

KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: Academic Session: 2023-24 Year: I Semester: I
Course Name: HAP-I Course Code: BP101T Course Coordinator Name: Dr. Praveen K. Dixit
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Apply the basic structure of human body parts including cell, tissue and various types of cells signaling pathways.	1,7,8,9,11	Apply	Factual & Conceptual
CO2	Illustrate the structural and functional characteristics of bones and muscles of the human body.	1,7,8,9,11	Apply	Factual & Conceptual
CO3	Compare the composition and functions of blood and lymph.	1,7,8,9,11	Analyze	Factual & Conceptual
CO4	Illustrate the anatomical and physiological aspects of peripheral nervous system and sense organs.	1,7,8,9,11	Apply	Factual & Conceptual
CO5	Illustrate the structural and functional aspects of heart and its correlation with disorders in relation with ECG.	1,7,8,9,11	Apply	Factual & Conceptual
Faculty Members Teaching the Course				
1. Dr. Praveen K. Dixit				
2. Ms. Priya Bansal				


 Assoc./ Asst. Head DOC

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.

Department of Pharmacy

Program Name: B. Pharm
Course Name: HAP-I
Academic Session: 2023-24
Year: I Semester: I
Course Code: BP101T
Course Coordinator Name: Dr. Praveen K Dixit/Ms. Priya

CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	-	-	-	-	1	1	1		2	-	-	-
CO2	3	-	-	-	-	-	1	1	1		2	-	-	-
CO3	3	-	-	-	-	-	1	1	1		2	-	-	-
CO4	3	-	-	-	-	-	1	1	1		2	-	-	-
CO5	3	-	-	-	-	-	1	1	1		2	-	-	-
PO Target	3	-	-	-	-	-	1	1	1		2	-	-	-

Faculty Members Teaching the Course		Signature
1. Dr. Praveen K. Dixit		
2. Ms. Priya Bansal		

Ruha

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Praveen

Signature of Addl. HoD

Praveen

Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. PHARM

Course Name: Pharmaceutical Analysis-I

Course Outcomes

Year: I Semester: I

Academic Session: 2023-24

Course Code: BP102T

Course Coordinator Name: Dr. Abhay Bhardwaj

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Understand the basics and concepts of pharmaceutical analysis, its techniques and errors.	1, 2, 3, 4, 6, 7, 9, 10, 11	Understand	Factual & Conceptual
CO2	Illustrate the basics and concepts of acid base and non-aqueous titration and its application.	1, 2, 3, 4, 6, 7, 9, 10, 11	Apply	Factual & Conceptual
CO3	Outline the basics and concepts of precipitation, complexometric, gravimetry and diazotization its application.	1, 2, 3, 4, 6, 7, 9, 10, 11	Analyze	Factual & Conceptual
CO4	Acquire the basics and concepts of redox titrations along with its application.	1, 2, 3, 4, 6, 7, 9, 10, 11	Apply	Factual & Conceptual
CO5	Interpret the basics and concepts of electrochemical methods of analysis and its applications.	1, 2, 3, 4, 6, 7, 9, 10, 11	Evaluate	Factual & Conceptual

Faculty Members Teaching the Course		Faculty Members Teaching the Course	Signature
1. Dr. Abhay Bhardwaj			
		3. Dr. K.Nagarajan	
2. Dr. Neha			

[Signature]

Signature of Course Coordinator

[Signature]

Assoc./ Asst. Head DOC

[Signature]

Signature of Addl. HoD

[Signature]

Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. PHARM

Academic Session: 2023-24

Year: I Semester: I

Course Name: Pharmaceutical Analysis-I

Course Code: BP102T

Course Coordinator Name: Dr. Abhay Bhardwaj

CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	2	3	-	2	1	-	2	-	3	-	-	-
CO2	3	-	2	2	-	2	1	-	2	-	3	-	-	-
CO3	3	-	2	3	-	2	1	-	2	-	3	-	-	-
CO4	3	-	2	3	-	1	1	-	2	-	2	-	-	-
CO5	3	-	2	3	-	2	1	-	2	-	3	-	-	-
PO Target	3	-	2	2.8	-	1.8	1	-	2	-	2.8	-	-	-

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Abhay Bhardwaj			
2. Dr. Neha			
3. Dr. K.Nagarajan			

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

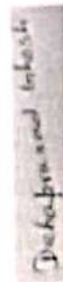
Department of KIET School of Pharmacy

Program Name: B.Pharm
 Course Name: Pharmaceutics-I Theory
 Course Outcomes

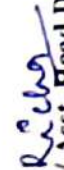
Academic Session: 2023-24
 Course Code: BP103T
 Year: I
 Semester: I
 Course Coordinator Name: Mr. Debaprasad Ghosh

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Discuss the rationale and concept behind the pharmacy profession, definition and types of dosage forms, pharmacopoeias, prescription & posology.	1,2,3,5,6,7,8,9,11	Understand	Factual, Conceptual
CO2	Apply different types of basic calculations involved in the pharmaceuticals, pharmaceutical powders & liquid dosage forms.	1,2,3,6,7,11	Apply	Conceptual & Procedural
CO3	Analyze the different monophasic liquid dosage forms, and biphasic liquid dosage forms like suspensions and emulsions.	1,2,3,4,6,7,11	Analyze	Conceptual & Procedural
CO4	Identify the formulation requirements of suppositories and different pharmaceutical incompatibilities.	1,2,3,6,7,11	Analyze	Conceptual & Procedural
CO5	Illustrate concept and preparation of semisolid dosage forms.	1,2,3,4,6,7,11	Analyze	Conceptual & Procedural

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Mr. Debaprasad Ghosh		—	—
2. Mr. Sanjeev Chauhan		—	—



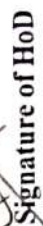
Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



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Department of KIET School of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24 Year: I Semester: I

Course Name: Pharmaceutics-I Theory

Course Code: BP103T Course Coordinator Name: Mr. Debaprasad Ghosh

CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	1	1	-	1	1	1	1	1	-	1			
CO2	3	1	1	-	-	1	1	-	-	-	1			
CO3	3	1	1	2	-	1	1	-	-	-	1			
CO4	3	1	2	-	-	1	1	-	-	-	1			
CO5	3	1	2	2	-	1	1	-	-	-	1			
PO Target	3.00	1.00	1.40	2.00	1.00	1.00	1.00	1.00	1.00	-	1.00			

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Mr. Debaprasad Ghosh	<i>Debaprasad Ghosh</i>	—	—
2. Mr. Sanjeev Chauhan	<i>Sanjeev Chauhan</i>	—	—

Debaprasad Ghosh

Signature of Course Coordinator

Richa

Assoc./ Asst. Head DOC

Signature of Addl. HoD

Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

KIET SCHOOL OF PHARMACY

Program Name: B.Pharm

Academic Session: 2023-2024

Year: I Semester: I

Course Name: Inorganic Pharmaceutical Chemistry

Course Code: BP104T

Course Coordinator Name: Ms. Shikha Kaushik

Course Outcomes

After completion of the course, the student will be able to		Relevant Pos/ PSO/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Attain an understanding of the sources of impurities with their control and limit test of inorganic molecules in pharmaceuticals.	1,9,10,11	Apply	Conceptual, and Procedural
CO2	Illustrate buffers, major intra, and extracellular electrolytes, and combination therapy including ORS and dental products.	1,9,10,11	Apply	Conceptual, and Procedural
CO3	Illustrate the various inorganic gastrointestinal agents and antimicrobials.	1,9,10,11	Apply	Conceptual, and Procedural
CO4	Acquire knowledge of the expectorants, emetics, hematinic, and antidotes used in inorganic pharmaceuticals.	1,9,11	Apply	Conceptual, and Procedural
CO5	Illustrate the radiopharmaceuticals their handling and precautions.	1,2,9,10,11	Apply	Conceptual, and Procedural

Faculty Members Teaching the Course		Signature
1. Ms. Shikha Kaushik		
2. Ms. Pragati Gupta		



Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



Signature of HoD

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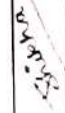
KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B.Pharm **Academic Session:** 2023-2024 **Year:** I **Semester:** I
Course Name: Inorganic Pharmaceutical Chemistry **Course Code:** BP104T **Course Coordinator Name:** Ms. Shikha Kaushik

CG - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	1	-	-	-	-	-	-	-	2	3	1	-	-	-
CO2	1	-	-	-	-	-	-	-	2	2	1	-	-	-
CO3	1	-	-	-	-	-	-	-	2	1	1	-	-	-
CO4	1	-	-	-	-	-	-	-	2	-	1	-	-	-
CO5	1	2	-	-	-	-	-	-	2	3	1	-	-	-
PO Target	1	2	-	-	-	-	-	-	2	2.25	1	-	-	-

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Ms. Shikha Kaushik		-	-
2. Ms. Pragati Gupta		-	-



Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



Signature of HoD

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Department of KSOP

Program Name: B. Pharm
Course Name: Communication Skills
Course Outcomes

Year: 1 Semester: 1

Academic Session: 2023-24

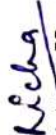
Course Code: BP105T

Course Coordinator Name: Dr Priyanka Sharma

After completion of the course, the student will be able to	Statement of Course Outcome	Relevant POs/PSOs/ APOs	Revised Bloom's Level(BL)	Knowledge Category(KC)
C01	Figure out the communication strategies and principles along with the various perspectives at workplace.	PO5,PO8,PO9,PO10,PO11	Understand	Conceptual
C02	Interpret the verbal & Non-verbal communication skills including the cognition of various communication style matrix.	PO8,PO9,PO10,PO11	Understand	Conceptual
C03	Express his/her self confidence with improved command over the dimensions of LSRW.	PO5,PO8,PO9,PO10,PO11	Apply	Conceptual
C04	Exercise the key principles of effective presentation techniques.	PO8,PO9,PO10,PO11	Apply	Conceptual
C05	Perform, comprehend, converse, interact and participate at multinational levels in day-to-day events and situation with cohesive arguments to reach a consensus.	PO5,PO8,PO9,PO10,PO11	Apply	Conceptual

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr Priyanka Sharma		—	—
2.	—	—	—


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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Department of KSOP

Program Name: B. Pharm
Course Name: Communication Skills

Academic Session: 2023-24
Course Code: BP105T
Year: 1 Semester: 1
Course Coordinator Name: Dr Priyanka Sharma

CO-PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	-	-	-	-	1	-	-	3	1	1	2	-	-	-
CO2	-	-	-	-	-	-	-	3	1	1	2	-	-	-
CO3	-	-	-	-	2	-	-	3	1	1	2	-	-	-
CO4	-	-	-	-	-	-	-	3	1	2	2	-	-	-
CO5	-	-	-	-	3	-	-	3	-	1	2	-	-	-
POTarget	--	-	-	-	2	-	-	3	1	2	2	--	--	--

Faculty Members Teaching the Course		Signature	Faculty Members Teaching the Course		Signature
1. Dr Priyanka Sharma					--
2.		--			--

Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



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Department of KSOP

Program Name: B. Pharm
Course Name: Remedial Mathematics
Course Outcomes

Academic Session: 2023-24
Course Code: BP106RMT
Year: I
Semester: I
Course Coordinator Name: Dr. Richa Agarwal

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Apply the concepts of partial fractions, logarithms, real valued functions, limits and continuity in Chemical Kinetics & Pharmacokinetics.	PO-1,2,3,4, 6,7,8,9,11	Apply	C, P
CO2	Apply the concepts of determinants and Matrices in solving Pharmacokinetics equations.	PO-1,2,3,4, 6,7,8,9,11	Apply	C, P
CO3	Apply the concepts of derivatives of a function of one variable to find extrema at a point.	PO-1,2,3,6,7,8,9,11	Apply	C, P
CO4	Apply the concepts of coordinate geometry integration in Pharmaceutical problems.	PO-1,2,3,6,7,8,9,11	Apply	C, P
CO5	Apply the concepts of Differential equations and Laplace transformations in solving Chemical Kinetics & Pharmacokinetics equations.	PO-1,2,3,4, 6,7,8,9,11	Apply	C, P

Faculty Members Teaching the Course	Signature
1. Dr. Richa Agarwal	

Richa

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of KSOP

Program Name: B. Pharm. Year: I Semester: I
 Course Name: Remedial Mathematics Course Code: BP106RMT Course Coordinator Name: Dr. Richa Agarwal

CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	2	-	-	-	-	-	1	-	1	-	1	NA	NA	NA
CO2	2	1	1	1	-	1	1	-	1	-	1	NA	NA	NA
CO3	2	1	2	-	-	1	1	-	1	-	1	NA	NA	NA
CO4	2	1	1	-	-	-	1	-	-	-	1	NA	NA	NA
CO5	2	1	2	-	-	1	1	-	-	-	1	NA	NA	NA
PO Target	2	1	1.5	1	-	1	1	-	1	-	1	NA	NA	NA

Faculty Members Teaching the Course	Signature
1. Dr. Richa Agarwal	


 Richa

Signature of Course Coordinator

Assoc./ Asst. Head DOC

Signature of Addl. HoD

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Department of Pharmacy

Program Name: B.Pharm
 Course Name: Remedial Biology
 Course Outcomes

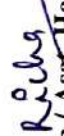
Academic Session: 2023-24
 Course Code: BP106RBT

Year: 1st
 Semester: 1st
 Course Coordinator Name: Ms. Sheena Mehta

After completion of the course, the student will be able to		Relevant POs/ PSO/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Understand the basic components of anatomy & morphology of plants.	1,7,8,10	Understand	Factual and Conceptual
CO2	Apply the concept of Body fluids, circulatory system, digestive system and respiration system.	1,7,8,9	Apply	Factual and Conceptual
CO3	Relate the basic concepts of excretory system, human reproduction system, neural, chemical control and coordination	1,7,8,9	Apply	Factual and Conceptual
CO4	Understand the basic concept of plant nutrition and nitrogen metabolism with the process of photosynthesis.	1,7,8,10	Understand	Conceptual and Procedural
CO5	Discover the plant cell and tissues with the mechanism of plant respiration, its growth and development.	1,7,8,10	Apply	Factual and Conceptual

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Ms. Sheena Mehta		—	—
2. Dr. Richa Goel		—	—


 Signature of Course Coordinator


 Assoc./ Asst. Head DOC


 Signature of Addl. HoD


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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

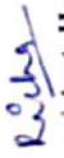
Program Name: B.Pharm
Course Name: Remedial Biology
Academic Session: 2023-24
Year: 1st Semester: 1st
Course Code: BP106RBT
Course Coordinator Name: Ms. Sheena Mehta

CO - PO/PSO/APO Matrix

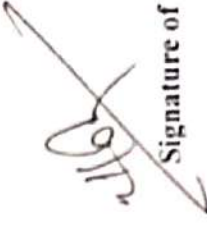
CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	-	-	-	-	1	1	-	1	-	-	-	-
CO2	3	-	-	-	-	-	1	1	3	-	-	-	-	-
CO3	3	-	-	-	-	-	1	1	3	-	-	-	-	-
CO4	3	-	-	-	-	-	1	1	-	1	-	-	-	-
CO5	3	-	-	-	-	-	1	1	-	1	-	-	-	-
PO Target	3	-	-	-	-	-	1	1	3	1	-	-	-	-

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Ms. Sheena Mehta		-	-
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 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

Department of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: I Semester: I

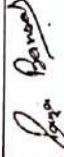
Course Name: Human Anatomy & Physiology-I Practical

Course Code: BP107P

Course Coordinator Name: Mrs. Priya Bansal

Course Outcomes

After completion of the course, the student will be able to		Relevant POs/PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Illustrate the microscopical characteristics of different types of cells and tissues in human body under the light of microscopic techniques.	1,4,8,9,11	Analyze	Conceptual & Procedural
CO2	Illustrate the concept for identification of various types of bones and joints under the background of their anatomical correlation	1,4,8,9,11	Analyze	Conceptual & Procedural
CO3	Assess the methods and techniques to measure the various components of blood.	1,4,8,9,11	Evaluate	Conceptual & Procedural

Faculty Members Teaching the Course		Faculty Members Teaching the Course	
	Signature		Signature
1. Mrs. Priya Bansal		—	—
2. Dr. Praveen K. Dixit		—	—



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.

Department of Pharmacy

Program Name: B.Pharm

Course Name: HAP-I Practical

Academic Session: 20232-24

Year: I Semester: I

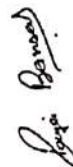
Course Code: BP107P

Course Coordinator Name: Mrs. Priya Bansal

CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	-	2	-	-	-	1	2	-	2	NA	NA	NA
CO2	3	-	-	2	-	-	-	1	2	-	2	NA	NA	NA
CO3	3	-	-	2	-	-	-	1	2	-	3	NA	NA	NA
PO Target	3	-	-	2	-	-	-	1	2	-	2.33	NA	NA	NA

Faculty Members Teaching the Course		Signature	Faculty Members Teaching the Course												Signature
1. Mrs. Priya Bansal			-												-
2. Dr. Praveen K. Dixit			-												-



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

Department of Pharmacy

Program Name: B. Pharm
Course Name: Pharm. Analysis-I Practical
Course Outcomes

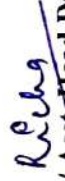
Academic Session: 2023-2024
Course Code: BP-108P

Year: I
Semester: I
Course Coordinator Name: Dr. Neha Rana

CO No.	Statement of Course Outcome	Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO1	Determine the qualitative and quantitative analysis of molecules in pharmaceuticals by volumetric analysis.	1, 3, 9, 10, 11	Apply	Conceptual & Procedural
CO2	Analyze the standardization of the given strength of molecules in pharmaceuticals.	1, 3, 9, 10, 11	Analyze	Conceptual & Procedural
CO3	Investigate the assay of given samples of pharmaceutical molecules.	1, 3, 9, 11	Analyze	Conceptual & Procedural

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Neha Rana		—	—
2. —	—	—	—


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

Department of Pharmacy

Program Name: B. Pharm **Academic Session:** 2023-2024 **Year:** I **Semester:** I
Course Name: Pharm. Analysis-I Practical **Course Code:** BP-108P **Course Coordinator Name:** Dr. Neha Rana

CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	3	-	-	-	-	-	3	3	3	NA	NA	NA
CO2	3	-	3	-	-	-	-	-	3	2	3	NA	NA	NA
CO3	3	-	3	-	-	-	-	-	3	-	3	NA	NA	NA
PO Target	3	-	3	-	-	-	-	-	3	2.5	3	NA	NA	NA

Faculty Members Teaching the Course		Signature	Faculty Members Teaching the Course		Signature
1. Dr. Neha Rana		<i>Neha Rana</i>			—
2. —		—			—

Neha Rana

Signature of Course Coordinator

Richa

Assoc./ Asst. Head DOC

Amey

Signature of Addl. HoD

Neha

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

Department of Pharmacy

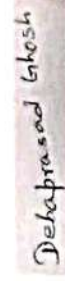
Year: 1st Semester: 1st
Course Coordinator Name: Mr. Pankaj

Academic Session: 2023-24
Course Code: BP109P

Program Name: B.Pharm
Course Name: Pharmaceutics- I Practical

Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSO's/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Demonstrate the preparation and dispensing of monophasic liquid dosage forms such as syrups, elixirs, linctus, solutions, gargles, mouthwashes and of biphasic liquid dosage forms such as suspensions and emulsions.	1,2,3,4,6,7,11	Apply	C,P
CO2	Illustrate the preparation and dispensing of different types of powders and granules.	1,2,3,4,6,7,11	Apply	C,P
CO3	Demonstrate the preparation and dispensing of semisolid dosage forms including ointments, creams and the preparation and dispensing of suppositories.	1,2,3,4,6,7,11	Apply	C,P

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Mr. Pankaj		—	—
2. Mr. 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 formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

Department of Pharmacy

Program Name: B.Pharm Academic Session: 2023-24 Year: 1st Semester: 1st
 Course Name: Pharmaceutics- I Practical Course Code: BP109P Course Coordinator Name: Mr. Pankaj

CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	1	2	2	-	1	1	-	-	-	2	NA	NA	NA
CO2	3	1	2	2	-	1	1	-	-	-	2	NA	NA	NA
CO3	3	1	2	2	-	1	1	-	-	-	2	NA	NA	NA
PO Target	3	1	2	2	-	1	1	-	-	-	2	NA	NA	NA

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Mr. Pankaj			—
2. Mr. 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 formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.

Department of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24 **Year: 1st** **Semester: 1st**

Course Name: Pharmaceutical Inorganic Chemistry Practical **Course Code: BP110P** **Course Coordinator Name: Ms. Pragati Gupta**

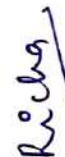
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Understand the sources of impurities with their control and limit test of inorganic molecules and pharmaceuticals.	1,2,3,4,5,7,8,9,10,11	Understand	Conceptual & Procedural
CO2	Explain the identification test and test for purity of inorganic molecules in pharmaceuticals.	1,2,3,4,5,7,8,9,10,11	Understand	Conceptual & Procedural
CO3	Elaborate on the preparation of inorganic pharmaceuticals and their assays.	1,2,3,4,5,7,8,9,10,11	Understand	Conceptual & Procedural

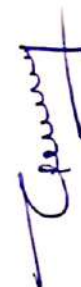
Faculty Members Teaching the Course		Faculty Members Teaching the Course	
1. Ms. Pragati Gupta			Signature
2. Ms. Shikha Kaushik			Signature



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.

Department of Pharmacy

Semester: 1st
Course Coordinator Name: Ms. Pragati Gupta

Program Name: B.Pharm
Academic Session: 2023-24
Year: 1st
Course Name: Pharmaceutical Inorganic Chemistry Practical
Course Code: BP110P

CO - PO/PSO/APO Matrix

CO - PO/PSO/APO Matrix														
CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	1	3	1	1	-	1	1	3	3	3	NA	NA	NA
CO2	3	1	3	1	1	-	1	1	3	2	3	NA	NA	NA
CO3	3	1	3	1	1	-	1	1	3	1	3	NA	NA	NA
PO Target	3	1	3	1	1	-	1	1	3	2	3	NA	NA	NA

Faculty Members Teaching the Course		Signature	Faculty Members Teaching the Course		Signature
1. Ms. Pragati Gupta					
2. Ms. Shikha Kaushik					



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.
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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of KSOP

Program Name: B.Pharm
 Course Name: Communication Skills Practical
 Course Outcomes

Academic Session: 2023-24

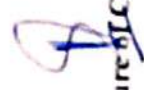
Year: 1 Semester: 1

Course Code: BP111P

Course Coordinator Name: Dr Priyanka Sharma

After completion of the course, the student will be able to		Relevant POs/PSOs/ APOs	Revised Bloom's Level (B L)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Attain the cognizance to exhibit interest and participate in the synergy & team work with the help of good interpersonal skills.	PO8, PO11	Apply	Conceptual
CO2	Apply the pronunciation etiquette to build the self-confidence with improved command over the mechanics of English language	PO8, PO11	Apply	Procedural
CO3	Attain both formal effective verbal and non-verbal communication skills to make information more accessible to the audience.	PO5, PO8, PO11	Apply	Procedural

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr Priyanka Sharma		—	—
2.	—	—	—


 Signature of Course Coordinator


 Assoc./ Asst. Head DOC


 Signature of Addl. HoD

Please Note (Reference: OBE Guidelines w.r.f. 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

Department of KSOP

Program Name: B.Pharm
Course Name: Communication Skills Practical
Academic Session: 2023-24
Course Code: BP111P
Year: 1 Semester: 1
Course Coordinator Name: Dr Priyanka Sharma

CO-PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	-	-	-	-	-	-	-	3	-	-	1	NA	NA	NA
CO2	-	-	-	-	-	-	-	3	-	-	1	NA	NA	NA
CO3	-	-	-	-	3	-	-	3	-	-	1	NA	NA	NA
POTarget	-	-	-	-	3	-	-	3	-	-	1	NA	NA	NA

Faculty Members Teaching the Course		Signature	Faculty Members Teaching the Course		Signature
1. Dr Priyanka Sharma			-		-
2.			-		-

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

Department of Pharmacy

Year: 1st Semester: 1st
Course Coordinator Name: Ms. Sheena Mehta

Academic Session: 2023-24
Course Code: BP112RBP

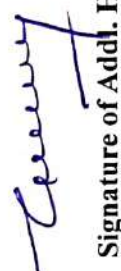
Program Name: B.Pharm
Course Name: Remedial Biology Practical
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Demonstrate microscope, section cutting, mounting and staining of slides.	1,4,7,9,11	Apply	Procedural
CO2	Contrast cell, stem, root, leaf, seed, fruit, flower and their modifications.	1,4,7,9,11	Analyze	Conceptual and Procedural
CO3	Determine the blood group, blood pressure and tidal volume in human.	1,3,4,7,8,9,11	Understand	Conceptual and Procedural

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Ms. Sheena Mehta		—	—
—	—	—	—


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

Department of Pharmacy

Program Name: B.Pharm **Year:** 1st **Semester:** 1st
Course Name: Remedial Biology Practical **Academic Session:** 2023-24 **Course Coordinator Name:** Ms. Sheena Mehta
Course Code: BP112RBP

CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	-	2	-	-	1	-	1	-	3	NA	NA	NA
CO2	3	-	-	2	-	-	1	-	1	-	3	NA	NA	NA
CO3	3	-	3	2	-	-	1	1	2	-	3	NA	NA	NA
PO Target	3	-	3	2	-	-	1	1	1.3	-	3	NA	NA	NA

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
Ms. Sheena Mehta			
	-		-


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: II

Semester: III

Course Name: Pharmaceutical Organic Chemistry-II

Course Code: BP301T

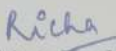
Course Coordinator Name: Shipra Singhal

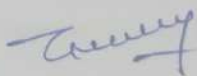
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSO/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Illustrate the structure, properties, chemical reactions and uses of benzene and its derivatives.	PO1, PO3, PO6, PO7, PO9, PO11	Apply	Factual & Conceptual
CO2	Examine the structure, properties, chemical reactions and uses of phenols, aromatic amines and aromatic acids.	PO1, PO3, PO6, PO7, PO9, PO11	Apply	Factual & Conceptual
CO3	Determine the structure, chemical reactions and analytical constants and significance of oil and fats.	PO1, PO3, PO6, PO7, PO9, PO11	Apply	Factual & Conceptual
CO4	Illustrate the structure, synthesis, chemical reactions and medicinal uses of polynuclear hydrocarbons.	PO1, PO3, PO6, PO7, PO9, PO11	Apply	Factual & Conceptual
CO5	Illustrate the structure, properties, chemical reactions and uses of cycloalkanes.	PO1, PO3, PO6, PO7, PO9, PO11	Apply	Factual & Conceptual

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 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

B.Pharm

Department of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: II

Semester: III

Course Name: Pharmaceutical Organic Chemistry-II

Course Code: BP301T

Course Coordinator Name: Shipra Singhal

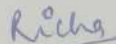
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	2	-	-	2	1	-	2	-	1	NA	NA	NA
CO2	3	-	2	-	-	2	1	-	2	-	1	NA	NA	NA
CO3	3	-	2	-	-	2	1	-	2	-	1	NA	NA	NA
CO4	3	-	2	-	-	2	1	-	2	-	1	NA	NA	NA
CO5	3	-	2	-	-	2	1	-	2	-	1	NA	NA	NA
PO Target	3	-	2	-	-	2	1	-	2	-	1	NA	NA	NA

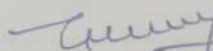
Faculty Members Teaching the Course	Signature
1. Mr. Surya Prakash	
2. Ms. Shipra Singhal	



Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



Signature of HoD

Please Note (Reference: OBE Guidelines 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

Department of Pharmacy

Program Name: B.Pharm

Course Name: Physical Pharmaceutics-I

Course Outcomes

Academic Session: 2023-24

Course Code: BP302T

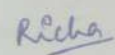
Year: II Semester: III

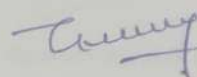
Course Coordinator Name: Dr Kiran Sharma

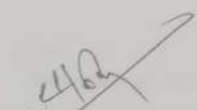
After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Illustrate parameters related to solubility of the drugs	PO- 1,2,3,4,8,9,11	Apply	F/C
CO2	Analyze states of matter, properties and physicochemical properties of drug molecules	PO- 1,2,3,4,8,9,11	Analyze	F/C
CO3	Express about surface and interfacial phenomenon	PO- 1,2,3,4,8,9,11	Apply	P/C
CO4	Illustrate complexation and protein binding	PO- 1,2,3,4,8,9,11	Analyze	P/C
CO5	Illustrate about pH, buffers and isotonic solutions	PO- 1,2,3,4,8,9,11	Apply	P/C

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr Kiran Sharma		—	—
2. Ms. Sakshi Garg		—	—


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

Department of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: II

Semester: III

Course Name: Physical Pharmaceutics-I

Course Code: BP302T

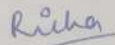
Course Coordinator Name: Dr Kiran Sharma

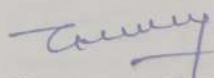
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	1	2	1				1	1		2	NA	NA	NA
CO2	3	1	2	1				1	1		2	NA	NA	NA
CO3	3	1	2	2				1	1		2	NA	NA	NA
CO4	3	1	2	2				1	1		2	NA	NA	NA
CO5	3	1	2	1				1	1		2	NA	NA	NA
PO Target	3	1	2	1.4				1	1		2	NA	NA	NA

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr Kiran Sharma		5. 	
2. Ms. Sakshi Garg		6. 	


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl HoD


Signature of HoD

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

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

KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B.Pharm.

Course Name: Pharmaceutical Microbiology

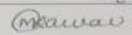
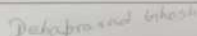
Course Outcomes

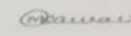
Academic Session: 2023-24 Year: 2nd Semester: 3rd

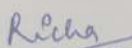
Course Code: BP303T

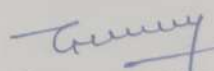
Course Coordinator Name: Dr. Monika Kaurav

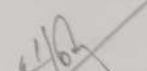
After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Illustrate the scope and applications of pharmaceutical biotechnology	1,11	Apply	Conceptual & Procedural
CO2	Analyze various staining and sterilization techniques used in pharmaceutical biotechnology	1,3,4,11	Analyze	Conceptual & Procedural
CO3	Outline evaluation methods of antiseptics, disinfectants, and the sterility testing as per different pharmacopoeias.	1,3,11	Analyze	Conceptual & Procedural
CO4	Explore the significance of clean area, methods and standardization of microbial assay of biological products.	1,3,4,5,10,11	Analyze	Conceptual & Procedural
CO5	Analyze the microbial spoilage and preservation of pharmaceutical products & process and application of tissue cell culture in pharmaceutical research.	1,3,5,10,11	Analyze	Conceptual & Procedural

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Monika kaurav		—	—
2. Mr. Debaprasad Ghosh		—	—


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B.Pharm.

Course Name: Pharmaceutical Microbiology

Academic Session: 2023-24 Year: 2nd

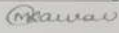
Semester: 3rd

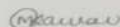
Course Code: BP303T

Course Coordinator Name: Dr. Monika Kaurav

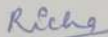
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	-	-	-	-	-	-	-	-	1	NA	NA	NA
CO2	3	-	1	2	-	-	-	-	-	-	1	NA	NA	NA
CO3	3	-	1	-	-	-	-	-	-	-	2	NA	NA	NA
CO4	3	-	1	1	1	-	-	-	-	1	2	NA	NA	NA
CO5	3	-	1	-	1	-	-	-	-	1	2	NA	NA	NA
PO Target	3	-	1	1.5	1	-	-	-	-	1	1.6	NA	NA	NA

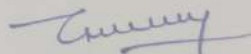
Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Monika Kaurav		-	-
2. Mr. Debaprasad Ghosh		-	-



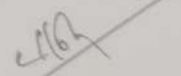
Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



Signature of HoD

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

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department: KSOP

Program Name: B Pharm.

Academic Session: 2023-24

Year: 2nd

Semester: 3rd

Course Name: Pharmaceutical Engineering-Theory

Course Code: BP304T

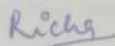
Course Coordinator Name: Mr. Balwan Singh

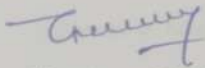
Course Outcomes

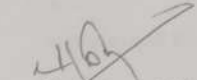
After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Understand the basic concepts related to fluid flow and equipment's used in size reduction and size separation in pharmaceutical industry	1, 2, 3 ,6, 10, 11	Understand	Factual, Conceptual, Procedural
CO2	Analyze the process of heat transfer and various equipment's used in evaporation and distillation	1, 2, 3 ,6, 10, 11	Analyze	Conceptual & Procedural
CO3	Examine various processes and equipment used in drying and mixing.	1, 2, 3, 4,6, 10, 11	Apply	Conceptual & Procedural
CO4	Apply filtration and centrifugation for processing of pharmaceutical products.	1, 2, 3, 4 ,6, 10, 11	Apply	Conceptual & Procedural
CO5	Explore selection of different material for pharmaceutical plant construction, corrosion and its prevention	1, 2, 3, 4 ,6, 10, 11	Analyze	Conceptual & Procedural

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Mr. Sanjeev Kumar		—	—
2. Mr. Balwan Singh		—	—


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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Department: KSOP

Program Name: B Pharm.

Academic Session: 2023-24

Year: 2nd

Semester: 3rd

Course Name: Pharmaceutical Engineering-Theory

Course Code: BP304T

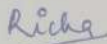
Course Coordinator Name: Mr. Balwan Singh

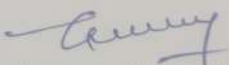
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	1	1	-	-	1	-	-	-	1	1	NA	NA	NA
CO2	3	1	1	-	-	1	-	-	-	1	1	NA	NA	NA
CO3	3	1	1	1	-	1	-	-	-	1	1	NA	NA	NA
CO4	3	1	1	1	-	1	-	-	-	1	1	NA	NA	NA
CO5	3	1	1	1	-	1	-	-	-	1	1	NA	NA	NA
PO Target	3	1	1	1	-	1	-	-	-	1	1	NA	NA	NA

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Mr. Sanjeev Kumar		—	—
2. Mr. Balwan Singh		—	—


Signature of Course Coordinator


Assoc./Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of KSOP

Program Name: B. Pharm

Academic Session: 2023-24

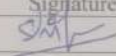
Year: II Semester: III

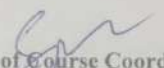
Course Name: Pharmaceutical Organic Chemistry-II (Practical) Course Code: BP305P

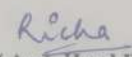
Course Coordinator Name: Surya Prakash

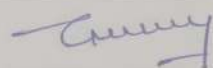
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Understand the laboratory techniques involved to perform the experiments of pharmaceutical chemistry.	1,2,3,4, 9,10,11	Understand	Conceptual & Procedural
CO2	Demonstrate the synthesis of some organic compounds like benzanilide, acetanilide, phenyl benzoate, 2,4,6-tribromo aniline etc.	1,2,3,4, 9,10,11	Apply	Conceptual & Procedural
CO3	Determine acid value, saponification value of oil and fats.	1,2,3,4, 9,10,11	Apply	Conceptual & Procedural

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. 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 wef. Session 2021 – 22)

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of KSOP

Program Name: B. Pharm.

Academic Session: 2023-24

Year: II Semester: III

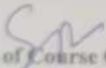
Course Name: Pharmaceutical Organic Chemistry-II (Practical) Course Code: BP305P

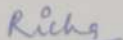
Course Coordinator Name: Surya Prakash

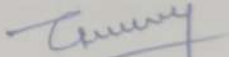
CO - PO/PSO/APO Matrix

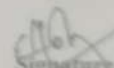
CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	1	3	1					1	1	3	NA	NA	NA
CO2	3	1	3	1					1	1	3	NA	NA	NA
CO3	3	1	3	1					1	1	3	NA	NA	NA
PO Target	3	1	3	1					1	1	3	NA	NA	NA

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. 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 wef. Session 2021 – 22)

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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/or itetc.

KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. Pharm
Course Name: Physical Pharmaceutics I Practical

Academic Session: 2023-24
Course Code: BP306P

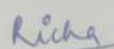
Year: 2nd Semester: 3rd
Course Coordinator Name: Ms. Sakshi Garg

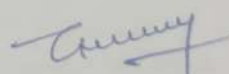
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Asses the solubility of the drug at room temperature and % composition of NaCl in a solution using the phenol-water system by CST method.	PO- 1,2,3,4,6,7,10,11	Evaluate	Conceptual Procedural
CO2	Determine the partition co-efficient and Freundlich-Langmuir constants using activated charcoal & the stability constant of PABA-Caffeine complex	PO- 1,2,3,4,6,7,10,11	Apply	Conceptual Procedural
CO3	Evaluate the surface tension of given liquids by different methods. HLB number of a surfactant by saponification method and CMC of surfactants.	PO- 1,2,3,4,6,7,10,11	Evaluate	Conceptual Procedural

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Kiran Sharma		—	—
2. Ms. Sakshi Garg		—	—


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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Department of Pharmacy

Program Name: B. Pharm

Academic Session: 2023-24

Year: 2nd Semester: 3rd

Course Name: Physical Pharmaceutics I Practical

Course Code: BP306P

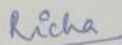
Course Coordinator Name: Ms. Sakshi Garg

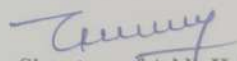
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	2	2	2	-	1	1	-	-	1	2	NA	NA	NA
CO2	3	2	2	2	-	1	1	-	-	1	2	NA	NA	NA
CO3	3	2	2	2	-	1	1	-	-	1	2	NA	NA	NA
PO Target	3	2	2	2	-	1	1	-	-	1	2	NA	NA	NA

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Kiran Sharma		—	—
2. Ms. Sakshi Garg		—	—


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Add. HoD


Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B.Pharm.

Academic Session: 2023-24 Year: 2nd

Semester: 3rd

Course Name: Pharmaceutical Microbiology Practical

Course Code: BP307P Course Coordinator Name:

Dr. Monika Kaurav

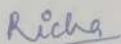
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	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 and their theoretical knowledge for the preparation of different types of culture media.	1,2,3,4,7,8,10,11	Apply	Conceptual & Procedural
CO2	Identify the type of bacteria by different staining techniques.	1,2,3,4,7,8,10,11	Analyze	Conceptual & Procedural
CO3	Determine sterility testing of different pharmaceutical products.	1,2,3,4,7,8,10,11	Analyze	Conceptual & Procedural

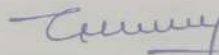
Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Monika Kaurav		2. Mr. Debaprasad Ghosh	



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 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

Department of Pharmacy

Program Name: B.Pharm.

Course Name: Pharmaceutical Microbiology Practical

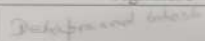
Academic Session: 2023-24 Year: 2nd Semester: 3rd

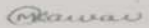
Course Code: BP307P

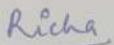
Course Coordinator Name: Dr. Monika Kaurav

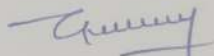
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	2	2	1	—	—	1	1	—	1	1	NA	NA	NA
CO2	3	2	3	2	—	—	1	1	—	1	1	NA	NA	NA
CO3	3	1	3	2	—	—	1	1	—	1	1	NA	NA	NA
PO Target	3	1.66	2.33	1.66	—	—	1	1	—	1	1	NA	NA	NA

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Monika Kaurav		2. Mr. 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.
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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department: KSOP

Program Name: B Pharm.

Academic Session: 2023-24

Year: 2nd

Semester: 3rd

Course Name: Pharmaceutical Engineering-Practical

Course Code: BP308P

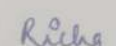
Course Coordinator Name: Mr. Sanjeev Kumar

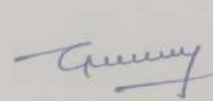
Course Outcomes

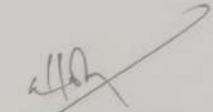
After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Demonstrate the process & factors affecting filtration and centrifugation.	1,2,3,6,9	Apply	Factual, Conceptual, Procedural
CO2	Demonstrate the process & principles of drying, crystallization, distillation and evaporation.	1,2,3,6,9	Apply	Conceptual & Procedural
CO3	Handle various pharmaceutical equipment's like FBD, fluid energy mill, Ball mill, Colloidal mill, planetary mixer & Freeze dryer.	1,2,3,6,9	Apply	Conceptual & Procedural

Faculty Members Teaching the Course	Signature
1. Mr. Sanjeev Kumar	
2. Mr. Balwan Singh	


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

Program Name: B Pharm.

Course Name: Pharmaceutical Engineering-Practical

Department: KSOP

Academic Session: 2023-24

Course Code: BP308P

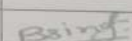
Year: 2nd

Semester: 3rd

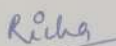
Course Coordinator Name: Mr. Sanjeev Kumar

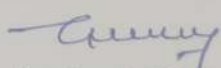
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	2	1	1	-	-	2	-	-	1	-	-	NA	NA	NA
CO2	2	1	1	-	-	2	-	-	1	-	-	NA	NA	NA
CO3	2	1	1	-	-	2	-	-	1	-	-	NA	NA	NA
PO Target	2	1	1	-	-	2	-	-	1	-	-	NA	NA	NA

Faculty Members Teaching the Course	Signature
1. Mr. Sanjeev Kumar	
2. Mr. Balwan Singh	


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.

KIETGroupofInstitutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

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

Academic Session: 2023-24
Course Code: BP410VA

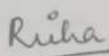
Year: 2
Semester: 3
Course Coordinator Name: Dr. Deepti Katiyar

After completion of the course, the student will be able to		Relevant POs	Revised Bloom's Level(BL)	KnowledgeCategory (KC)
CONo.	Statement of CourseOutcome			
CO1	Understand the basics of Regulatory Affairs including the roles and responsibilities of the various Regulatory Agencies	PO-1, 6, 8, 9	Understand	Conceptual
CO2	Demonstrate the dossier preparation and general guidance on the submissions in US-FDA and European Union	PO-1, 3, 4, 6, 8, 9	Apply	Conceptual/ Procedural
CO3	Describe the basic Regulatory Documentations like DMF, PDR, BMR, BPR, Batch Formula, Master Formula Record and so on	PO-1, 3, 6, 8, 9	Understand	Conceptual/ Procedural
CO4	Summarize the ICH Efficacy, safety and quality guidelines.	PO-1, 3, 6, 8	Understand	Conceptual/ Procedural
CO5	Elaborate about Patent, Trademark, Copyright, Industrial Designs and Geographical Indications, Indian Patent Scenario. IPR vs Regulatory Affairs	PO-1, 3, 4, 6, 8	Understand	Conceptual/ Procedural

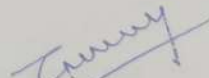
Faculty Members Teaching the Course	Signature
1. Dr. Deepti Katiyar	
2. Dr. Vinay Kumar	



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 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.

Department of Pharmacy

Program Name: B. Pharm
Course Name: Drug Regulatory Affairs

Academic Session: 2023-24
Course Code: BP410VA

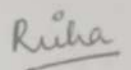
Year: 2
Semester: 3
Course Coordinator Name: Dr. Deepti Katiyar

CO-PO/PSO/APO Matrix

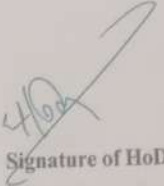
CO No.	Programme Outcome(PO)												PSO/APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	-	-	-	1	-	1	1	-	3	NA	NA	NA
CO2	3	-	1	2	-	2	-	1	1	-	2	NA	NA	NA
CO3	3	-	1	-	-	2	-	1	1	-	2	NA	NA	NA
CO4	3	-	1	-	-	1	-	1	-	-	3	NA	NA	NA
CO5	3	-	1	1	-	1	-	1	-	-	3	NA	NA	NA
POTarget	3	-	1	1.5	-	1.4	-	1	1	-	2.6	NA	NA	NA

Faculty Members Teaching the Course	Signature
1. Dr. Deepti Katiyar	
2. Dr. Vinay 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)

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. Pharma

Academic Session: 2023-24

Year: 2nd

Semester: 3rd

Course Name: Universal Human Values and Professional Ethics- Theory Course Code: KVE301

Course Coordinator Name: Dr. Garima Kapoor

Course Outcomes

CO No.	Statement of Course Outcome	Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO1	Discuss the need, basic guidelines, content and process for Value Education under the light of 'universal human values'	PO5, PO6, PO7, PO9, PO11	Understand	Conceptual & procedural
CO2	Explore the concept of harmony in the human being (in Myself) being 'I' & 'body' as separate entity.	PO5, PO6, PO7, PO9, PO11	Apply	Conceptual & procedural
CO3	Ensure the concept 'harmony' in the family and society keeping family as part of undivided society.	PO5, PO6, PO7, PO9, PO11	Analyze	Conceptual & procedural
CO4	Appraise harmony in the nature and existence imbibing the role of individuals in maintaining the harmony within.	PO5, PO6, PO7, PO9, PO10, PO11	Evaluate	Conceptual & procedural
	Interpret the holistic approach of harmony in relation with Professional Ethics.	PO5, PO6, PO7, PO9, PO10, PO11	Evaluate	Conceptual & procedural

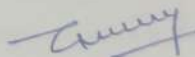
Faculty Members Teaching the Course	Signature
1. Dr. Garima Kapoor	
2. Dr. Praveen Kumar Dixit	



Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



Signature of HoD

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

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

KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. Pharma

Academic Session: 2023-24

Year: 2nd

Semester: 3rd

Course Name: Universal Human Values and Professional Ethics- Theory Course Code: KVE301 Course Coordinator Name: Dr. Garima Kapoor

CO - PO/PSO/APO Matrix

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

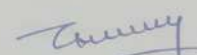
Faculty Members Teaching the Course	Signature
1. Dr. Garima Kapoor	
2. Dr. Praveen Kumar Dixit	



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 Conditions and Criteria.

KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: 3rd

Semester: 5

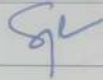
Course Name: Medicinal Chemistry-II

Course Code: BP501T

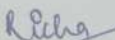
Course Coordinator Name: Ms. Pragati Gupta

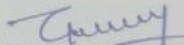
Course Outcomes

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

Faculty Members Teaching the Course	Signature
1. Ms. Pragati Gupta	
2. Mr. Surya Prakash	


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 number of COs. The Project having 7 to 12 credits should have 6 to 10 number of COs.
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B.Pharm
5th

KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. Pharm

Academic Session: 2023-24

Year: 3rd

Semester: 5th

Course Name: Medicinal Chemistry-II

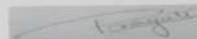
Course Code: BP501T

Course Coordinator Name: Ms. Pragati Gupta

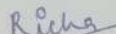
CO - PO/PSO/APO Matrix

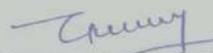
CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	2	1	-	-	1	1	-	1	-	NA	NA	NA
CO2	3	-	2	1	-	-	1	1	-	1	-	NA	NA	NA
CO3	3	-	2	1	-	-	1	1	-	1	-	NA	NA	NA
CO4	3	-	2	1	-	-	1	1	-	1	-	NA	NA	NA
CO5	3	-	2	1	-	-	1	1	-	1	-	NA	NA	NA
PO Target	3	-	2	1	-	-	1	1	-	1	-	NA	NA	NA

Faculty Members Teaching the Course	Signature
1. Ms. Pragati Gupta	
2. Mr. Surya Prakash	



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.
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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of KIET School of Pharmacy

Program Name: B.Pharm.

Academic Session: 2023-24

Year: 3rd

Semester: 5th

Course Name: Industrial Pharmacy-1

Course Code: BP502T

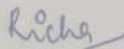
Course Coordinator Name: Dr. Ashu Mittal

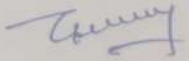
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	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, 3,11	Understand	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, 11	Apply	Conceptual
CO3	Formulate and prepare drug products such as tablets, coated tablet, liquid oral, capsules, pellets, parenteral, ophthalmic products, cosmetics, aerosols, ophthalmic preparation	PO-1,2, 3,4,7,10, 11	Apply	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, 3,4,7,11	Evaluate	Conceptual, Procedural
CO5	Investigate various compression and processing problems related to manufacture of tablets, coated tablets, capsules	PO-1,2, 3,4,7,11	Analyze	Conceptual

Faculty Members Teaching the Course	Signature
1. Dr. Ashu Mittal	
2. Ms Surbhi	


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of KIET School of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: 3rd

Semester: 5th

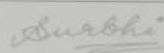
Course Name: Industrial Pharmacy-I

Course Code: BP502T

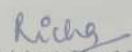
Course Coordinator Name: Dr.Ashu Mittal

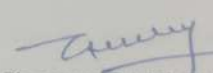
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	2	1	-	-	-	-	-	-	-	2	NA	NA	NA
CO2	3	2	1	1	-	-	-	-	-	-	2	NA	NA	NA
CO3	3	2	1	1	-	-	1	-	-	1	2	NA	NA	NA
CO4	3	2	1	1	-	-	1	-	-	-	2	NA	NA	NA
CO5	3	2	1	1	-	-	1	-	-	-	2	NA	NA	NA
PO Target	3	2	1	1	-	-	1	-	-	-	2	NA	NA	NA

Faculty Members Teaching the Course	Signature
1. Dr.Ashu Mittal	
2. Ms.Surbhi	


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.
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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

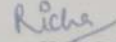
Program Name: B.Pharm
Course Name: Pharmacology-II
Course Outcomes

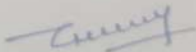
Academic Session: 2023-24 Year: III Semester: V
Course Code: BP503T Course Coordinator Name: Dr. Abhishek Kumar

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	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-1,3,4,11	Understand	Factual & Conceptual
CO2	Elaborate the pharmacology of drugs acting on urinary system.	PO-1,3,4,11	Apply	Factual & Conceptual
CO3	Examine the pharmacological and physiological roles of autacoids and drugs acting on their receptors.	PO-1,3,4,11	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

Faculty Members Teaching the Course	Signature
1. Dr. Roma Ghai	
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)

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

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

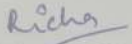
Academic Session: 2023-24 Year: III Semester: V
Course Code: BP503T Course Coordinator Name: Dr. Abhishek Kumar

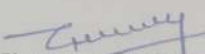
CO - PO/PSO/APO Matrix

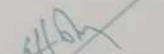
CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	1	1	-	-	-	-	-	-	2	NA	NA	NA
CO2	3	-	1	1	-	-	-	-	-	-	2	NA	NA	NA
CO3	3	-	1	1	-	-	-	-	-	-	2	NA	NA	NA
CO4	3	-	1	1	-	-	-	-	-	-	2	NA	NA	NA
CO5	3	1	2	1	-	-	1	-	-	-	2	NA	NA	NA
PO Target	3	1	1.2	1	-	-	1	-	-	-	2	NA	NA	NA

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

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: 3

Semester: 5

Course Name: Pharmacognosy & Phytochemistry

Course Code: BP504T

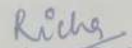
Course Coordinator Name: Dr. Daksh Bhatia

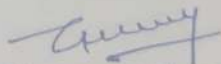
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	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, 11	Understand	Factual & Conceptual
CO2	Acquire the knowledge of the chemistry, source, therapeutic uses and commercial applications of specific crude drugs.	PO-1, 3, 11	Apply	Factual & Conceptual
CO3	Analyze the specified phytoconstituents utilizing the standardized parameters	PO-1, 3, 4, 11	Analyze	Conceptual & Procedural
CO4	Understand the industrial applications of the mentioned phytoconstituents	PO-1, 3, 4, 11	Understand	Factual & Conceptual
CO5	Compare various methods for extraction, isolation and purification of phytoconstituents.	PO-1, 2, 3, 4, 11	Evaluate	Conceptual & Procedural

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


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: 3

Semester: 5

Course Name: Pharmacognosy & Phytochemistry

Course Code: BP504T

Course Coordinator Name: Dr. Daksh Bhatia

CO - PO/PSO/APO Matrix

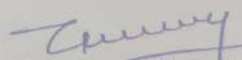
CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	-	3	-	-	-	-	-	-	2	NA	NA	NA
CO2	3	-	2	-	-	-	-	-	-	-	2	NA	NA	NA
CO3	3	-	2	3	-	-	-	-	-	-	2	NA	NA	NA
CO4	3	-	2	3	-	-	-	-	-	-	2	NA	NA	NA
CO5	3	1	2	3	-	-	-	-	-	-	1	NA	NA	NA
PO Target	3	1	2	3	-	-	-	-	-	-	1.8	NA	NA	NA

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



Signature of Course Coordinator

Assoc./ Asst. Head DOC



Signature of Addl. HoD



Signature of HoD

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

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name:

Academic Session: 2023-2024

Year: III Semester: V

Course Name: Pharmaceutical Jurisprudence- Theory

Course Code: BP505T

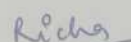
Course Coordinator Name: Mr. Pankaj

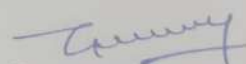
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSO's/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Interpret the rules and regulations defined under the Drugs and Cosmetics act 1945.	PO-1,6,7,8,9,11	Understand	C,F
CO2	Illustrate the regulation by Pharmacy Act, Medicinal and Toilet Preparations Act-1955 and Narcotics Narcotic Drugs and Psychotropic Substances Act 1948 and Rules.	PO-1,6,7,8,9,11	Analyze	C,F
CO3	Explore the guidelines laid under the acts pertaining to prevention of cruelty to animals and national pricing authority.	PO-1,6,7,8,9,11	Apply	C,F
CO4	Illustrate the basics of pharmaceutical legislations and code of pharmaceutical ethics.	PO-1,6,7,8,9,11	Apply	C,F
CO5	Explain the medical termination of pregnancy act, RTI act and IPR.	PO-1,6,7,8,9,11	Analyze	C,F

Faculty Members Teaching the Course	Signature
1. Mr. Pankaj	
2. Dr. Garima Kapoor	


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. Pharm

Academic Session: 2023-2024

Year: III Semester: V

Course Name: Pharmaceutical Jurisprudence- Theory

Course Coordinator Name: Mr. Pankaj

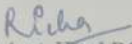
Course Code: BP505T

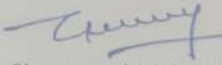
CO - PO/PSO/APO Matrix-

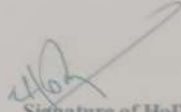
CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	-	-	-	2	3	1	3	-	3	NA	NA	NA
CO2	3	-	-	-	-	2	3	1	3	-	3	NA	NA	NA
CO3	3	-	-	-	-	2	3	1	3	-	3	NA	NA	NA
CO4	3	-	-	-	-	2	3	1	3	-	3	NA	NA	NA
CO5	3	-	-	-	-	2	3	1	3	-	3	NA	NA	NA
PO Target	3	-	-	-	-	2	3	1	3	-	3	NA	NA	NA

Faculty Members Teaching the Course	Signature
1. Mr. Pankaj	
2. Dr. Garima Kapoor	


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. Pharm

Academic Session: 2022-2023

Year: 3rd Semester: 5th

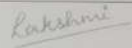
Course Name: Industrial Pharmacy-I (Practical)

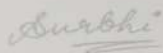
Course Code: BP506P

Course Coordinator Name: Ms. Surbhi Kamboj

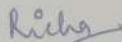
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Carry out assessment of physicochemical properties of drugs as a tool in the optimization of solid, semi solid and liquid dosage forms	PO-1,2,3,4,7,8,10,11	Analyze	Conceptual, Procedural
CO2	Formulate and prepare tablets, capsules, semi solids, injections, eye drops, cold cream, vanishing cream using established procedures and technology.	PO-1,2,3,4,7,8,10,11	Create	Conceptual, Procedural
CO3	Evaluate the tablet, capsule dosage form, packaging material, for quality and stability and compare with standards prescribed in the pharmacopoeia	PO-1,2,3,4,7,8,10,11	Evaluate	Conceptual, Procedural

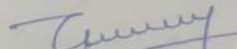
Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Ashu Mittal		3. Ms. Surbhi Kamboj	
2. Dr. Lakshmi			



Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. Pharm

Academic Session: 2022-2023

Year: III Semester: V

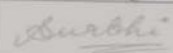
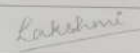
Course Name: Industrial Pharmacy-I (Practical)

Course Code: BP506P

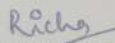
Course Coordinator Name: Ms. Surbhi Kamboj

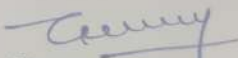
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	2	2	1	-	-	1	1	-	1	1	NA	NA	NA
CO2	3	2	3	1	-	-	1	1	-	1	1	NA	NA	NA
CO3	3	1	3	1	-	-	1	1	-	1	1	NA	NA	NA
PO Target	3	1.66	2.66	1	-	-	1	1	-	1	1	NA	NA	NA

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Ashu Mittal		3. Ms. Surbhi Kamboj	
2. Dr. Lakshmi			


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of KIET School Of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: III

Semester: V

Course Name: Pharmacology-II Practical

Course Code: BP507P

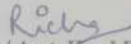
Course Coordinator Name: Dr. Roma Ghai

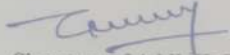
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	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.	PO1, PO2, PO4, PO9, PO11	Analyze	Conceptual, Procedural
CO2	Determine the pharmacological activity of drugs on animal models.	PO1, PO2, PO3, PO4, PO9, PO11	Apply	Conceptual, Procedural
CO3	Demonstrate different types of bioassay techniques on animal tissue preparations using simulation software	PO1, PO2, PO4, PO9, PO11	Apply	Conceptual, Procedural

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


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of KIET School Of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: III

Semester: V

Course Name: Pharmacology-II Practical

Course Code: 245079

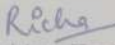
Course Coordinator Name: Dr. Roma Ghai

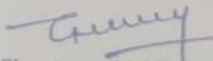
CO - PO/PSO/ APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	1	-	3	-	-	-	-	1	-	3	NA	NA	NA
CO2	3	1	2	2	-	-	-	-	1	-	2	NA	NA	NA
CO3	3	1	-	3	-	-	-	-	1	-	2	NA	NA	NA
PO Target	1	1	2	2.6	-	-	-	-	1	-	2.3	NA	NA	NA

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


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: 3

Semester: 5

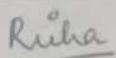
Course Name: Pharmacognosy Practical

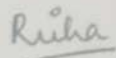
Course Code: BP508P

Course Coordinator Name: Dr. Richa Goel

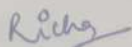
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
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-1,2,3,4,6,11	Evaluate	Conceptual & Procedural
CO3	Analyze the specified phytoconstituents utilizing the standardized parameters.	PO-1,2,3,4,6,11	Analyze	Conceptual & Procedural

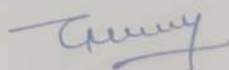
Faculty Members Teaching the Course	Signature
1. Dr. Richa Goel	
2. Dr. Daksh Bhatia	



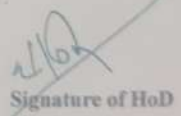
Signature of Course Coordinator



Assoc./ Asst. Head DOC



Signature of Addl. HoD



Signature of HoD

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B.Pharm

Academic Session: 2023-24

Year: 3

Semester: 5

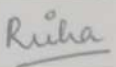
Course Name: Pharmacognosy Practical

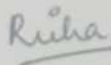
Course Code: BP508P

Course Coordinator Name: Dr. Richa Goel

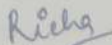
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	-	1	-	2	-	-	-	-	1	NA	NA	NA
CO2	3	2	2	2	-	2	-	-	-	-	2	NA	NA	NA
CO3	3	2	2	2	-	2	-	-	-	-	2	NA	NA	NA
PO Target	3	2	2	1.6	-	2	-	-	-	-	1.6	NA	NA	NA

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



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

Department of KSOP

Program Name: B. Pharm.

Academic Session: 2023-24

Year: IV

Semester: VII

Course Name: Instrumental Methods of Analysis

Course Code: BP701T

Course Coordinator Name: Ms. Shipra

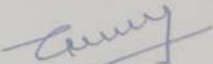
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Apply the Concept, Instrumentation and Applications of UV-Visible Spectroscopy and Fluorimetry.	1,3,4, 6,7,9,11	Apply	Factual & Conceptual
CO2	Evaluate the principle and instrumentation and knowledge in IR spectroscopy, Flame Photometry, Atomic absorption spectrometry and Nephelo-turbidimetry.	1,3,4, 6,7,9,11	Evaluate	Factual & Conceptual
CO3	Apply the concepts of Adsorption, Partition Column chromatography, TLC, Paper Chromatography and Electrophoresis with its applications.	1,3,4, 6,7,9,11	Apply	Factual, Conceptual & Procedural
CO4	Illustrate the concept of GC & HPLC with its advantages and applications.	1,3,4, 6,7,9,11	Apply	Factual & Conceptual
CO5	Analyze the methodology in ion exchange, gel and affinity chromatography with its applications.	1,3,4, 6,7,9,11	Analyze	Factual, Conceptual & Procedural

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Ms. Shipra		2. Dr. K. Nagarajan	


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.
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B. Pharma

KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of KSOP

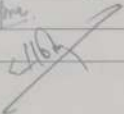
Program Name: B. Pharm.
Course Name: Instrumental Methods of Analysis

Academic Session: 2023-24
Course Code: BP701T

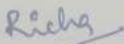
Year: IV Semester: VII
Course Coordinator Name: Ms. Shipra

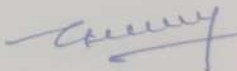
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	-	2	3	-	2	1	-	2	-	2	NA	NA	NA
CO2	3	-	2	3	-	2	1	-	2	-	2	NA	NA	NA
CO3	3	-	2	3	-	2	1	-	2	-	1	NA	NA	NA
CO4	3	-	2	3	-	2	1	-	2	-	2	NA	NA	NA
CO5	3	-	2	3	-	2	1	-	2	-	2	NA	NA	NA
PO Target	3	-	2	3	-	2	1	-	2	-	1.8	NA	NA	NA

Faculty Members Teaching the Course	Signature
1. Ms. Shipra	
2. Dr. K. Nagarajan	


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

Department of Pharmacy

Program Name: B.Pharm

Course Name: Industrial Pharmacy II - Theory

Course Outcomes

Academic Session: 2023-24

Course Code: BP702T

Year: IV

Semester: VII

Course Coordinator Name: Anuj Pathak

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	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-1,2,3,4,7,8,10,11	Understand	Conceptual, Factual and Procedural
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-1,2,3,7,8,10,11	Analyze	Conceptual, Factual and Procedural
CO3	Assess regulatory affairs and various regulatory requirements for drug approval in context with regulatory framework of Pharma Industry	PO-1,2,3,7,8,10,11	Evaluate	Conceptual, Factual and Procedural
CO4	Outline different aspects of Quality Management System in the capacity of quality product development	PO-1,2,3,7,8,10,11	Analyze	Conceptual, Factual and Procedural
CO5	Explore Indian Regulatory Requirements	PO-1,2,3,7,8,10,11	Understand	Conceptual, Factual and Procedural

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Anuj Pathak		2. Ms. Vidhu Saxena	

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.

Department of Pharmaceutics

Program Name: B.PHARM

Course Name: Industrial Pharmacy II

Academic Session: 2023-24

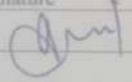
Course Code: BP702 T

Year: IV Semester: VII

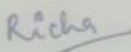
Course Coordinator Name: Anuj Pathak

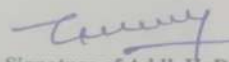
CO - PO/PSO/APO Matrix

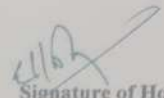
CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	2	1	2	-	-	2	3	-	1	3	NA	NA	NA
CO2	3	2	3	-	-	-	2	3	-	1	3	NA	NA	NA
CO3	3	2	1	-	-	-	2	3	-	1	3	NA	NA	NA
CO4	3	2	3	-	-	-	2	3	-	1	3	NA	NA	NA
CO5	3	2	1	-	-	-	2	3	-	1	3	NA	NA	NA
PO Target	3	2	1.8	2	-	-	2	3	-	1	3	NA	NA	NA

Faculty Members Teaching the Course	Signature
1. Anuj Pathak	
2. Vidhu Saxena	


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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

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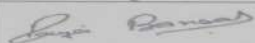
Department of KSOP

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

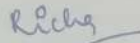
Academic Session: 2023-24
Course Code: BP703T

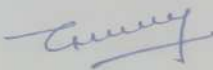
Year: IV Semester: VII
Course Coordinator Name: Dr. Shardendu K Mishra

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	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
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

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


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

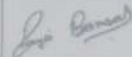
Department of KSOP

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

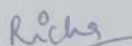
Academic Session: 2023-24
Course Code: BP703T
Year: IV Semester: VII
Course Coordinator Name: Dr. Shardendu K. Mishra

CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	2	2	1	-	3	2	2	3	-	2	NA	NA	NA
CO2	3	2	2	1	-	3	2	2	3	-	2	NA	NA	NA
CO3	3	2	2	-	-	2	2	3	3	-	2	NA	NA	NA
CO4	3	2	2	-	-	3	2	2	2	-	2	NA	NA	NA
CO5	3	2	3	1	-	3	2	1	2	-	2	NA	NA	NA
PO Target	3	2	2.2	1	-	2.8	2	2	2.6	-	2	NA	NA	NA

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


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

KIET School of Pharmacy

Program Name: B. Pharm

Academic Session: 2023-24

Year: 4th

Semester: 7th

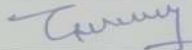
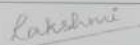
Course Name: Novel Drug Delivery systems

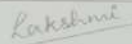
Course Code: BP704T

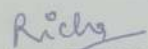
Course Coordinator Name: Dr. Lakshmi

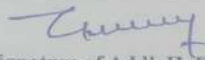
Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Understand basic concepts related to various Novel drug delivery systems.	PO1, PO2, PO3, PO4, PO9 and P11	Understand	F, C
CO2	Analyze various novel drug delivery systems.	PO1, PO2, PO3, PO9 and P11	Analyze	C, P
CO3	Examine various approaches for development of various Novel drug delivery systems.	PO1, PO2, PO3, PO4, PO5, PO8, PO9 and P11	Apply	C, P
CO4	Apply different methods for development of novel drug delivery systems for various drugs.	PO1, PO2, PO3, PO4, PO8, PO9, PO10 and P11	Apply	C, P
CO5	Apply Novel drug delivery systems for various medical conditions.	PO1, PO2, PO3, PO4, PO8, PO9, PO10 and P11	Apply	C, P

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

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

Academic Session: 2023-24

Year: 4th

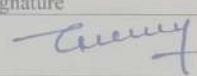
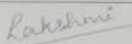
Semester: 7th

Course Name: Novel Drug Delivery Systems Course Code: BP704T

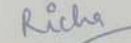
Course Coordinator Name: Dr. Lakshmi

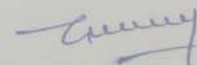
CO - PO/PSO/APO Matrix

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	-	-	2	1	-	1
CO4	3	3	3	1	-	-	-	1	1	2	1
CO5	3	3	2	1	-	-	-	1	2	1	1
PO Target	3	2.6	1.8	1	1	-	-	1.3	1.2	1.5	1

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

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

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. Pharma

Academic Session: 2023-24

Year: 4th Semester: 7th

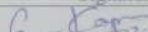
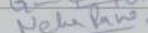
Course Name: Instrumental Methods of Analysis (Practical)

Course Code: BP705P

Course Coordinator Name: Dr. Garima Kapoor

Course Outcomes

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Analyze the graphs of absorption maxima and effect of solvents in different organic compounds.	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO11	Analyze	Conceptual & procedural
CO2	Evaluate different organic compounds using colorimetry, fluorimetry and UV spectroscopy.	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO11	Evaluate	Conceptual & procedural
CO3	Demonstrate the working of HPLC, Gas chromatography and flame photometry.	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO11	Apply	Conceptual & procedural
CO4	Illustrate the process of separation of various compounds using different chromatographic techniques.	PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO11	Analyze	Conceptual & procedural

Faculty Members Teaching the Course	Signature
1. Dr. Garima Kapoor	
2. Dr. Neha	


Signature of Course Coordinator


Assoc./ Asst. Head DOC


Signature of Addl. HoD


Signature of HoD

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

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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of Pharmacy

Program Name: B. Pharma

Academic Session: 2023-24

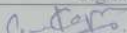
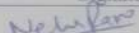
Year: 4th Semester: 7th

Course Name: Instrumental Methods of Analysis (Practical) Course Code: BP705P

Course Coordinator Name: Dr. Garima Kapoor

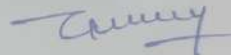
CO - PO/PSO/APO Matrix

CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	1	1	3	1	2	-	2	-	-	1	3	NA	NA
CO2	3	1	1	3	1	2	-	2	-	-	1	3	NA	NA
CO3	3	1	1	3	1	2	-	2	-	-	1	3	NA	NA
CO4	3	1	1	3	1	2	-	2	-	-	1	3	NA	NA
PO Target	3	1	1	3	1	2	-	2	-	-	1	3	NA	NA

Faculty Members Teaching the Course	Signature	Faculty Members Teaching the Course	Signature
1. Dr. Garima Kapoor		2. Dr. Neha	


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

Department of KSOP

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

Academic Session: 2023-24
Course Code: BP706PS

Year: 4th Semester: 7th
Course Coordinator Name: Mr. Debaprasad Ghosh

After completion of the course, the student will be able to		Relevant POs/ PSOs/ APOs	Revised Bloom's Level (BL)	Knowledge Category (KC)
CO No.	Statement of Course Outcome			
CO1	Understand the rationale behind undergoing the 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-1,2,3,4,5,6,8,10,11	Apply	Conceptual & Procedural
CO3	Analyze the implementation of available technology or development of new strategies to cater the needs under consideration.	PO-1,2,3,4,5,6,8,10,11	Analyze	Conceptual & Procedural
CO4	Evaluate the potential role of new findings and their conversion into suitable solution.	PO-1,2,3,4,5,6,8,10,11	Evaluate	Conceptual & Procedural
CO5	Create modern pharmaceuticals or alternate therapeutic systems or new analytical method or any other labeled horizon in the area of work.	PO-1,2,3,4,5,6,8,10,11	Create	Conceptual & Procedural

Faculty Members Teaching the Course	Signature
1. Mr. 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.
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KIET Group of Institutions, Delhi – NCR, Ghaziabad

Department of KSOP

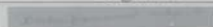
Program Name: B.Pharm
Course Name: Practice School

Course Code: BP706PS

Academic Session: 2023-24 Year: 4th Semester: 7th
Course Coordinator Name: Mr. Debaprasad Ghosh

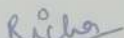
CO - PO/PSO/APO Matrix

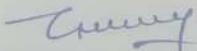
CO No.	Programme Outcome (PO)												PSO/ APO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	2	2	-	1	1	-	1	-	2	3	NA	NA	NA
CO2	3	2	2	3	1	1	-	1	-	2	3	NA	NA	NA
CO3	3	2	2	3	1	1	-	1	-	2	3	NA	NA	NA
CO4	3	2	2	2	1	1	-	1	-	2	3	NA	NA	NA
CO5	3	2	2	2	1	1	-	1	-	2	3	NA	NA	NA
PO Target	3.00	2.00	2.00	2.50	1.00	1.00	-	1.00	-	2.00	3.00	NA	NA	NA

Faculty Members Teaching the Course	Signature
I. Mr. 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 formed considering a proper structure having mandatory and optional parts. The mandatory parts are Action & Knowledge and optional parts are Condition and Criteria.