e.f. Session 2021 – 22)

- The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory course/ mini/ project/ seminars/ industrial training having credits less than 3 should have 3 number of COs. The Project having 7 to 12 credits should have 8 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: Odd 2024-25 Year: **II** Semester: **III**
 Course Code: BP303T Course Coordinator Name: **Dr. Monika Kaurav**

Program Name: **B.Pharm.**
 Course Name: **Pharmaceutical Microbiology**

Course Outcomes

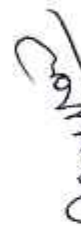
After completion of the course, the student will be able to

CO No.	Statement of Course Outcome	Relevant POs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO1	Illustrate the scope and applications of pharmaceutical biotechnology	PO-1,1,1	Understand	Factual & Conceptual
CO2	Analyze various staining and sterilization techniques used in pharmaceutical biotechnology	PO-1,2,3,4,1,1	Analyze	Conceptual & Procedural
CO3	Outline evaluation methods of antiseptics, disinfectants, and the sterility testing as per different pharmacopoeias.	PO-1,2,3,1,1	Apply	Factual & Conceptual
CO4	Explain the significance of the clean area, methods, and standardization of microbial assay of biological products.	PO-1,2,3,4,5,10,1,1	Apply	Factual & Conceptual
CO5	Analyze the microbial spoilage, preservation of pharmaceutical products & processes, and application of tissue cell culture in pharmaceutical research.	PO-1,2,3,5,10,1,1	Analyze	Factual & Conceptual

Programme Outcome (PO)

CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	-	-	-	-	-	-	-	-	-	1
CO2	3	2	1	2	-	-	-	-	-	-	1
CO3	3	2	1	-	-	-	-	-	-	1	2
CO4	3	2	1	1	1	-	-	-	-	1	2
CO5	3	2	1	-	1	-	-	-	-	1.00	1.60
PO Target	3.00	2.00	1.00	1.50	1.00	-	-	-	-	1.00	1.60

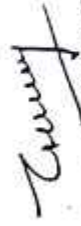
Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Monika Kaurav		Dr. Monika Kaurav	



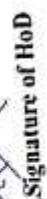
Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



Signature of HoD

KIET Group of Institutions, Delhi – NCR Ghaziabad

KIET School of Pharmacy

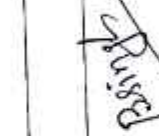
Program Name: B. Pharm
Course Name: Pharmaceutical Engineering-Theory
Course Outcomes

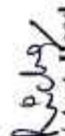
Academic Session: ODD 2024-25
Course Code: BP304T

Year: II
Semester: III
Course Coordinator Name: Mr. Balwan Singh

After completion 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			
CO1	Understand the basic concepts related to fluid flow and equipment's used in size reduction and size separation in pharmaceutical industry	PO-1, 2, 3, 7, 10, 11	Understand	Factual, Conceptual,
CO2	Explain process of heat transfer and various equipment's used in evaporation and distillation	PO-1, 2, 3, 10, 11	Analyze	Conceptual & Procedural
CO3	Examine various processes and equipment used in drying and mixing.	PO-1, 2, 3, 4, 10, 11	Apply	Conceptual & Procedural
CO4	Apply the concept of filtration and centrifugation for processing of pharmaceutical products.	PO-1, 2, 3, 4, 10, 11	Apply	Conceptual & Procedural
CO5	Explore the different material for pharmaceutical plant construction, including corrosion and its prevention	PO-1, 2, 3, 4, 6, 7, 10, 11	Analyze	Factual, Conceptual

Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	1	1	-	-	1	-	-	-	1	1
CO2	3	1	1	-	-	1	-	-	-	1	1
CO3	3	1	1	1	-	1	-	-	-	1	1
CO4	3	1	1	1	-	1	-	-	-	1	1
CO5	3	1	1	1	-	1	-	-	-	1	1
PO Target	3.00	1.00	1.00	1.00	-	1.00	-	-	-	1.00	1.00

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

Signature of Course Coordinator: 
Assoc./ Asst. Head DOC: 
Signature of 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 statements 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 Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Year: II Semester: III
Course Coordinator Name: Surya Prakash

Academic Session: Odd 2024-25

Course Code: BP305P

Program Name: B. Pharm

Course Name: Pharmaceutical Organic Chemistry-II

Course Outcomes

After completion 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			
CO1	Explore the laboratory techniques involved to perform the experiments of pharmaceutical chemistry.	PO-1,2,3,4, 7,8,9,10,11	Apply	Conceptual & Procedural
CO2	Practice the synthesis of some organic compounds like benzanilide, acetanilide, phenyl benzoate, 2,4,6-tribromo aniline etc.	PO-1,2,3,4, 7,8,9,10,11	Apply	Conceptual & Procedural
CO3	Analyze acid value, saponification value of oil and fats.	PO-1,2,3,4, 7,8,9,10,11	Analyze	Conceptual & Procedural

Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	7	8	9	10
CO1	3	1	3	1			2	2	1	1
CO2	3	1	3	1			2	2	1	1
CO3	3	1	3	1			2	2	1	1
PO Target	3.00	1.00	3.00	1.00			2.00	2.00	1.00	1.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Surya Prakash	<i>SP</i>	2. Ms. Shipra Singhal	<i>Shipra</i>

SP
Signature of Course Coordinator

Richa
Assoc./ Asst. Head DOC

Tareem
Signature of Addl. HoD

Shikha
Signature of HoD

Please Note (Reference: OBE Guidelines w.e.f. Session 2021 – 22)

- The theory course/ 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 Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm
Course Name: Physical Pharmaceutics-I (Practical)
Course Outcomes

Semester: III

Year: II

Academic Session: Odd 2024-25

Course Code: BP306P

Course Coordinator Name: Mr. Debaprasad Ghosh

After completion of the course, the student will be able to

CO No.	Statement of Course Outcome	Relevant POs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO1	Evaluate the solubility, CST and pKa values of a drug.	PO-1,2,3,4,6,11	Evaluate	Conceptual, Procedural
CO2	Measure the partition co-efficient, Freundlich-Langmuir constant, stability constant and donor acceptor ratio of the formed complexes.	PO-1,2,3,4,6,11	Evaluate	Conceptual, Procedural
CO3	Evaluate the surface tension of given liquids by drop count and drop weight method, HLB number of a surfactant by saponification method and critical micellar concentration of surfactants.	PO-1,2,3,4,6,11	Evaluate	Conceptual, Procedural

Programme Outcome (PO)

CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	2	2	2	-	1	-	-	-	-	2
CO2	3	2	2	2	-	1	-	-	-	-	2
CO3	3	2	2	2	-	1	-	-	-	-	2
PO Target	3.00	2.00	2.00	2.00	-	1.00	-	-	-	-	2.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Mr. Debaprasad Ghosh		Dr. N.G.R. Rao	

Signature of HoD

Signature of Addl. HoD

Assoc./ Asst. Head DOC

Signature of Course Coordinator

Please Note (Reference: OBE Guidelines w.r. 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 Group of Institutions, Delhi – NCR, Ghaziabad

Program Name: B.Pharm. KIET School of Pharmacy III
 Course Name: Pharmaceutical Microbiology Academic Session: Odd 2024-25 Year: II Semester: III
 Course Outcomes Course Code: BP307P Course Coordinator Name: Dr. Monika Kaurav

After completion 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			
CO1	Apply various techniques and instruments used in the microbiology lab.	PO-1,2,3,4,5,8,9,11	Apply	Conceptual & Procedural
CO2	Apply their theoretical knowledge to prepare different types of culture media and sterility testing of different pharmaceutical products.	PO-1,2,3,4,5,8,9,11	Analyze	Conceptual & Procedural
CO3	Examine the type of bacteria by different staining techniques and biochemical testing methods.	PO-1,2,3,4,5,8,9,11	Analyze	Conceptual & Procedural

Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	7	8	9	10
CO1	3	3	2	2	1	-	-	1	1	1
CO2	3	3	2	3	2	-	-	1	1	1
CO3	3	3	1	3	2	-	-	1	1	1
PO Target	3.00	3.00	1.66	2.66	1.66	-	-	1.00	1.00	1.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Monika Kaurav		Dr. Lalit M Nainwal	

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 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 Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Year: II Semester: III
Course Coordinator Name: Mr. Sanjeev Chauhan

Academic Session: Odd 2024-25

Course Code: BP308P

Program Name: B. Pharm
Course Name: Pharmaceutical Engineering Practical
Course Outcomes

After completion 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			
CO1	Demonstrate the process and factors affecting rate of filtration, centrifugation and size reduction.	PO-1,2,3,6,7,8,9,11	Apply	Conceptual, Procedural
CO2	Demonstrate the process & principles of drying, evaporation, crystallization and distillation.	PO-1,2,3,6,7,8,9,11	Apply	Conceptual & Procedural
CO3	Handle various pharmaceutical equipment like FBD, centrifuge, Lyophilizer, Tray Dryer, Vacuum Dryer, Reynolds no, Manometer, Double Cone Blender, Filter Press, Ball Mill, Sieve Shaker and Homogenizer.	PO-1,2,3,6,7,8,9,11	Apply	Conceptual & Procedural

Programme Outcome (PO)

CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	2	1	1	-	-	2	2	1	1	-	3
CO2	2	1	1	-	-	2	2	1	1	-	3
CO3	2	1	1	-	-	2	2	1	1	-	3
PO Target	2.00	1.00	1.00	-	-	2.00	2.00	1.00	1.00	-	3.00

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

Signature

Signature of Course Coordinator

Richa
Assoc./ Asst. Head DOC

Signature
Signature of Addl. HoD

Signature
Signature of HoD

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

- The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory courses/ 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 Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm
Course Name: UHVPE
Course Outcomes

Academic Session: Odd 2024-25
Course Code: KVE301

Semester: III
Year: II
Course Coordinator Name: Dr. Praveen K. Dixit

After completion 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			
CO1	Discuss the need, basic guidelines, content and process of Value Education under the light of "Universal Human Values"	PO-3,5,6,7,9,11	Understand	Factual, Conceptual
CO2	Explore the concept of harmony in the Human being (Myself) being "I" and "body" as separate entity.	PO-3,5,6,7,9,11	Apply	Factual, Conceptual
CO3	Ensure the concept "harmony" in the family and society keeping family as part of Undivided Society.	PO-3,5,6,7,9,11	Analyze	Factual, Conceptual
CO4	Appraise harmony in the nature and existence imbibing the role of an individual in maintaining the harmony within nature and existence.	PO-3,5,6,7,9,10,11	Evaluate	Factual, Conceptual
CO5	Interpret the holistic approach of harmony in relation with Professional Ethics.	PO-3,5,6,7,9,10,11	Evaluate	Factual, Conceptual

Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	7	8	9	10
CO1	—	—	2	—	3	1	3	—	1	—
CO2	—	—	2	—	3	1	3	—	1	—
CO3	—	—	2	—	3	2	3	—	2	—
CO4	—	—	2	—	3	2	3	—	3	3
CO5	—	—	2	—	3	2	3	—	3	3
PO Target	—	—	2.00	—	3.00	1.6	3.00	—	2.00	3.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Praveen K. Dixit		Mr. Surya Prakash	

Assoc./ Asst. Head DOC

Signature of HoD

Signature of Course Coordinator

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.

Program Name: B. Pharm
Course Name: Drug Regulatory affairs
Course Outcomes

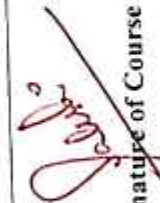
KIET School of Pharmacy
Academic Session: Odd 2024-25
Course Code: KVA309T

Year: II
Semester: III
Course Coordinator Name: Ms. Sakshi Garg

After completion 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			
CO1	Explain the basics of Regulatory Affairs and the roles and responsibilities of the various Regulatory Agencies	PO-1,5,6,7,8,11	Understand	Factual and Conceptual
CO2	Determine the dossier preparation and general guidance on the submissions in US-FDA and European Union	PO- 1,2,3,5,6,7,11	Apply	Factual and Conceptual
CO3	Explain the basic Regulatory Documentations like DMF, PDR, BMR, BPR, Batch Formula, Master Formula Record and validation	PO-1,2,6,7,8,9,11	Understand	Factual and Conceptual
CO4	Illustrate ICH guidelines with emphasis to Efficacy, safety and quality.	PO-1,2,6,7,9,11	Analyze	Factual and Conceptual
CO5	Explain the concept of IPR vs regulatory affairs	PO-1,5,6,7,9,11	Understand	Factual and Conceptual

Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	7	8	9	10
CO1	3	-	-	-	2	2	3	2	-	-
CO2	3	2	2	-	2	2	3	-	-	-
CO3	3	2	-	-	-	2	3	2	2	-
CO4	3	2	-	-	-	2	3	-	2	-
CO5	3	-	-	-	2	2	3	-	2	-
PO Target	3.00	2.00	2.00	-	2.00	2.00	3.00	2.00	2.00	-

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Ms. Sakshi Garg & Ms. Vidhu Saxena		Prof. Ashu Mittal & Dr. Lalit M Nainwal	

 **Signature of Course Coordinator**
 **Assoc./ Asst. Head DOC**
 **Signature of HoD**

Program Name: B. Pharm

Course Name: Medicinal Chemistry-II

Course Outcomes

KIET School of Pharmacy

Academic Session: Odd 2024-25

Course Code: BP501T

Year: III

Semester: V

Course Coordinator Name: Dr. Garima Kapoor

After completion of the course, the student will be able to				
CO No.	Statement of Course Outcome	Relevant POs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO1	Examine the classification, mechanism of action and SAR of Antihistaminic agents	PO-1,3,4,7,8,10	Apply	Factual & Conceptual
CO2	Illustrate the classification, mechanism of action and SAR of Antineoplastic agents	PO-1,3,4,7,8,9,10	Analyze	Factual & Conceptual
CO3	Customize the classification, mechanism of action and SAR of various categories of Cardiovascular agents	PO-1,3,4,7,8,9,10	Apply	Factual & Conceptual
CO4	Explain the classification, mechanism of action and SAR of various categories of Endocrine system	PO-1,3,4,7,8,9,10	Analyze	Factual & Conceptual
CO5	Determine the classification, mechanism of action and SAR of Anti-diabetic agents and local Anesthetics	PO-1,3,4,7,8,9,10	Evaluate	Factual & Conceptual

CO No.	Program Outcome (PO)									
	1	2	3	4	5	6	7	8	9	10
CO1	3	-	2	1	-	-	1	1	-	1
CO2	3	-	2	1	-	-	1	1	2	1
CO3	3	-	2	1	-	-	1	1	2	1
CO4	3	-	2	1	-	-	1	1	2	1
CO5	3	-	2	1	-	-	1	1	2	1
PO Target	3	-	2	1	-	-	1	1	2	1
Faculty Members Teaching the Course		Signature			Faculty Members Teaching the Course			Signature		
Ms. Pragati Gupta					Dr. Garima Kapoor					

Signature of Course Coordinator

Please Note (Reference: OBE Guidelines wef, Session 2020-21)
The theory courses/ project having credits 3 to 6 should

Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

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

Program Name: B. Pharm

Course Name: Industrial Pharmacy I

Course Outcomes

KIET School of Pharmacy

Academic Session: Odd 2024-25

Year: III

Semester: V

Course Code: BP502T

Course Coordinator Name: Dr. (Prof.) Ashu Mittal

After completion 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			
CO1	Understand preformulation studies, various drug products such as tablets, coated tablet, liquid oral, capsules, pellets, parenteral, ophthalmic products, cosmetics, aerosols, ophthalmic preparation and packaging material	PO-1,2,7	Understand	Factual, Conceptual
CO2	Apply preformulation and BCS considerations in the development of solid, liquid oral and parenteral dosage forms and its impact on stability of dosage forms	PO-1,2,3,4,7,8,11	Apply	Factual, Conceptual
CO3	Prepare drug products such as tablets, coated tablet, liquid oral, capsules, pellets, parenteral, ophthalmic products, cosmetics, aerosols, ophthalmic preparation	PO-1,2,3,5,7,8,10,11	Apply	Factual, Conceptual, Procedural
CO4	Assess the quality of prepared drug products such as tablets, coated tablet, liquid oral, capsules, pellets, parenteral, ophthalmic products, aerosols, and packaging material	PO-1,2,3,4,5,7,8,11	Evaluate	Factual, Conceptual, Procedural
CO5	Investigate various compression and processing problems related to manufacture of tablets, coated tablets, capsules	PO-1,2,3,8,11	Analyze	Factual, Conceptual

		Programme Outcome (PO)										
CO No.		1	2	3	4	5	6	7	8	9	10	11
CO1		3	2	1	-	-	-	-	-	-	-	2
CO2		3	2	1	1	-	-	-	-	-	-	2
CO3		3	2	1	1	-	-	1	-	-	1	2
CO4		3	2	1	1	-	-	1	-	-	-	2
CO5		3	2	1	1	-	-	-	-	-	-	2
PO Target		3.00	2.00	1.00	1.00	-	-	1.00	-	-	1.00	2.00
Faculty Members Teaching the Course		Signature			Faculty Members Teaching the Course							
Dr. (Prof.) Ashu Mittal					Prof. Anuj Pathak							
												

Signature of Course Coordinator

Signature of Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of 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.

Program Name: B. Pharm
Course Name: Pharmacology-II
Course Outcomes

KIET School of Pharmacy

Academic Session: Odd 2024-25

Year: III

Semester: V

Course Code: BP503T

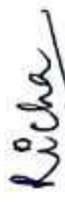
Course Coordinator Name: Dr. Abhishek Kumar

After completion 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			
CO1	Understand the pharmacology of drugs used for management of cardiovascular disorders.	PO-1,3,4,7,11	Understand	Factual & Conceptual
CO2	Elaborate the pharmacology of drugs acting on urinary system.	PO-1,3,4,11	Understand	Factual & Conceptual
CO3	Examine the pharmacological and physiological roles of autacoids and drugs acting on their receptors.	PO1,3,4,11	Apply	Factual & Conceptual
CO4	Explore the pharmacology of drugs acting on endocrine system.	PO-1,3,4,11	Analyze	Factual & Conceptual
CO5	Illustrate bioassay of specific drugs.	PO-1,2,3,4,7,11	Apply	Conceptual & Procedural

CO No.	Programme Outcome (PO)										
	1	2	3	4	5	6	7	8	9	10	11
CO1	3	-	1	1	-	-	1	-	-	-	2
CO2	3	-	1	1	-	-	-	-	-	-	2
CO3	3	-	1	1	-	-	-	-	-	-	2
CO4	3	-	1	1	-	-	-	-	-	-	2
CO5	3	1	2	1	-	-	1	-	-	-	2
PO Target	3.00	1.00	1.20	1.00	-	-	1.00	-	-	-	2.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Abhishek Kumar		2. Dr. Roma Ghai	


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 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-II

Course Outcomes

Academic Session: Odd 2024-25 Year: III Semester: V
Course Code: BP504T Course Coordinator Name: Dr. Richa Goel

After completion 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			
CO1	Understand the concepts of metabolic pathways in higher plants.	PO-1, 4, 10	Understand	Factual & Conceptual
CO2	Acquire the knowledge of the chemistry, source, therapeutic uses and commercial applications of specific crude drugs.	PO-1, 3, 7, 11	Apply	Factual & Conceptual
CO3	Analyze the specified phytoconstituents utilizing the standardization of various physico-chemical parameters.	PO-1, 3, 4, 11	Analyze	Conceptual & Procedural
CO4	Understand the industrial applications of the mentioned phytoconstituents.	PO-1, 3, 4, 7, 10, 11	Understand	Factual & Conceptual
CO5	Compare various methods for extraction, isolation and purification of phytoconstituents.	PO-1, 2, 3, 4, 11	Evaluate	Conceptual & Procedural

Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	-	-	3	-	-	-	-	-	2	-
CO2	3	-	2	-	-	-	2	-	-	-	2
CO3	3	-	2	3	-	-	-	-	-	-	2
CO4	3	-	2	3	-	-	2	-	-	2	2
CO5	3	1	2	3	-	-	-	-	-	-	1
PO Target	3.00	1.00	2.00	3.00	-	-	2.00	-	-	2.00	1.75

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Richa Goel	Richa	Dr. Daksh Bhatia	Daksh

Richa
Signature of Course Coordinator

Richa
Assoc./ Asst. Head DOC

Gurpreet
Signature of Addl. HoD

Richa
Signature of 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 courses/ 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 Group of Institutions, Delhi – NCR, Ghaziabad

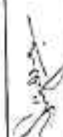
KIET School of Pharmacy

Program Name: B. Pharm
Course Name: Pharmaceutical Jurisprudence
Course Outcomes

Academic Session: Odd 2024-25 Year: III Semester: V
Course Code: BP505T Course Coordinator Name: Dr. Snigdha Bhardwaj

After completion 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			
CO1	Explore the rules and regulations defined under the Import and manufacturing of D&C Act 1940 and Rules 1945.	PO-1, 2, 3, 7, 9, 10, 11	Apply	Factual & Conceptual
CO2	Acquire the knowledge of rules of various schedules, sale, labelling requirement and administrations of D&C Act 1940 and Rules 1945.	PO-1, 2, 3, 7, 9, 10, 11	Apply	Factual & Conceptual
CO3	Illustrate the regulations of Pharmacy Act 1948, Medicinal and Toilet Preparations Act 1955 and NDPS Act 1985.	PO-1, 3, 6, 7, 9, 11	Analyze	Factual & Conceptual
CO4	Explain guidelines laid under the acts pertaining to prevention of cruelty to animals and national pricing authority.	PO-1, 2, 3, 7, 9, 11	Analyze	Factual & Conceptual
CO5	Determine the basics of pharmaceutical legislations, code of pharmaceutical ethics and other important acts like RTI, IPR, MTP.	PO-1, 3, 6, 7, 9, 11	Apply	Factual & Conceptual

Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	2	3	-	-	-	3	-	3	3	3
CO2	3	2	3	-	-	-	3	-	3	3	3
CO3	3	-	2	-	-	2	3	-	3	-	3
CO4	3	2	2	-	-	-	3	-	3	-	3
CO5	3	-	2	-	-	2	3	-	3	-	3
PO Target	3.00	2.00	2.40	-	-	2.00	3.00	-	3.00	3.00	3.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Snigdha Bhardwaj		Dr. Garima Kapoor	

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Asst. HOD

Signature of HoD

Please Note (Reference: OBE Guidelines web, 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 Group of Institutions, Delhi - NCR, Ghaziabad

Program Name: B. Pharm
Course Name: Industrial Pharmacy-I Practical
Course Outcomes

KIET School of Pharmacy

Academic Session: Odd 2024-25
Course Code: BP506P

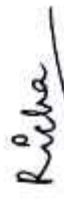
Year: III
Semester: V
Course Coordinator Name: Dr. Lakshmi

After completion 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			
CO1	Determine various physicochemical parameters of drugs to perform preformulation studies.	PO-1,2,3,4,7,8,10,11	Evaluate	Conceptual, Procedural
CO2	Prepare various dosage forms such as coated tablets, capsules, injections, eye ointments, eye drops and creams.	PO-1,2,3,4,7,8,10,11	Create	Conceptual, Procedural
CO3	Evaluate tablets and capsules on various parameters.	PO-1,2,3,4,7,8,10,11	Evaluate	Conceptual, Procedural

Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	7	8	9	10
CO1	3	2	2	1	-	-	1	1	-	1
CO2	3	2	3	1	-	-	1	1	-	1
CO3	3	1	3	1	-	-	1	1	-	1
PO Target	3.00	1.66	2.67	1.00	-	-	1.00	1.00	-	1.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Lakshmi		Dr. Ashu Mittal	


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

Please Note (Reference: OBE Guidelines w.r. 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 Group of Institutions, Delhi – NCR, Ghaziabad

Program Name: B. Pharm

Course Name: Pharmacology-II Practical

Course Outcomes

KIET School of Pharmacy

Academic Session: Odd 2024-25

Course Code: BP507P

Year: III

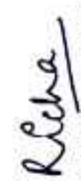
Semester: V

Course Coordinator Name: Dr. Shardendu Kumar Mishra

After completion 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										
CO1	Illustrate the effect of drugs on isolated preparations of animal tissues using simulation software.	PO-1,2,4,9,10,11	Analyze	Conceptual, Procedural							
CO2	Determine the pharmacological activity of drugs on animal models using simulation software.	PO-1,2,4,9,10,11	Apply	Conceptual, Procedural							
CO3	Demonstrate different types of bioassay techniques on animal tissue preparations using simulation software	PO-1,2,4,9,10,11	Apply	Conceptual, Procedural							
Program Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	1	-	3	-	-	-	-	1	1	3
CO2	3	1	-	2	-	-	-	-	1	1	2
CO3	3	1	-	3	-	-	-	-	1	1	2
PO Target	3.00	1.00	-	2.67	-	-	-	-	1.00	1.00	2.3

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Shardendu Kumar Mishra		2. Dr. Abhishek Kumar	


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 theory courses/ project having credits 3 to 6 should have 5 amount of COs. The laboratory course/ mini project/ seminar/ industrial training having credits less than 3 should have 3 amount of COs. The Project having 7 to 12 credits should have 6 to 10 amount 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 Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm

Course Name: Pharmacognosy-II

Year: III Semester: V

Academic Session: Odd 2024-25
Course Code: BP508P
Course Coordinator Name: Dr. Daksh Bhatia

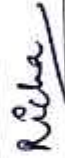
Course Outcomes

After completion of the course, the student will be able to

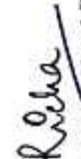
CO No.	Statement of Course Outcome	Relevant POs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO1	Acquire the knowledge of the morphology and microscopy of crude drugs.	PO-1,4,6,11	Apply	Conceptual & Procedural
CO2	Compare various methods for extraction and isolation of phytoconstituents.	PO-1,2,3,4,6,10,11	Evaluate	Conceptual & Procedural
CO3	Analyze the specified phytoconstituents utilizing the standardized parameters.	PO-1,2,3,4,6,7,11	Analyze	Conceptual & Procedural

Programme Outcome (PO)

CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	-	-	1	-	2	-	-	-	-	1
CO2	3	2	2	2	-	2	-	-	-	2	2
CO3	3	2	2	2	-	2	2	-	-	-	2
PO Target	3.00	2.00	2.00	1.67	-	2.00	2.00	-	-	2.00	1.67

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Dr. Daksh Bhatia		Dr. Richa Goel	


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

Please Note (Reference: OBE Guidelines w.e.f. Session 2021 – 22)

- The theory courses/ project having credits 3 to 6 should have 5 number of COs. The laboratory courses/ 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 statements 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 Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm
Course Name: Hospital Training-I
Course Outcomes

Academic Session: ODD 2024-25
Course Code: BP509P

Year: III
Semester: V
Course Coordinator Name: Kapil Sachan

After completion 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			
CO1	Illustrate the application and utilization of first aid (wound dressing, artificial respiration etc.).	POs 1,3,4,6,7,9,11	Apply	Factual/Conceptual/Procedural
CO2	Apply different routes of injection on patients.	POs 1,3,4,6,7,9,11	Apply	Procedural
CO3	Interpret the patient observation charts, prescriptions and dispensing, simple diagnostic reports, etc.	POs 1,3,4,6,7,9,11	Evaluate	Factual/Conceptual/Procedural

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

Faculty Members Teaching the Course	Signature
KAPIL SACHAN	Kapil Sachan

Signature of Course Coordinator
Signature of Asst. Head DOC
Signature of Addl. HoD
Signature of 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.
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KIET Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm
Course Name: Instrumental Methods of Analysis
Semester: VII
Academic Session: Odd 2024-25
Year: IV
Course Coordinator Name: Dr. Lalit Mohan Nainwal
Course Code: BP701T

Course Outcomes

CO No.	Statement of Course Outcome	Relevant POs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO1	Examine the principle, instrumentation and pharmaceutical applications of UV radiations with drugs.	PO-1, 3, 4, 6, 7, 11	Analyze	Factual, Conceptual
CO2	Explore the principle, instrumentation and applications of vibrational spectrophotometric drug analysis.	PO-1, 3, 4, 6, 7, 11	Analyze	Factual, Conceptual
CO3	Illustrate the principle and applications of basic chromatographic separation techniques in drug analysis.	PO-1, 2, 3, 4, 6, 7, 11	Apply	Factual, Conceptual
CO4	Describe the principle, instrumentation and applications of gas and liquid chromatographic separation in drug analysis.	PO-1, 2, 3, 4, 6, 7, 10, 11	Understand	Factual, Conceptual
CO5	Explain the principle and applications of ion exchange, gel and affinity chromatographic techniques.	PO-1, 2, 3, 4, 6, 7, 10, 11	Understand	Factual, Conceptual

Programme Outcome (PO)

CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	3	3	3	3	2	2	2	2	2	3
CO2	3	3	3	3	3	2	2	2	2	2	3
CO3	3	3	3	3	3	2	2	2	2	2	3
CO4	3	3	3	3	3	2	2	2	2	2	3
CO5	3	3	3	3	3	2	2	2	2	2	3
PO Target	3.00	3.00	3.00	3.00	3.00	2.00	2.00	2.00	2.00	2.00	3.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Prof. (Dr.) K. Nagarajan		Dr. Lalit Mohan Nainwal	
Ms. Shipra Singhal			

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

Please Note (Reference: OBE Guid
❖ The theory courses/ project having a should have 6 to 10 number of COs.
❖ The statement of a CO must be form
1-22)
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 structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

KIET Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

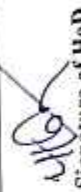
Program Name: B. Pharm
Course Name: Industrial Pharmacy-II (Theory)
Academic Session: Odd 2024-25
Course Code: BP702T
Semester: VII
Year: IV
Course Coordinator Name: Mr. Balwan Singh

Course Outcomes

After completion 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			
CO1	Explain pilot plant scale up techniques, SUPAC guidelines and platform technology in perspective of Indian Pharmaceutical setup	PO-1, 2, 3, 7, 11	Understand	Factual, Conceptual
CO2	Categorize various terminologies, guidelines for technology development and transfer along with different technology transfer agencies in India, in light of referring the basics of product development and commercialization	PO-1, 3, 7, 11	Analyze	Factual, Conceptual
CO3	Assess regulatory affairs and various regulatory requirements for drug approval in context with regulatory framework of Pharma Industry	PO-1, 3, 6, 7, 11	Evaluate	Factual, Conceptual
CO4	Outline different aspects of Quality Management System in the capacity of quality product development	PO-1, 3, 6, 7, 11	Analyze	Factual, Conceptual
CO5	Examine Indian Regulatory Requirements and approval process for new drugs.	PO-1, 3, 6, 7, 11	Apply	Factual, Conceptual

Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	3	2	-	-	-	3	-	-	-	3
CO2	3	-	3	-	-	-	3	-	-	-	3
CO3	3	-	2	-	-	3	3	-	-	-	3
CO4	3	-	3	-	-	2	3	-	-	-	3
CO5	3	-	2	-	-	2	3	-	-	-	3
PO Target	3.00	3.00	2.4	-	-	2.33	3	-	-	-	3.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Mr. Balwan Singh		Ms. Vidhu Saxena	

Signature of Course Coordinator: 
Signature of Addl. HoD: 
Signature of HoD: 

Please Note (Reference: OBE Guidelines w.e.f. Session 2021-22)

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KIE School of Pharmacy

Academic Session: Odd 2024-25
 Year: IV Semester: VII
 Course Code: BP703T Course Coordinator Name: Ms. Priya Bansal

Program Name: B. Pharm
 Course Name: Pharmacy Practice
 Course Outcomes

After completion 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			
CO1	Acquire the basic knowledge of hospital organization, establishments of wholesale retail drug store and role of pharmacist in hospital specifically in ADR monitoring.	PO-1,2,3,4,6,7,8,9,11	Apply	Factual & Conceptual
CO2	Explore the drug distribution system in hospital, hospital formulary, Indian scenario for therapeutic drug monitoring and medical adherence to maintain the patient compatibility.	PO-1,2,3,4,6,7,8,9,11	Analyze	Factual & Conceptual
CO3	Review the pharmacy policies and therapeutic committee to maintain the drug safety and medication error.	PO-1,2,3,6,7,8,9,11	Understand	Factual, Conceptual & Procedural
CO4	Illustrate the implementation of new budget in pharmacy and rational use of OTC medications.	PO-1,2,3,6,7,8,9,11	Analyze	Factual, Conceptual & Procedural
CO5	Evaluate various methods of estimation of blood compositions and urine in clinical set-up.	PO-1,2,3,4,6,7,8,9,11	Evaluate	Factual, Conceptual & Procedural

Programme Outcome (PO)

CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	2	2	1	-	3	2	2	3	-	2
CO2	3	2	2	1	-	3	2	2	3	-	2
CO3	3	2	2	-	-	2	2	3	3	-	2
CO4	3	2	2	-	-	3	2	2	2	-	2
CO5	3	2	3	1	-	3	2	1	2	-	2
PO Target	3.00	2.00	2.20	1.00	-	2.80	2.00	2.00	2.60	-	2.00

Faculty Members Teaching the Course		Faculty Members Teaching the Course	
1. Ms. Priya Bansal	Signature	2. Dr. Shardendu Kumar Mishra	Signature

Signature of Course Coordinator

Assoc./ Asst. Head DOC

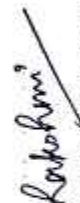
Signature of HoD

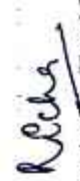
Course Outcomes

After completion 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			
CO1	Understand basic concepts related to Controlled drug delivery systems.	PO-1,2,3, 9, 10, 11	Understand	Factual, Conceptual
CO2	Understand the concept and preparation of mucosal drug delivery systems, microcapsules, and implants.	PO-1,2,3,9,11	Understand	Factual, Conceptual
CO3	Examine various approaches for development of Transdermal Drug delivery systems, Gastroretentive drug delivery systems and nasopulmonary drug delivery systems.	PO-1,2,3,4,9,11	Apply	Factual, Conceptual
CO4	Apply different methods for development of targeted drug delivery systems for various drugs.	PO-1,2,3,10,11	Apply	Factual, Conceptual
CO5	Apply ocular and intrauterine drug delivery systems for various medical conditions.	PO-1,2,3,9, 10,11	Apply	Factual, Conceptual

CO No.	Programme Outcome (PO)										
	1	2	3	4	5	6	7	8	9	10	11
CO1	3	2	1	-	-	-	-	-	1	1	1
CO2	3	2	1	-	-	-	-	-	1	-	1
CO3	3	3	2	1	-	-	-	-	1	-	1
CO4	3	3	3	-	-	-	-	-	-	2	1
CO5	3	3	2	-	-	-	-	-	2	1	1
PO Target	3	2.6	1.8	1	-	-	-	-	1.25	1.33	1

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1.Prof. N.G. Raghvendra Rao		2.Dr. Lakshmi	


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

Program Name: B. Pharm

Course Name: Instrumental Method of Analysis Practical
Course Outcomes

KIET School of Pharmacy

Academic Session: 2024-25

Course Code: BP705P

Year: IV Semester: VII

Course Coordinator Name: Shipra Singhal

After completion of the course, the student will be able to											
CO No.	Statement of Course Outcome										
CO1	Analyze the absorption maxima and effect of solvents in different organic compounds/drugs by using different spectroscopic techniques.										
CO2	Characterize the different drug samples using HPLC, Gas chromatography and flame photometry.										
CO3	Illustrate the process of separation of various compounds using different chromatographic techniques.										
Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	1	1	3	1	2	2	2	-	2	1
CO2	3	1	1	3	1	2	2	2	-	2	1
CO3	3	1	1	3	1	2	-	2	-	-	1
PO Target	3.00	1.00	1.00	3.00	1.00	2.00	2.00	2.00	-	2.00	1.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Lalit Nainwal		2. Ms. Shipra Singhal	

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 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

KIET Group of Institutions, Delhi – NCR, Ghaziabad

Program Name: B. Pharm
Course Name: Practice School
Course Outcomes

KIET School of Pharmacy

Academic Session: Odd 2024-25
Course Code: BP706PS

Year: IV

Semester: VII
Course Coordinator Name: Mr. Debaprasad Ghosh

After completion 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			
CO1	Understand the rationale behind practice school in a specific thrust area of pharmacy.	PO-1,2,3,5,6,8,10,11	Understand	Factual & Conceptual
CO2	Acquire expertise in data mining, reviewing, and processing for a particular thrust area.	PO-1,2,3,4,5,6,7,8,10,11	Apply	Factual, Conceptual & Procedural
CO3	Apply the technology or development of new strategies to cater the needs of PS students and thereby examine the potential role of new findings and their conversion into suitable outcomes.	PO-1,2,3,4,5,6,7,8,9,10,11	Apply	Conceptual & Procedural

Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	7	8	9	10
CO1	3	2	2	—	1	1	—	1	—	2
CO2	3	2	2	3	1	1	3	1	—	2
CO3	3	2	2	3	1	1	3	1	2	2
PO Target	3.00	2.00	2.00	3.00	1.00	1.00	3.00	1.00	2.00	2.00

Faculty Members Teaching the Course	Signature
Mr. Debaprasad Ghosh	Debaprasad Ghosh


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 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 framed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

KIET Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm
 Course Name: Report on Hospital/ Industrial Training
 Academic Session: Odd 2024-25
 Course Code: BP707P
 Year: IV
 Semester: VII
 Course Coordinator Name: Ms. Vidha Saxena

Course Outcomes

CO No.	Statement of Course Outcome	Relevant POs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO1	Extrapolate the different sections and different departments, rules and regulations of pharmaceutical industry/ CRO/ Hospital Pharmacy/ Clinical Pharmacy	PO-1,2,3,4,6, 7,8,9,10,11	Understand	Factual, Conceptual, Procedural
CO2	Explore the roles and responsibilities of pharmaceutical industry/ CRO/ Hospital Pharmacy/ Clinical Pharmacy	PO-1,2,3,4,6, 7,8,9,10,11	Apply	Factual, Conceptual
CO3	Document the day-to-day learning as received in pharmaceutical industry/ CRO/ Hospital Pharmacy/ Clinical Pharmacy	PO-1,2,4, 6, 8,9,10,11	Analyze	Conceptual, Procedural

Programme Outcome (PO)

CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	3	1	1	3	-	1	2	1	1	1	3
CO2	3	1	1	3	-	1	3	1	1	1	3
CO3	3	1	-	3	-	3	-	3	1	1	2
PO Target	3.00	1.00	1.00	3.00	-	1.67	2.50	1.67	1.00	1.00	2.67

Faculty Members Teaching the Course	Signature
Ms. Vidha Saxena	

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Attili, Hob

Signature of Hob

- The theory courses/ project having credits 1 to 6 should have 5 number of COs. The laboratory courses/ viva projects/ seminar/ industrial training having credits less than 1 should have 1 number of COs.
- The statement of a CO must be formed considering a unique strategy having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Understanding and Values.

KIET Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm

Academic Session: Odd 2024-25

Semester: VII

Course Name: AI tools and Corporate Quality Skills

Course Code: KEVA708T

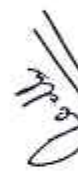
Course Coordinator Name: Ms. Nidhi

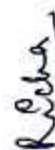
Course Outcomes

After completion 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			
CO1	Understand the role of AI in healthcare	PO-1,2,3,4,7,11	Understand	Factual and Conceptual
CO2	Apply AI tools and technologies for healthcare.	PO-1,2,3,4,7,11	Apply	Factual and Conceptual
CO3	Demonstrate effective verbal, non-verbal, and written communication skills in professional settings. Apply strategies for relationship-building, teamwork, and conflict resolution in professional settings	PO-1,2,3,5,6,8,11	Apply	Factual and Conceptual
CO4	Develop emotional intelligence and adaptability skills for various professional scenarios.	PO-2,3,5,6,8,11	Create	Factual and Conceptual
CO5	Prepare for and perform effectively for job interviews, exhibit workplace professionalism, and deliver effective presentations.	PO-2,5,6,8,11	Create	Factual and Conceptual

Programme Outcome (PO)											
CO No.	1	2	3	4	5	6	7	8	9	10	11
CO1	2	1	2	2	-	-	2	-	-	-	1
CO2	2	3	2	3	-	-	2	-	-	-	1
CO3	1	2	2	-	3	3	-	3	-	-	1
CO4	-	2	2	-	3	3	-	3	-	-	1
CO5	-	2	-	-	3	3	-	3	-	-	1
PO Target	2.00	2.00	2.00	1.50	3.00	3.00	2.00	3.00	-	-	1.00

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Ms. Nidhi		Ms. Surbhi Kamboj	


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 theory courses/ project having credits 3 to 6 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 Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm

Academic Session: Odd 2024-25

Semester: VII

Course Name: AI tools and Corporate Quality Skills

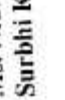
Course Code: KEVA709P

Course Coordinator Name: Ms. Surbhi Kamboj

Course Outcomes

After completion 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			
CO1	Apply various technology and AI tools in healthcare and pharmaceutical settings.	PO-1,2,3,4,7,8,9,11	Apply	Procedural and Conceptual
CO2	Discuss communication skills, excel in interpersonal interactions, and work well within a team.	PO-1,2,3,5,6,8,11	Understand	Procedural and Conceptual
CO3	Interact effectively in interviews and demonstrate professionalism in their interactions.	PO-2,3,5,6,8,11	Understand	Procedural and Conceptual

Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	7	8	9	10
CO1	2	2	3	3			3	1	3	1
CO2	1	2	3		3	3		3		1
CO3		2	3		3	3		3		1
PO Target	1.5	2.00	3.00	3.00	3.00	3.00	3.00	2.33	3.00	1.00

Faculty Members Teaching the Course		Faculty Members Teaching the Course	
Course	Signature	Signature	Signature
Ms. Nidhi, Ms. Vidhu Saxena, Ms. Surbhi Kamboj, Ms. Sheena			



Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HOD



Signature of HOD

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

- The theory course/ 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 Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm

Academic Session: Odd 2024-25

Semester: VII

Course Name: Python Programming Lab

Course Code: KEVA710P

Year: IV

Course Coordinator Name: Dr. Piyush Pant

Course Outcomes

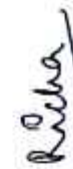
After completion of the course, the student will be able to		Relevant POs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Understand numbers, strings and data structures in python.	PO-1,4,11	Understand	Conceptual
CO2	Apply conditional statement and functions in Python.	PO-1,4,11	Apply	Procedural
CO3	Apply graphical demonstration in Python.	PO-1,4,11	Apply	Procedural

Programme Outcome (PO)										
CO No.	1	2	3	4	5	6	7	8	9	10
CO1	1			3						11
CO2	1			3						2
CO3	1			3						2
PO Target	1.00			3.00						2.00

Faculty Members Teaching the Course	Signature
Dr. Piyush Pant	



Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



Signature of HoD

Phase Note (Reference: OBE Guidelines ver. 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

Minutes of Meeting held on 01st April 2024 in KSOP Department

Agenda:

Discussion and approval of CO statements and CO-PO mapping for B.Pharm 2nd, 4th, 6th and 8th semester for session 2023-24

Time: 2.00 P.M.

Chair: Dr. K. Nagarajan (Principal-KSOP)

BoS Members Present:

1. Dr. N.G. Raghavendra Rao
2. Dr. Ashu Mittal
3. Dr. Roma Ghai
4. Dr. Daksh Bhatia
5. Dr. Richa Goel

Topics Discussed:

1. The BoS members reviewed and approved the CO statements and CO-PO mapping as per IQAC requirements for the 2023-24 Even semester session.
2. The target benchmarks given by the respective subject teachers were also reviewed and approved for 2023-24 Even semester session.
3. The CO statements, CO-PO mapping and target benchmarks were handed over to OBE team for getting them uploaded on the KIET ERP Portal through the respective CO-coordinator.

Prof. (Dr.) K. Nagarajan
Principal,
KIET School of Pharmacy



Dr. Anil K. Ahlawat
Dean Academics & Director In Charge,
KIET Group of Institutions

Sir,

The statements of CO's and CO-PO mapping is formed as per guidelines

Harika
05/04/24

KIET SCHOOL OF PHARMACY

Minutes of Meeting held on 21st April 2025 in KSOP Department

Agenda:

Discussion and approval of CO statements, CO-PO mapping, target benchmark for B. Pharm 2nd, 4th, 6th and 8th semester and M. Pharm 2nd and 4th semester for session 2024-25 Even semester

Time: 12:30 P.M.

Chair: Dr. K. Nagarajan (Principal-KSOP)

BoS Members Present:

1. Dr. N.G. Raghavendra Rao

2. Dr. Roma Ghai

Topics Discussed:

1. The BoS members reviewed and approved the CO statements and CO-PO mapping per IQAC requirements for the 2024-25 Even semester session.
2. The CO statements, CO-PO mapping, and target benchmarks were handed over to the OBE team for approval by higher authorities. Afterwards, they will be uploaded on the KIET ERP Portal and Cyber Vidya Portal through the respective CO-coordinator.

Prof. (Dr.) K. Nagarajan
Principal,
KIET School of Pharmacy



Prof. (Dr.) Yaduvir Singh
Dean, Ranking and Accreditation

Prof. (Dr.) Adesh Pandey
Director Academics

KIET Group of Institutions - Ghaziabad
KSOP Subject Allocation- Even Sem, 2024-25

19-02-2025

Yr	Subject	Theory (Sec-A)	Class Coordinator	Theory (Sec-B)	Class C
I-Yr	Human Anatomy and Physiology II - Theory I-yr	Dr. Pooja K. Dixit	Ms. Pragati/ Mr. Sanjeev	Ms. Sneha Mohan	Dr. Pooja/ Ms. Pallavi
	Pharmaceutical Organic Chemistry I- Theory I-yr	Dr. Smriti Sahu		Dr. Abhay Bhargava	
	Biochemistry - Theory I-yr	Ms. Pragati Gupta/ Dr. K. Nagarajan		Dr. Lalit Mohan Nainwal	
	Pathophysiology - Theory I-yr	Ms. Nidhi		Dr. Pooja K. Dixit	
	Environmental Sciences - Theory I-yr	Mr. Sanjeev Chandra		Ms. Pallavi Barik	
	Computer Applications in Pharmacy - Theory I-yr	Ms. Surbhi Kumbhoj/ Mr. Shishupal (MCA)		Ms. Surbhi Kumbhoj/ Mr. Shishupal (MCA)	
II-Yr	Pharmaceutical Organic Chemistry III - Theory	Mr. Surya Prakash	Mr. Gihosh/ Ms. Nidhi	Ms. Shipra Singh	Ms. Shipra/ Ms. Priya
	Medicinal Chemistry I - Theory II-yr	Ms. Shipra Singh		Mr. Surya Prakash	
	Physical Pharmaceutics II - Theory II-yr	Mr. Gihosh		Prof. (Dr.) N. G. R. Rao	
	Pharmacology I - Theory II-yr	Ms. Nidhi		Ms. Priya Bansal	
	Pharmacognosy I - Theory II-yr	Dr. Deepthi Kariyas		Dr. Richa Goyal	
	Biomedical waste management II-yr	Dr. Shwetankshi		Prof. (Dr.) Roma Ghai	
III-Yr	Medicinal Chemistry III - Theory III-yr	Dr. Garima Kapoor/ Dr. K. Nagarajan	Dr. Snigdha/ Mr. Sanjeev	Dr. Lalit Mohan Nainwal	Dr. Lakshmi/ Dr. Monika
	Pharmacology III - Theory III-yr	Dr. Shardendu		Dr. Abhishek Kumar	
	Herbal Drug Technology - Theory III-yr	Mr. Harman Singh		Prof. (Dr.) Dikshu Bhatia	
	Biopharmaceutics and Pharmacokinetics - Theory	Mr. Sanjeev Chandra		Prof. (Dr.) Ashu Mittal	
	Pharmaceutical Biotechnology - Theory III-yr	Mr. Debaprasad Ghosh		Dr. Monika Kaurav	
	Quality Assurance - Theory III-yr	Dr. Snigdha Bhargava		Dr. Lakshmi	
IV-Yr	Biostatistics and Research Methodology IV-yr	Dr. Neelam Sharma	Ms. Sheena/ Ms. Sakshi	Dr. Ajay Dixit	Ms. Vidhu/ Ms. Shikha
	Social and Preventive Pharmacy IV-yr	Ms. Sheena Mehra		Ms. Vidhu Saxena	
	Pharma Marketing Management* IV-yr	Ms. Sakshi Garg		Ms. Shikha Kaushik	
	Computer Aided Drug Design* IV-yr	Dr. Garima Kapoor		Dr. Garima Kapoor	
	Cosmetic Science* IV-yr	Dr. Shwetankshi		Dr. Monika Kaurav	
PG-QA	Hazards and Safety Management PG QA		Dr. Abhay Bhargava		Dr. Smriti
	Pharmaceutical Validation PG QA		Ms. Surbhi Kumbhoj		
	Analysis and Regulatory PG QA		Dr. Smriti Sahu		
	Pharmaceutical Manufacturing Technology PG QA		Dr. Snigdha Bhargava		
PG-P ^{Sc} entics	Molecular Pharmaceutics (Nano Tech and Targeted DDS)		Prof. (Dr.) N. G. R. Rao		Dr. Snigdha
	Advanced Biopharmaceutics & Pharmacokinetics		Prof. (Dr.) Ashu Mittal		
	Computer Aided Drug Delivery System PG P ^{Sc} entics		Dr. Lakshmi		
	Cosmetic and Cosmeceuticals PG P ^{Sc} entics		Dr. Anuj Pathak		
PG-P ^C ology	Advanced Pharmacology II PG Cology		Dr. Shardendu Kumar Mishra		Dr. Roma
	Pharmacological and Toxicological Screening Methods II		Dr. Abhishek Kumar		
	Principles of Drug Discovery PG Cology		Prof. (Dr.) K. Nagarajan		
	Clinical Research and Pharmacovigilance PG Cology		Prof. (Dr.) Roma Ghai		
D.Pharm-I	Pharmacognosy - Theory D.Pharm-I		Dr. Deepthi Kariyas		Dr. Deepthi/ Mr. Priya Ranjan
	Social Pharmacy - Theory D.P-I		Mr. Priya Ranjan Bhidonia		
	Pharmaceutics - Theory D.P-I		Mr. Shubham Sharma		
	Pharmaceutical Chemistry - Theory D.Pharm-I		Ms. Shikha Kaushik/ Mr. Rahul Singh		
	Human Anatomy & Physiology - Theory D.Pharm-I		Mr. Rahul Singh		
D.Pharm-II	Pharmacy Law & Ethics D.P-II		Mr. Shubham Sharma		Mr. Shubham/ Mr. Kapil
	Community Pharmacy & Management D.Pharm-II		Ms. Konika Rao		
	Environmental Education and Disaster Management		Ms. Konika Rao		
	Biochemistry & Clinical Pathology D.Pharm-II		Ms. Sheena/ Ms. Pallavi Barik		
	Pharmacotherapeutics D.Pharm-II		Mr. Kapil Sachan		
	Pharmacology D.P-II		Ms. Nidhi/ Ms. Priya Bansal		
	Hospital & Clinical Pharmacy D.Pharm-II		Mr. Priya Ranjan Bhidonia		



KIET Group of Institutions - Ghaziabad
KSOP CO-COORDINATOR Even Sem, 2024-25

Sem.	SUBJECT Code	Name of the SUBJECT	CO-COORDINATOR
2	BP201T	Human Anatomy and Physiology II - Theory	Ms. Sheena Mehta
2	BP202T	Pharmaceutical Organic Chemistry I - Theory	Dr. Abhay Bhardwaj
2	BP203T	Biochemistry - Theory	Ms. Pragati Gupta
2	BP204T	Pathophysiology - Theory	Ms. Nidhi
2	BP205T	Computer Applications in Pharmacy - Theory	Ms. Surbhi Kamboj
2	BP206T	Environmental Sciences - Theory	Ms. Pallavi Barik
2	BP207P	Human Anatomy and Physiology II - Practical	Dr. Praveen Kr. Dixit
2	BP208P	Pharmaceutical Organic Chemistry I - Practical	Dr. Smriti Sahu
2	BP209P	Biochemistry - Practical	Mr. Surya Prakash
2	BP210P	Computer Applications in Pharmacy - Practical	Ms. Surbhi Kamboj
4	BP401T	Pharmaceutical Organic Chemistry III - Theory	Ms. Shipra Singhal
4	BP402T	Medicinal Chemistry I - Theory	Mr. Surya Prakash
4	BP403T	Physical Pharmaceutics II - Theory	Mr. Debaprasad Ghosh
4	BP404T	Pharmacology I - Theory	Ms. Nidhi
4	BP405T	Pharmacognosy I - Theory	Dr. Deepthi Katiyar
4	BP406P	Medicinal Chemistry I - Practical	Ms. Shikha
4	BP407P	Physical Pharmaceutics II - Practical	Dr. Lakshmi
4	BP408P	Pharmacology I - Practical	Ms. Nidhi
4	BP409P	Pharmacognosy I - Practical	Dr. Richa Goel
4		Biomedical waste Management II-theory	Ms. Shwetakshi
6	BP601T	Medicinal Chemistry III - Theory	Dr. Garima Kapoor
6	BP602T	Pharmacology III - Theory	Dr. Shardendu
6	BP603T	Herbal Drug Technology - Theory	Mr. Balwan Singh
6	BP604T	Biopharmaceutics and Pharmacokinetics - Theory	Prof. (Dr.) Ashu Mittal
6	BP605T	Pharmaceutical Biotechnology- Theory	Mr. Debaprasad Ghosh
6	BP606T	Quality Assurance- Theory	Dr. Lakshmi
6	BP607P	Medicinal Chemistry III - Practical	Dr. Lalit
6	BP608P	Pharmacology III - Practical	Dr. Abhishek Kumar
6	BP609P	Herbal Drug Technology - Practical	Prof. (Dr.) Daksh Bhatia
6	BP610P	Report on Industrial Training	Mr. Kapil Sachan
8	BP801T	Biostatistics and Research Methodology	Dr. Neelam Sharma
8	BP802T	Social and Preventive Pharmacy	Ms. Sheena Mehta
8	BP803ET	Pharma Marketing Management*	Ms. Shikha Kaushik
8	BP807ET	Computer Aided Drug	Dr. Garima Kapoor
8	BP809ET	Cosmetic Science*	Dr. Monika Kaurav
8	BP815PW	Project Work (On Elective)	Mr. Debaprasad Ghosh
8	BP816P	Report on Industrial Tour	Ms. Vidhu Saxena
2	MQA201T	Hazards and Safety Management	Dr. Abhay Bhardwaj
2	MQA202T	Pharmaceutical Validation	Ms. Surbhi Kamboj
2	MQA203T	Audits and Regulatory Compliance	Dr. Smriti Sahu
2	MQA204T	Pharmaceutical Manufacturing Technology	Dr. Smigdha Bhardwaj
2	MQA205P	Pharmaceutical Quality Assurance Practical II	Dr. Shwetakshi
2	MQA206P	Seminar/ Assignment	Ms. Surbhi Kamboj
4	MRM401T	Journal Club	Ms. Surbhi Kamboj
4	MRM402P	Discussion / Presentation (Proposal Presentation)	Ms. Surbhi Kamboj
4	MRM403P	Research Work and Colloquium	Ms. Surbhi Kamboj
2	MPH201T	Molecular Pharmaceutics (Nano Tech and Targeted DDS)	Prof. (Dr.) N. G. R. Rao
2	MPH202T	Advanced Biopharmaceutics & Pharmacokinetics	Prof. (Dr.) Ashu Mittal
2	MPH203T	Computer Aided Drug Delivery System	Dr. Lakshmi
2	MPH204T	Cosmetic and Cosmeceuticals	Mr. Anuj Pathak
2	MPH205P	Pharmaceutics Practical II	Dr. Smigdha
2	MPH206S	Seminar /Assignment	Mr. Balwan Singh
4	MRM401T	Journal Club	Mr. Balwan Singh
4	MRM402P	Discussion / Presentation (Proposal Presentation)	Mr. Balwan Singh



KIET SCHOOL OF PHARMACY
KIET GROUP OF INSTITUTIONS

GHAZIABAD

TARGET BENCHMARK EVEN SEMESTER 2024-25

TARGET BENCHMARK EVEN SEMESTER 2024-25							EXTERNAL EXAM OUTCOMES		
S NO.	SUBJECT CODE	SUBJECT NAME	SUBJECT TYPE	FACULTY NAME	INTERNAL TARGET	2021-22	2022-23	2023-24	PROPOSED EXTERNAL TARGET
1	BP201T	Human Anatomy and Physiology II	Theory	Ms. Sheena Mehra	60	59.06	59.86	59.30	59.41
2	BP202T	Pharmaceutical Organic Chemistry I	Theory	Dr. Akhay Bhardwaj	55	48.41	50.43	56.27	51.70
3	BP203T	Biochemistry	Theory	Ms. Pragati Gupta	60	53.79	54.04	53.64	53.82
4	BP204T	Pathophysiology	Theory	Ms. Nidhi	59	57.29	58.00	60.34	58.54
5	BP205T	Computer Applications in Pharmacy	Theory	Ms. Surbhi Kamboj	60	NA	NA	NA	NA
6	BP206T	Environmental Sciences	Theory	Ms. Pallavi Barik	66	NA	NA	NA	NA
7	BP207P	Human Anatomy and Physiology II	Practical	Dr. Praveen Kr. Dixit	70	60	62	64	62.00
8	BP208P	Pharmaceutical Organic Chemistry I	Practical	Dr. Smriti Sahu	70	60	62	64	62.00
9	BP209P	Biochemistry	Practical	Mr. Surya Prakash	60	60	62	64	62.00
10	BP210P	Computer Applications in Pharmacy	Practical	Ms. Surbhi Kamboj	70	60	62	64	62.00
11	BP401T	Pharmaceutical Organic Chemistry III	Theory	Ms. Shipra Singhal	58	58.20	49.55	61.02	56.25
12	BP402T	Medicinal Chemistry I	Theory	Mr. Surya Prakash	60	55.20	53.94	59.57	56.27
13	BP403T	Physical Pharmaceutics II	Theory	Mr. Debaprasad Ghosh	55	49.27	53.56	59.97	54.27
14	BP404T	Pharmacology I	Theory	Ms. Nidhi	56	57.96	49.71	62.15	56.61
15	BP405T	Pharmacognosy I	Theory	Dr. Deepa Katiyar	55	59.02	55.40	66.15	60.19
16	BP406P	Medicinal Chemistry I	Practical	Ms. Shikha	70	60	62	64	62.00
17	BP407P	Physical Pharmaceutics II	Practical	Dr. Lashmi	70	60	62	64	62.00
18	BP408P	Pharmacology I	Practical	Ms. Nidhi	70	60	62	64	62.00
19	BP409P	Pharmacognosy I	Practical	Dr. Rina Goel	70	60	62	64	62.00
20	BP601T	Medicinal Chemistry III	Theory	Dr. Garima Kapoor	60	58.88	54.64	53.54	55.69
21	BP602T	Pharmacology III	Theory	Dr. Shardendu	58	60.19	52.25	55.21	55.88
22	BP603T	Herbal Drug Technology	Theory	Mr. Bahwan Singh	55	61.25	52.51	55.19	56.32
23	BP604T	Biopharmaceutics and Pharmacokinetics	Theory	Prof. (Dr.) Ashu Mittal	55	58.31	49.3	57.64	55.08
24	BP605T	Pharmaceutical Biotechnology	Theory	Mr. Debaprasad Ghosh	57	57.99	55.14	58.82	56.65
25	BP606T	Quality Assurance	Theory	Dr. Lashmi	55	55.88	50.16	57.48	54.51
26	BP607P	Medicinal Chemistry III	Practical	Dr. Lait	70	60	62	64	62.00
27	BP608P	Pharmacology III	Practical	Dr. Abhishek Kumar	70	60	62	64	62.00
28	BP609P	Herbal Drug Technology	Practical	Dr. Daksh Bhatia	NA	60	62	64	62.00
29	BP610P	Report on Industrial Training	Theory	Mr. Kapil Sachan	60	55.6	53.83	53.36	54.26
30	BP801T	Biostatistics and Research Methodology	Theory	Dr. Neelam Sharma	57	59.04	61.94	59.81	50.25
31	BP802T	Social and Preventive Pharmacy	Theory	Ms. Sheena Mehra	62	58.75	63.7	59.43	60.63
32	BP803ET	Pharma Marketing Management	Theory	Ms. Shikha Kaushik	65	61.16	58.86	41.06	53.59
33	BP807ET	Computer Aided Drug	Theory	Dr. Garima Kapoor	57	62.83	54.19	64	62.00
34	BP809ET	Cosmetic Science	Theory	Dr. Monika Kaurav	NA	60	62	64	62.00
35	BP815PW	Project Work	Practical	Mr. Debaprasad Ghosh	70	60	62	64	62.00
36	BP816P	Report on Industrial Tour	Practical	Ms. Vidhu Saxena	63	65.16	67.03	56.11	62.83
37	MPL201T	Advanced Pharmacology II	Theory	Dr. Shardendu K. Mishra	61	59.81	62.93	56.10	59.50
38	MPL202T	Pharmacological and Toxicological Screening Methods-II	Theory	Dr. Abhishek Kumar	61	59.81	62.93	56.10	59.50



39	MPL203T	Principles of Drug Discovery	Theory	Prof. (Dr.) K. Nagarajan	66	66.67	63.73	63.33	64.58
40	MPL204T	Clinical Research and Pharmacovigilance	Theory	Prof. (Dr.) Romn Ghai	68	66.13	62.57	73.62	67.44
41	MPL205P	Experimental Pharmacology - II	Practical	Dr. Roma	70	62	64	66	64.00
42	MPH201T	Cellular Pharmacology (Nano Tech and Targeted)	Theory	Prof. (Dr.) N. G. R. Rao	60	59.14	62.15	74.1	65.13
43	MPH202T	Advanced Biopharmaceutics & Pharmacokinetics	Theory	Prof. (Dr.) Ashu Mittal	70	49.81	59.38	63.05	57.41
44	MPH203T	Computer Aided Drug Delivery System	Theory	Dr. Lakshmi	60	66.00	66.05	64.00	65.35
45	MPH204T	Cosmetic and Cosmetics	Theory	Mr. Anil Pathak	63	67.05	62.05	54.76	61.29
46	MPH205P	Pharmaceuticals Practical II	Practical	Dr. Sridhar	70	61	63	65	63.00
47	MQA201T	Hazards and Safety Management	Theory	Dr. Aditya Bhardwaj	73	67.85	74.42	73.20	71.82
48	MQA202T	Pharmaceutical Validation	Theory	Ms. Sushil Kambal	63	73.78	45.44	65.07	61.43
49	MQA203T	Audits and Regulatory Compliance	Theory	Dr. Smiti Sahu	77	82.37	76.19	71.47	76.68
50	MQA204T	Pharmaceutical Manufacturing Technology	Theory	Dr. Sridhar Bhardwaj	70	59.11	76.22	66.37	67.20
51	MQA205P	Pharmaceutical Quality Assurance Practical II	Practical	Dr. Shwetakshi	70	62	63	64	63.00



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Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: II
Course Name: Human Anatomy and Physiology - II	Course Code: BP201T	Facu. Dr. Sharda Mishra

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
	After completion of the course, the student will be able to		
CO1	Elaborate the anatomy and physiology of the Nervous system.	Understand	Factual & Conceptual
CO2	Illustrate anatomy and physiology of Digestive System and energetics (ATP, Creatinine Phosphate).	Apply	Factual & Conceptual
CO3	Explore the structure and functions of Respiratory System and Urinary System.	Apply	Factual & Conceptual
CO4	Illustrate the anatomical and physiological aspects of the Endocrine System.	Apply	Factual & Conceptual
CO5	Infer the structural and functional aspects of Reproductive System and Genetics	Analyze	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Human Anatomy and Physiology (BP201T)

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	-	-	-	1	-	1	2	-	2
CO-2	3	-	-	-	-	1	-	1	2	-	2
CO-3	3	-	-	-	-	1	-	1	2	-	2
CO-4	3	-	-	-	-	1	-	1	2	-	2
CO-5	3	-	-	-	-	1	-	1	2	-	2
PO Target	3	-	-	-	-	1	-	1	2	-	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

Please refer to the following guidelines for the mapping of COs with POs:
❖ The COs should be mapped with POs based on the Action & Knowledge.
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Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	Generalize the chemistry and isomerism of Organic Compounds.	Understand	Factual & Conceptual
CO2	Illustrate the chemistry and applications of Alkanes, Alkenes and Conjugated dienes.	Apply	Factual & Conceptual
CO3	Explore the chemistry and applications of Alkyl halide and Alcohols	Apply	Factual & Conceptual
CO4	Illustrate about chemistry and applications of Carbonyl compounds.	Apply	Factual & Conceptual
CO5	Explore chemistry and applications of Carboxylic acids and Amines.	Apply	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

P. Organic Chemistry-I (BP202T)

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	2	2	-	2	1	-	2	-	3
CO-2	3	-	2	2	-	2	1	-	2	-	3
CO-3	3	-	2	2	-	2	1	-	2	-	3
CO-4	3	-	2	2	-	2	1	-	2	-	3
CO-5	3	-	2	2	-	2	1	-	2	-	3
PO Target	3	-	2	2	-	2	1	-	2	-	3

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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: Pragati Gupta	Academic Session: Even 2024-25	Semester: I
Course name: Biochemistry	Course Code: BP203T	Faculty: Ms. Pragati Gupta

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
	After completion of the course, the student will be able to		
CO1	Elaborate the concepts of biomolecules and biocenergetics.	Understand	Factual & Conceptual
CO2	Explore the knowledge of carbohydrate metabolism and biological oxidation and underlying diseases	Apply	Factual & Conceptual
CO3	Analyze the concepts of lipid and amino acid metabolism and their role in various diseases.	Analyze	Factual & Conceptual
CO4	Illustrate the concept of nucleic acid metabolism and transfer of genetic information.	Analyze	Factual & Conceptual
CO5	Classify various types of enzymes and their role as diagnostic and therapeutic applications	Analyze	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Biochemistry (BP203T)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	-	-	-	-	-	-	-	-	2
CO-2	3	-	-	-	-	-	-	-	2	-	2
CO-3	3	-	-	-	-	1	-	-	2	-	2
CO-4	3	-	3	2	-	2	-	-	2	2	2
CO-5	3	1	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	1.50	2.00

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Signature of Addl. HoD

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Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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.

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: II
Course name: Pathophysiology	Course Code: BP204T	Faculty: Ms N'dhi

Tagging COs with BLs & KCs		
CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)
CO1	After completion of the course, the student will be able to Illustrate the basic mechanisms involved in the process of cell injury and inflammation.	Apply
CO2	Illustrate the pathological mechanisms involved in the development of cardiovascular, renal, and respiratory diseases.	Apply
CO3	Explore the mechanisms of development of diseases associated with the blood, endocrine, nervous, and gastrointestinal systems.	Apply
CO4	Illustrate the development and progression of inflammatory diseases along with cancer.	Apply
CO5	Infer the etiology and pathogenesis of infectious and sexually transmitted diseases.	Analyze
		Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix										
Pathophysiology (BP204T)										
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10
CO-1	3	-	-	-	-	1	-	1	1	-
CO-2	3	-	1	-	-	1	-	1	3	-
CO-3	3	-	1	-	-	1	-	1	3	-
CO-4	3	-	1	-	-	1	-	1	3	-
CO-5	3	-	1	-	-	1	-	1	3	-
PO Target	3	-	1	-	-	1	-	1	2.6	-
										2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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.

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: II
Course name: Computer Applications in Pharmacy	Course Code: BP205T	Faculty: Ms. Srubhi Kamboj

Tagging COs with BLs & KCs				
CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)	
After completion of the course, the student will be able to				
CO1	Elaborate the concept of number system and information systems.	Understand	Factual & Conceptual	
CO2	Interpret various web technologies and databases.	Evaluate	Factual & Conceptual	
CO3	Illustrate various types of application of computers in pharmacy.	Apply	Factual & Conceptual	
CO4	Explore the objective, concept and impact of Bioinformatics.	Analyze	Factual & Conceptual	
CO5	Acquire the application of computers in data analysis in Preclinical development.	Apply	Conceptual & Procedural	

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Computer Applications in Pharmacy (BP205T)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	-	-	2	3	-	-	-	2	-	-	3
CO-2	2	2	2	3	1	-	-	-	-	-	3
CO-3	3	3	2	3	1	2	2	3	2	-	3
CO-4	3	2	2	3	-	2	2	2	3	-	3
CO-5	3	3	2	2	1	2	2	2	-	-	2
PO Target	2.75	2.5	2.00	2.8	1.00	2.00	2.00	2.25	2.5	-	2.8

Signature of Course Coordinator

Signature of Course Coordinator

Signature of Addl. HoD

Signature of Addl. HoD

Signature of HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: II
Course Name: Environmental Sciences Theory	Course Code: BP206T	Faculty: Pallavi Barik

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	After completion of the course, the student will be able to Review the concept of environmental studies with its natural resources.	Understand	Factual & Conceptual
CO2	Elaborate the concept of ecosystem and its structural and functional components with its classification.	Understand	Factual & Conceptual
CO3	Illustrate the concept of environmental pollution, its impacts and mitigation measures.	Apply	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Course Code	Environmental Sciences Theory (BP206T)										
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	-	1	1	-	1	2	1	1	3	3	3
CO-2	-	2	1	-	1	1	1	1	2	3	3
CO-3	-	3	3	-	1	2	1	1	3	3	3
PO Target	-	2	1.67	-	1	1.67	1	1	2.67	3	3

Pallavi

Signature of Course Coordinator

Barik

Signature of Addl. HoD

Barik

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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.

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: II
Course name: Human Anatomy & Physiology-II Practical	Course Code: BP207P	Faculty: Dr. Praveen Kumar Dixit

Tagging COs with BLs & KCs		
CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)
After completion of the course, the student will be able to		
CO1	Elaborate the anatomy and physiology of CNS, Digestive system, Respiratory system, urinary system, endocrine system and reproductive system using models and charts.	Understand
CO2	Demonstrate the practical aspects related to reflex activity, body temperature recording, lung capacities, BMI and their importance.	Apply
CO3	Explore the different mechanisms of responses related to sense organs and nervous system.	Apply
CO4	Illustrate the recent advancements in the treatment and diagnosis of respiratory, digestive and CVS related diseases.	Apply
		Conceptual
		Conceptual & Procedural
		Conceptual
		Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Human Anatomy & Physiology-II Practical (BP207P)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	-	-	-	-	-	1	-	-	2
CO-2	3	-	-	-	-	-	-	1	2	-	2
CO-3	3	-	-	-	-	-	-	1	-	-	2
CO-4	3	-	-	-	-	-	-	1	2	-	2
PO Target	3	-	-	-	-	-	-	1	2	-	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: II
Course name: Organic Chemistry Practical	Course Code: BP208P	Faculty: Dr. Smriti Sahu

Tagging COs with BLs & KCs				
CO No.	Statement* of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)	
After completion of the course, the student will be able to				
CO1	Explore necessary skills for performing organic chemistry experiments, including proper handling of laboratory equipment and adherence to safety protocols.	Apply	Conceptual & Procedural	
CO2	Apply synthetic techniques to prepare pharmaceutical compounds, gaining proficiency in common laboratory procedures for the synthesis of organic molecules.	Apply	Conceptual & Procedural	
CO3	Validate methods for the isolation and purification of organic compounds, including techniques such as extraction, distillation, and chromatography.	Evaluate	Conceptual & Procedural	
CO4	Validate methods for the isolation and purification of organic compounds, including techniques such as extraction, distillation, and chromatography.	Evaluate	Conceptual & Procedural	

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Organic Chemistry Practical (BP208P)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	3	3	3	-	-	1	-	2	2	3
CO-2	3	3	3	3	-	-	1	-	2	2	3
CO-3	3	3	3	3	-	-	1	-	2	2	3
CO-4	3	3	3	3	-	-	1	-	2	2	3
PO Target	3	3	3	3	-	-	1	-	2	2	3

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of COs. The courses having credits less than 3 should have 4 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.

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Analyze different carbohydrates, proteins, and abnormal constituents of urine.	Analyze	Conceptual & Procedural
CO2	Estimate blood creatinine, salivary amylase, blood sugar and serum total cholesterol.	Evaluate	Conceptual & Procedural
CO3	Demonstrate the preparation of buffer solution and measurement of pH.	Apply	Conceptual & Procedural
CO4	Assess quantitative analysis of reducing sugars (DNSA method) and Proteins.	Evaluate	Conceptual & Procedural

Interaction with Program outcomes CO-POs Matrix

Mapping of Course outcomes with Program Outcomes											
Computer Applications in Pharmacy (BP210P)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	3	2	3	-	1	2	2	2	2	3
CO-2	3	3	2	3	-	1	2	2	2	2	3
CO-3	3	3	2	3	-	1	2	2	2	2	3
CO-4	3	3	2	3	-	1	2	2	2	2	3
PO Target	3	2	2	3	-	1	2	2	2	2	3

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 Signature of HoD

Source: <https://www.ore.com/ore-guidelines-wef-session-2023-24>

- Please Note (Reference: OBE Guidelines ver. 2.0, Session 2020-21)**
- ❖ The courses having credits less than 3 should have 4 number of Cos.
 - ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits 3 to 6 should have 5 number of Cos. The mandatory parts are Action & Knowledge
 - ❖ 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: Ev'n 2024-25	Semester: II
Course name: Computer Applications in Pharmacy	Course Code: BP210P	Faculty: Ms. Surbhi Kamboj

Tagging COs with BLs & KCs		Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO No.				
	After completion of the course, the student will be able to			
CO1	Demonstrate the utility of MS office suite to maintain patient record database.		Apply	Conceptual & Procedural
CO2	Apply the knowledge of computing fundamentals to pharmaceuticals application for any given requirement		Apply	Factual & Conceptual
CO3	Analyze the contemporary IT tools (web technologies and databases) with pharmaceutical activities.		Analyze	Conceptual & Procedural
CO4	Interpret the various application of database in pharmacy		Understand	Conceptual and Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Computer Applications in Pharmacy (BP210P)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	2	2	2	-	2	-	3	2	-	3
CO-2	3	2	2	2	-	2	-	3	2	-	3
CO-3	3	2	2	3	2	2	2	-	2	2	3
CO-4	3	-	-	2	-	2	2	2	3	2	3
PO Target	3.00	2.00	2.00	2.25	2.00	2.00	2	2.67	2.25	2.00	3.00

Surbhi
Signature of Course Coordinator

Suraj
Signature of Addl. HoD

Suraj
Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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.

Program Name: B. Pharmacy	Academic Session: Even 2024-25	Semester: II
Course name: Upskilling including Python	Course Code: BPHI 211	Faculty: Ms. Sakshi Garg

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	After completion of the course, the student will be able to		
CO1	Elaborate the concepts of upskilling and soft skills in Pharmacy	Understand	Factual & Conceptual
CO2	Explore the digital literacy and professional skills for Pharmacists	Apply	Factual & Conceptual
CO3	Illustrate the significance of branch of AI and role in patient care and drug discovery	Analyze	Factual & Conceptual
CO4	Illustrate the significance of emerging technologies in Pharma and healthcare	Analyze	Factual & Conceptual
CO5	Elaborate the concept of programming in pharmaceutical research and applications of python in healthcare	Understand	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	2	-	2	2	2	-	2	3	1	3
CO-2	3	2	1	2	2	2	-	2	3	1	3
CO-3	3	2	2	3	3	3	2	2	3	1	3
CO-4	3	2	3	3	2	3	2	2	3	2	3
CO-5	3	2	2	3	2	2	2	2	2	2	3
PO Target	3.00	2.00	2.00	2.60	2.2	2.4	2.00	2.00	2.80	1.40	3.00

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Signature of Course Coordinator

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Signature of Addl. HoD

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Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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. Pharma	Academic Session: Even 2024-25	Semester: IV
Course name: Pharmaceutical Organic Chemistry-III	Course Code: BP401T	Faculty: Ms. Shipra Singhal

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Illustrate about Stereo isomerism, Optical isomerism.	Apply	Factual & Conceptual
CO2	Illustrate about Geometrical isomerism and Conformational isomerism.	Apply	Factual & Conceptual
CO3	Outline the nomenclature, classification, synthesis and reaction of some heterocyclic compounds.	Analyze	Factual & Conceptual
CO4	Summarize the Synthesis, reactions and medicinal uses of some heterocyclic compounds.	Apply	Factual & Conceptual
CO5	Outline some important synthetic name reactions.	Analyze	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Pharmaceutical Organic Chemistry-III (BP401T)

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	1	2	-	-	-	1	-	-	-	2
CO-2	3	1	2	-	-	-	1	-	-	-	2
CO-3	3	1	2	-	-	-	2	-	2	-	2
CO-4	3	1	2	-	-	-	2	-	2	-	2
CO-5	3	1	2	-	-	-	1	-	2	-	2
PO Target	3	1	2	-	-	-	1.4	-	2	-	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: IV
Course name: Medicinal Chemistry -I Theory	Course Code: BP402T	Faculty: Mr. Su8y02

Tagging COs with BLs & KCs	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	After completion of the course, the student will be able to Elaborate basics of medicinal chemistry, physicochemical and stereochemical properties in relation to drug design and drug metabolism.	Understand	Factual & Conceptual
CO2	Explore the chemistry of drugs acting on adrenergic system.	Apply	Factual & Conceptual
CO3	Explore the chemistry of drugs acting on cholinergic system.	Apply	Factual & Conceptual
CO4	Illustrate the chemistry of drugs acting on CNS such as sedative, hypnotics, antipsychotics and anticonvulsants.	Apply	Factual & Conceptual
CO5	Illustrate the chemistry of general anesthetics, narcotic & non-narcotic analgesics and anti-inflammatory agents.	Apply	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Medicinal Chemistry -I Theory (BP402T)

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	1	3	-	-	2	1	-	2	2	3
CO-2	3	1	3	-	-	2	1	-	2	1	2
CO-3	3	1	3	-	-	2	1	-	2	1	2
CO-4	3	1	3	-	-	2	1	-	2	1	2
CO-5	3	1	3	-	-	2	1	-	2	1	2
PO Target	3	1	3	-	-	2	1	-	2	1.2	2.2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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.

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: IV
Course name: Physical Pharmaceutics-II	Course Code: BP403T	Faculty: Mr. Debnarayan Ghosh

Tagging COs with BLs & KCs		
CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)
CO1	Examine the types, general characteristics, and effect of various factors on Colloidal dispersions.	Apply
CO2	Identify the rheological behavior of fluids and the principles of deformation of solids.	Analyze
CO3	Analyze the theories, types, various properties, and stability of Coarse dispersions like suspensions and emulsions.	Analyze
CO4	Analyze various aspects of micrometrics.	Analyze
CO5	Analyze the effects of kinetics, degradation factors and common reactions on the stability of drugs including accelerated stability studies and their prevention.	Analyze

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Physical Pharmaceutics-II (BP403T)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	1	2	3	-	-	-	-	-	-	2
CO-2	3	1	2	3	-	-	-	-	-	-	2
CO-3	3	1	2	3	-	-	-	-	-	-	2
CO-4	3	1	2	3	-	-	-	-	-	-	2
CO-5	3	1	2	3	-	1	1	1	1	1	2
PO Target	3	1	2	3	-	1	1	1	1	1	2

Signature of Course Coordinator *[Signature]* Signature of Addl. HoD *[Signature]* Signature of HoD *[Signature]*

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: IV
Course name: Pharmacology-I	Course Code: BP404T	Faculty: Ms. Nidhi

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Acquire concept of general pharmacology and pharmacokinetics.	Apply	Factual & Conceptual
CO2	Analyze the mechanism of action of drugs, related adverse drug reaction, drug-receptor interactions, dose-response relationships, and factors influencing drug action.	Analyze	Factual & Conceptual
CO3	Apply the implications of peripheral nervous system in treatment of associated diseases.	Apply	Conceptual & Procedural
CO4	Apply the implications of central nervous system in treatment of neurological diseases.	Apply	Factual & Conceptual
CO5	Audit the significance of drugs in pharmacotherapy of various diseases and management of adverse effects.	Analyze	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Pharmacology-I (BP404T)

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	2	-	-	3	3	-	2	-	3
CO-2	3	-	2	-	-	3	3	2	2	-	3
CO-3	3	-	2	-	-	3	3	-	2	-	3
CO-4	3	-	2	-	-	3	3	-	2	-	3
CO-5	3	-	2	-	-	3	3	2	2	-	3
PO Target	3	-	2	-	-	3	3	2	2	-	3

[Signature]

Signature of Course Coordinator

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Signature of Addl. HoD

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Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: IV
Course name: Pharmacognosy & Phytochemistry I	Course Code: BP405T	Faculty: Dr. Deepthi Katiyar

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Appraise the sources, classification and quality control of herbal drugs.	Evaluate	Conceptual & Procedural
CO2	Attain the knowledge of the cultivation & production of crude drugs and conservation of medicinal plants.	Apply	Conceptual & Procedural
CO3	Illustrate the concepts of Plant Tissue Culture and to determine properties of edible vaccines.	Apply	Factual & Conceptual
CO4	Acquire the knowledge of traditional systems of medicine and to summarize properties of various secondary metabolites.	Apply	Factual & Conceptual
CO5	Explore the properties and applications of plant fibers, hallucinogens, carbohydrates, lipids, proteins, enzymes and marine products.	Analyze	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Pharmacognosy & Phytochemistry I (BP405T)

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	-	2	-	-	-	-	2	-	2
CO-2	3	-	2	-	-	-	2	-	-	2	2
CO-3	3	-	2	-	-	-	-	-	-	2	2
CO-4	3	-	2	-	-	2	-	-	-	-	2
CO-5	3	-	2	1	-	2	2	-	2	-	2
PO Target	3	-	2	1.5	-	2	2	-	2	2	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: IV
Course Name: Medicinal Chemistry-I Practical	Course Code: BP406P	Faculty: Ms Shikha Kaushik

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Illustrate the synthesis of some heterocyclic drugs or intermediates.	Apply	Conceptual & Procedural
CO2	Analyze the purity of some heterocyclic drugs.	Analyze	Conceptual & Procedural
CO3	Analyze the partition coefficient of some drugs.	Analyze	Conceptual & Procedural
CO4	Evaluate some organic and inorganic compounds through chemical tests.	Evaluate	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Medicinal Chemistry-I Practical (BP406P)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	2	1	1	-	1	2	2	2	2	3
CO-2	3	2	1	1	-	1	3	2	2	-	3
CO-3	3	2	-	1	-	-	2	2	2	2	2
CO-4	3	2	-	1	-	-	1	-	-	2	2
PO Target	3	2	1	1	-	1	2	2	2	2	2.5

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Signature of Course Coordinator

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Signature of Addl. HoD

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Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: IV
Course name: Physical Pharmaceutics-II Practical	Course Code: BP407P	Faculty: Dr. Lakshmi

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Evaluate particle size, particle size distribution, and derived properties of the powder.	Evaluate	Conceptual & Procedural
CO2	Calculate the viscosity of viscous samples using different methods.	Apply	Conceptual & Procedural
CO3	Evaluate the prepared suspension and emulsion formulations.	Evaluate	Conceptual & Procedural
CO4	Evaluate the kinetics of chemical reactions with stability studies.	Evaluate	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Physical Pharmaceutics-II Practical (BP407P)

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	2	2	3	-	-	1	-	1	1	2
CO-2	3	2	2	3	-	-	1	-	1	1	2
CO-3	3	2	2	3	-	-	2	-	1	1	2
CO-4	3	2	2	3	-	-	2	-	1	1	2
PO Target	3	2	2	3	-	-	1.5	-	1	1	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: IV
Course name: Pharmacology-I Practical	Course Code: BP408P	Faculty: Ms. Nidhi

Tagging COs with BLs & KCs		
CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)
After completion of the course, the student will be able to		
CO1	Illustrate the CCSEA guidelines for laboratory animals, including ethical considerations, instrumentation, and essential techniques used in experimental pharmacology.	Apply
CO2	Explore the different routes of drug administration in mice and rats, along with key laboratory techniques for studying drug effects on physiological functions.	Apply
CO3	Illustrate the effect of enzyme inducers on sleeping time in mice, drug effects on ciliary motility in frogs, and pharmacological actions on the central and peripheral nervous systems.	Apply
CO4	Apply the concept of experimental methodologies to assess antitachycardic and anxiolytic activities, as well as the effects of local anesthetic agents in animal models.	Apply

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Pharmacology-I Practical (BP408P)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	1	2	2	-	2	2	2	1	-	3
CO-2	3	1	2	2	-	2	2	2	1	-	3
CO-3	3	1	2	2	-	2	2	2	1	-	3
CO-4	3	1	2	2	-	2	2	2	1	-	3
PO Target	3	1	2	2	-	2	2	2	1	-	3

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Signature of Addl. HoD

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Signature of Course Coordinator

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

- The courses having credits less than 3 should have 4 number of COs.
- The courses having credits 3 to 6 should have 5 number of Cos. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

KIET SCHOOL OF PHARMACY

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: IV
Course Name: Pharmacognosy I- Practical	Course Code: BP409P	Faculty: Dr. Richa Goel

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
	After completion of the course, the student will be able to		
CO1	Describe quantitative microscopy for determining the leaf constant.	Apply	Conceptual & Procedural
CO2	Determine the size of cellular content by micrometry technique using eyepiece micrometer.	Apply	Conceptual & Procedural
CO3	Evaluate the crude drugs on the basis of WHO guidelines.	Evaluate	Conceptual & Procedural
CO4	Analyze the crude drugs by chemical tests.	Analyze	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Pharmacognosy I- Practical (BP409P)

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	2	2	2	2	-	1	-	-	-	-	3
CO-2	2	2	2	2	-	1	-	-	-	-	3
CO-3	3	3	3	3	-	3	3	-	-	-	3
CO-4	3	3	3	3	-	3	-	-	-	-	3
PO Target	2.5	2.5	2.5	2.5	-	2	3	-	-	-	3

Richa

Signature of Course Coordinator

Richa

Signature of Addl. HoD

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Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: IV
Course name: Biomedical Waste Management	Course Code: BPH2 410	Faculty: Dr. Shwetakshi Sharma

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	After completion of the course, the student will be able to	Understand	Factual & Conceptual.
CO2	Understand the concept of health care waste.		
CO3	Analyze the impact of biochemical waste on health.	Analyze	Factual, Conceptual, Procedural
CO4	Analyze the WHO guidelines and policies on health care waste management.	Analyze	Factual, Conceptual, Procedural
CO5	Apply the different treatment technologies in-site and off-site.	Apply	Factual, Conceptual, Procedural
CO5	Apply waste minimization recycling and disposal technologies.	Apply	Factual, Conceptual, Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Biomedical Waste Management (BPH2 410)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	3	-	-	3	2	-	2	3	2
CO-2	3	-	3	-	-	3	3	2	1	3	2
CO-3	3	2	3	2	2	3	2	3	2	3	2
CO-4	3	2	3	3	-	3	1	2	1	3	2
CO-5	3	2	3	3	-	3	1	2	1	3	2
PO Target	3	2	3	2.33	2	3	1.80	2.25	1.4	3	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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.

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: VI
Course name: Medicinal Chemistry-III	Course Code: BP601T	Faculty: Dr. Garima Kapoor

Tagging COs with BLs & KCs		Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1		After completion of the course, the student will be able to		
CO1		Illustrate classification, nomenclature, mechanism of action, SAR and uses of different classes of antibiotics.	Apply	Factual & Conceptual
CO2		Illustrate classification, mechanism of action and SAR of Antimalarials, Anti-tubercular, Urinary tract anti-infective, Antifungal, Anti-protozoal Agents and Anthelmintics.	Apply	Factual & Conceptual
CO3		Classify different antiviral agents along with their mechanism of action and SAR.	Apply	Factual & Conceptual
CO4		Illustrate classification, mechanism of action and SAR of Sulphonamides and Sulfones, Folate reductase inhibitors.	Apply	Factual & Conceptual
CO5		Analyze the concept of Drug Design, and Combinatorial Chemistry.	Analyze	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Medicinal Chemistry-III (BP601T)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	2	-	-	-	-	-	1	-	2
CO-2	3	-	2	-	-	-	-	-	1	-	2
CO-3	3	-	2	-	-	-	-	-	1	-	2
CO-4	3	-	2	-	-	-	-	-	1	-	2
CO-5	3	-	3	2	-	2	-	-	1	-	3
PO Target	3	-	2.2	2	-	2	-	-	1	-	2.2

Signature of Course Coordinator
Signature of Addl. HoD
Signature of HoD

Please Note (Reference: OBE Guidelines wef. Session 2023-24)
❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: VI
Course name: Pharmacology-III	Course Code: BP602T	Faculty: Dr. Shardendu Kumar Mishra

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Understand the knowledge of pharmacotherapy of respiratory and GIT diseases.	Understand	Factual & Conceptual
CO2	Analyze the utility of antimicrobial agents used for curing infections.	Analyze	Factual & Conceptual
CO3	Illustrate the various mechanisms by which chemotherapeutic agents act and their applications in infection management.	Analyze	Factual & Conceptual
CO4	Examine the pharmacological profiles of anti-microbial agents and immunomodulators.	Apply	Factual & Conceptual
CO5	Assess the principles & management of poisoning and chronotherapy.	Evaluate	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Pharmacology-III (BP602T)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	1	2	-	-	1	2	2	3	-	3
CO-2	3	1	2	-	-	1	2	2	3	-	3
CO-3	3	1	2	-	-	1	2	2	3	-	3
CO-4	3	1	2	-	-	1	2	2	3	-	3
CO-5	3	1	2	-	-	1	2	2	3	-	3
PO Target	3	1	2	-	-	1	2	2	3	-	3

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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.

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: VI
Course name: Herbal Drug Technology	Course Code: BP603T	Faculty: Mr. Balwan Singh

Tagging COs with BLs & KCs		
CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)
CO1	Understand the Indian system of medicines and fundamentals of traditional herbal raw materials from its cultivation to collection with the help of biodynamic agriculture.	Understand
CO2	Explore the demand and need of nutraceuticals in various diseases and their interaction behavior.	Analyze
CO3	Investigate various herbal excipients used in cosmetic formulations.	Analyze
CO4	Apply the National and International regulatory guidelines for the assessment of herbal drugs and patenting.	Apply
CO5	Explore the Current Good Manufacturing Practices (cGMP) in herbal drug industry.	Analyze
		Knowledge Category (KC)
		Factual & Conceptual
		Factual & Conceptual
		Conceptual & Procedural
		Factual, Conceptual
		Factual, Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix										
Herbal Drug Technology (BP603T)										
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10
CO-1	3	-	-	-	-	-	-	-	2	2
CO-2	3	-	-	-	-	2	-	-	2	2
CO-3	3	-	3	3	-	-	-	-	-	2
CO-4	3	-	-	-	-	2	2	3	2	2
CO-5	3	2	3	-	-	2	2	-	2	2
PO Target	3	2	3	3	-	2	2	3	2	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

Please Note (Reference: OBE Guidelines wef. Session 2023-24)
 ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: VI
Course name: Biopharmaceutics and Pharmacokinetics	Course Code: BP604T	Faculty: Prof. Dr. Ashu Mittal

Tagging COs with BLs & KCs	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO No.			
	After completion of the course, the student will be able to		
CO1	Illustrate the mechanisms and factors of drug absorption and drug distribution.	Apply	Factual & Conceptual
CO2	Analyze the processes of drug elimination, bioavailability and bioequivalence.	Analyze	Factual & Conceptual
CO3	Apply the principles of pharmacokinetics to different compartment models, non-compartment models, and physiological models, with a focus on the one compartment open model.	Apply	Factual & Conceptual
CO4	Utilize the principles of pharmacokinetics to comprehend the concepts related to multicompartment models.	Apply	Factual & Conceptual
CO5	Demonstrate a comprehensive understanding of nonlinear pharmacokinetics	Apply	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
Course Code											
CO-1	3	-	1	---	---	1	1	1	---	1	2
CO-2	3	---	3	2	---	1	---	1	---	---	2
CO-3	3	---	1	2	---	1	---	1	---	---	2
CO-4	3	---	3	2	---	1	---	1	---	1	2
CO-5	3	---	1	2	---	1	1	1	---	1	2
PO Target	3	---	1.8	2	---	1	1	1	---	1	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of 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.

Program Name: B. Pharm.	Academic Session: Even 2024-25	Semester: VI
Course name: Pharmaceutical Biotechnology	Course Code: BP605T	Faculty: Mr. Debaprasad Ghosh

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
	After completion of the course, the student will be able to		
CO1	Analyze the role and the importance of biotechnology in pharmaceuticals with applicable methodologies	Analyze	Conceptual, and Procedural
CO2	Analyze the recombinant DNA technology and its application in pharmaceuticals production.	Analyze	Conceptual, and Procedural
CO3	Demonstrate immunity and various immunological products and their production methods.	Apply	Conceptual, and Procedural
CO4	Analyze various immunoassay techniques for determination of immunological products.	Analyze	Conceptual, and Procedural
CO5	Apply different fermentation techniques in production of various fermentation products.	Apply	Conceptual, and Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Pharmaceutical Biotechnology (BP605T)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	1	1	1	1	1	1	1	1	2	2
CO-2	3	1	1	2	1	2	2	1	1	2	3
CO-3	3	1	2	1	1	1	1	1	1	1	2
CO-4	3	1	2	2	1	2	2	1	2	1	2
CO-5	3	1	2	1	1	1	1	1	1	1	2
PO Target	3	1	1.6	1.4	1	1.4	1.4	1	1.2	1.4	2.2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: VI
Course name: Quality Assurance	Course Code: BP606T	Faculty: Dr. Lakshmi

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Understand major guidelines and principles related to Quality Assurance and Quality Management.	Understand	Factual & Conceptual
CO2	Acquire knowledge of GMP guidelines in the pharmaceutical industry.	Apply	Factual & Conceptual
CO3	Assess procedures for quality control of packing materials and GLP guidelines	Evaluate	Conceptual & Procedural
CO4	Analyze various documents relevant to the pharmaceutical Industry.	Analyze	Factual & Conceptual
CO5	Apply general principles of analytical method Validation, calibration, and qualification of commonly used equipment	Apply	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Quality Assurance (BP606T)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	2	-	2	1	1	3	1	2	1	2
CO-2	3	2	1	-	1	1	3	2	2	2	2
CO-3	3	2	1	-	1	1	3	1	2	1	2
CO-4	3	2	2	-	1	1	3	1	2	1	2
CO-5	3	2	1	2	1	1	3	1	2	1	2
PO Target	3	2	1.25	2	1	1	3	1.20	2	1.20	2

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Signature of Course Coordinator

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Signature of Addl. HoD

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Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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.

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: VI
Course name: Medicinal Chemistry -III Practical	Course Code: BP607P	Faculty: Dr. Lalit Mohan Nainwal

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Prepare intermediate compounds and drugs of medicinal importance.	Create	Conceptual & Procedural
CO2	Analyze and determine the purity of drug present in the bulk and dosage forms.	Analyze	Conceptual & Procedural
CO3	Determine the physicochemical and druglike properties of drugs using drug design softwares.	Evaluate	Conceptual & Procedural
CO4	Illustrate chemical reactions and their mechanisms using ChemDraw software.	Analyze	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Medicinal Chemistry -III Practical (BP607P)

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	2	3	2	-	1	3	1	1	3	3
CO-2	3	2	3	2	-	-	3	3	1	1	1
CO-3	3	3	3	3	-	1	1	1	1	-	3
CO-4	3	3	3	3	-	1	1	2	1	-	3
PO Target	3	2.5	3	2.5	-	1	2	1.75	1	2	2.5

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: VI
Course Name: Pharmacology -III Practical	Course Code: BP608P	Faculty: Dr. Abhishek Kumar

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
	After completion of the course, the student will be able to		
CO1	Understand the methods for dose calculation for experimental animals.	Understand	Conceptual & Procedural
CO2	Demonstrate the knowledge of experiment design and bioassay process by experimental pharmacology on living tissue and simulation software.	Apply	Conceptual & Procedural
CO3	Examine the method of biochemical, pharmacokinetic analysis of biological samples.	Apply	Conceptual & Procedural
CO4	Demonstrate the method of toxicity studies and biostatistical analysis in Experimental Pharmacology.	Apply	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Pharmacology-III Practical (BP608P)											
Mapping of Course outcomes with Program Outcomes											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	1	1	-	-	-	2	1	-	-	3
CO-2	3	1	1	2	-	-	2	1	-	1	3
CO-3	3	1	1	2	-	-	2	1	-	1	3
CO-4	3	1	1	2	-	-	2	1	-	1	3
PO Target	3	1	1	2	-	-	2	1	-	1	3

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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 2024-25	Semester: VI
Course name: Herbal Drug Technology-Practical	Course Code: BP609P	Faculty: Dr. Daksh Bhatia

Tagging COs with BLs & KCs	
CO No.	Statement of Course Outcome
After completion of the course, the student will be able to	
CO1	Analyze the photo composition of crude drugs using various chemical tests.
CO2	Evaluate the marketed Ayurvedic/Herbal formulations on various parameters given in pharmacopoeia.
CO3	Develop the herbal formulation with the help of knowledge of herbs and excipients.
CO4	Evaluate the analysis and evaluation of crude drugs on the basis of pharmacopoeial standards.

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Herbal Drug Technology-Practical (BP609P)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	2	2	-	-	-	-	-	-	-	2
CO-2	3	2	2	3	-	-	-	-	-	-	2
CO-3	3	2	2	-	-	-	-	-	-	2	2
CO-4	3	2	2	3	-	-	-	-	-	-	2
PO Target	3	2	2	3	-	-	-	-	-	2	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

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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.

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 number of Cos. The mandatory parts are Action & Knowledge
- ❖ 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 2024-25	Semester: VIII
Course Name: Biostatistics & Research Methodology	Course Code: BP801T	Faculty: Dr. Neelam Sharma

Tagging COs with BLs & KCs

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
After completion of the course, the student will be able to			
CO1	Apply the role of biostatistics, concept of central tendency, dispersion and Correlation coefficient to solve pharmaceutical problems.	Apply	Conceptual & Procedural
CO2	Examine the concept of probability and its applications to the problem related to probability distributions along with the statistical method of data samples.	Apply	Conceptual & Procedural
CO3	Apply the non-parametric tests in the need of research design of experiment, along with the concept of graphs to designing the methodology.	Apply	Conceptual & Procedural
CO4	Understand the concept of Regression Modeling and understand the operation of M.S Excel, SPSS, R and MINITAB, DOE (Design of Experiment).	Understand	Factual & Conceptual
CO5	Demonstrate the concept of design, analysis of experiments and apply the optimization techniques in solving the problems.	Apply	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Biostatistics & Research Methodology (BP801T)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	2	1	1	1	-	-	-	-	-	-	1
CO-2	2	1	2	1	-	-	-	-	-	-	1
CO-3	1	1	2	1	-	-	-	-	-	-	1
CO-4	2	2	2	2	-	-	-	-	-	-	1
CO-5	2	2	1	2	-	-	-	-	-	-	1
PO Target	1.8	1.4	1.6	1.4	-	-	-	-	-	-	1

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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

KIET SCHOOL OF PHARMACY

Program Name: B. Pharm.	Academic Session: Even 2024-25	Semester: VIII
Course name: Social and Preventive Pharmacy	Course Code: BP802T	Faculty: Ms. Sreena Mehta

Tagging COs with BLs & KCs				
CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)	
After completion of the course, the student will be able to				
CO1	Elaborate the various concepts of health and diseases with reference to public health	Understand	Factual & Conceptual	
CO2	Acquire the knowledge of general principles for prevention and control of various diseases in light of social and preventive medicine	Apply	Factual & Conceptual	
CO3	Outline the important attributes of various National Health Programmes in context with its objectives, functions and outcomes	Analyze	Factual & Conceptual	
CO4	Explore various National Health Programmes and role of WHO in Indian health program in context with public health	Analyze	Factual & Conceptual	
CO5	Illustrate the role of community services in rural, urban and school health	Apply	Factual & Conceptual	

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Social and Preventive Pharmacy (BP802T)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	2	-	-	3	3	2	3	-	3
CO-2	3	-	2	-	-	3	3	3	3	-	3
CO-3	3	-	2	-	-	3	3	3	3	-	3
CO-4	3	-	2	-	-	3	3	3	3	-	3
CO-5	3	-	2	-	-	3	3	3	3	-	3
PO Target	3	-	2	-	-	3	3	2.8	3	-	3

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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

- ❖ The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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

KIET SCHOOL OF PHARMACY

Program Name: B. Pharm.	Academic Session: Even 2024-25	Semester: VIII
Course name: Pharm Marketing Management	Course Code: BP803ET	Faculty: Ms. Snikha Kaushik

Tagging COs with BLs & KCs		
CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)
	After completion of the course, the student will be able to	
CO1	Apply the basic concepts of marketing and their application in pharmaceutical marketing.	Apply
CO2	Illustrate product management in the pharmaceutical industry.	Apply
CO3	Analyze various promotional techniques for pharmaceutical products.	Analyze
CO4	Acquire knowledge about various pharmaceutical marketing channels.	Apply
CO5	Ascertain the objectives and importance of price management in the pharmaceutical industry.	Apply
		Knowledge Category (KC)
		Factual & Conceptual
		Factual & Conceptual
		Factual & Conceptual
		Factual & Conceptual
		Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Pharm Marketing Management (BP803ET)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	2	3	3	1	3	3	2	2	3	1	2
CO-2	3	3	2	3	3	3	2	3	3	1	3
CO-3	2	3	3	3	1	3	3	3	3	1	3
CO-4	2	3	3	2	3	2	3	3	3	1	3
CO-5	3	2	3	3	2	3	3	3	3	1	3
PO Total	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	1	2.00

Signature of Course Coordinator

Signature of Addl. HOD

Signature of HOD

KIET SCHOOL OF PHARMACY

Program Name: B. Pharm.	Academic Session: Even 2024-25	Semester: VIII
Course name: Computer Aided Drug Design	Course Code: BP807ET	Faculty: Dr. Garima Kapoor

Tagging COs with BLs & KCs		
CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)
CO1	Elaborate the basic concepts of CADD and rational approaches to drug design	Understand
CO2	Understand the concept of QSAR, descriptors and various approaches.	Understand
CO3	Acquire knowledge of virtual screening techniques and molecular docking.	Apply
CO4	Explore about bioinformatics and cheminformatics in pharmaceutical drug discovery	Apply
CO5	Explore objectives and importance of molecular mechanics and quantum mechanics in drug discovery.	Apply
		Knowledge Category (KC)
		Factual & Conceptual
		Factual & Conceptual
		Factual & Conceptual
		Factual & Conceptual
		Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix										
Computer Aided Drug Design (BP807ET)										
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10
CO-1	3	3	3	2	-	2	-	2	2	1
CO-2	2	-	2	3	2	2	-	3	2	1
CO-3	1	-	-	3	-	1	-	2	-	-
CO-4	2	-	3	2	2	2	-	2	-	-
CO-5	3	-	3	3	-	-	-	1	-	-
PO Target	2.2	3	2.75	2.6	2	1.75	-	2	2	1
										2.8

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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- The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 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

Program Name: B. Pharm.	Academic Session: Even 2024-25	Semester: VIII
Course name: Cosmetic Science	Course Code: BP809ET	Faculty: Dr. Monika Kaurav

Tagging COs with BLs & KCs	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	After completion of the course, the student will be able to	Apply	Conceptual & Procedural
CO2	Illustrate the structures of skin, hair, and oral cavity with associated problems and study of basics of cosmetic and cosmeceutical products	Apply	Conceptual & Procedural
CO3	Illustrate the principles of formulation and building blocks of skin care & Hair care products	Apply	Factual, Conceptual & Procedural
CO4	Demonstrate the role of herbs in cosmetics and analytical methods of cosmetics evaluation.	Analyze	Factual & Conceptual
CO5	Analyze the instrumental methods and their principle in cosmetics evaluation.	Apply	Factual & Conceptual
CO5	Explore the cosmetic problems associated with Hair, scalp and skin.	Apply	Factual & Conceptual

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Course Code	Course Name (Course Code)										
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	-	3	-	3	2	2	-	2	-	3
CO-2	3	-	2	-	2	2	2	-	2	-	2
CO-3	3	-	2	-	-	-	2	-	1	1	1
CO-4	3	-	2	-	-	2	2	-	-	2	2
CO-5	3	-	2	-	2	2	2	-	2	1	2
PO Target	3	-	2.2	-	2.33	2	2	-	1.75	1.33	2

Signature of HoD

Signature of Addl. HoD

Signature of Course Coordinator

Please Note (Reference: OBE Guidelines wef. Session 2023-24)
The courses having credits less than 3 should have 4 number of COs. The courses having credits 3 to 6 should have 5 number of Cos. The courses having credits less than 3 should have 4 number of COs. The mandatory parts are Action & Knowledge. The mandatory parts are Action & Knowledge. The mandatory parts are Action & Knowledge.

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: VIII
Course name: Project Work on Elective	Course Code: BP814PW	Faculty: Mr. Debaprasad Ghosh
Tagging COs with BLs & KCs		

CO No.	Statement of Course Outcome	Bloom's Cognitive Process Level (BL)	Knowledge Category (KC)
CO1	After completion of the course, the student will be able to Acquire the rationale behind performing project work in a specific elected area of pharmacy and expertise in data mining, literature reviewing, and processing for a particular research area of pharmacy.	Apply	Conceptual & Procedural
CO2	Analyze the implementation of available knowledge and technology to cater the needs under consideration.	Analyze	Conceptual & Procedural
CO3	Evaluate the potential role of new findings and their conversion into suitable solutions for the current pharmaceutical challenges.	Evaluate	Conceptual & Procedural
CO4	Develop novel theories, ideas, products, analytical methods, procedures, and techniques in a specific elected area in pharmacy.	Create	Conceptual & Procedural

Mapping of Course outcomes with Program outcomes CO-POs Matrix

Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	1	2	-	-	1	1	-	1	-	2
CO-2	3	2	2	3	-	1	1	-	1	-	2
CO-3	3	2	2	1	-	1	1	-	2	-	2
CO-4	3	1	2	2	-	1	1	-	2	-	2
PO Target	3	1.5	2	2	-	1	1	-	1.5	-	2

Signature of Course Coordinator

Signature of Addl. HoD

Signature of HoD

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KIET SCHOOL OF PHARMACY

Program Name: B. Pharm	Academic Session: Even 2024-25	Semester: VIII
Course name: Report on Industrial Tour	Course Code: BP816P	Faculty: Ms. Vidhu Saxena

Tagging COs with BLs & KCs	
CO No.	Statement of Course Outcome
After completion of the course, the student will be able to	
CO1	Observe the different sections and departments of pharmaceutical industry
CO2	Elaborate the manufacturing process of different formulations in the pharmaceutical industry
CO3	Analyze the rules and regulations related with pharmaceutical industry
CO4	Acquire professional ethics and responsibilities towards the environment and the society.

Mapping of Course outcomes with Program outcomes CO-POs Matrix											
Report on Industrial Tour (BP816P)											
Course Code	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11
CO-1	3	1	1	3	-	1	-	1	1	1	3
CO-2	3	1	1	3	-	1	-	1	1	1	3
CO-3	3	1	-	-	-	3	-	3	1	1	2
CO-4	1	1	-	-	3	1	3	-	1	3	3
PO Target	2.5	1	1	3	3	1.5	3	1.67	1	1.5	2.75

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