



# NATIONAL COLLEGE OF PHARMACY

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## TO WHOMSOEVER IT MAY CONCERN

This is to certify that the information given in the attached documents are verified by me and is true to the best of my knowledge.

Dr. Sujith Varma.K **PRINCIPAL**  
Principal National College of Pharmacy  
Manassery, Kozhikode  
National College of Pharmacy  
Manassery, Mukkam, Kozhikode





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### CRITERIA 2: TEACHING LEARNING AND EVALUATION

#### 2.6.2: ATTAINMENT OF POs AND COs ARE EVALUATED

<u>SL NO</u>	<u>PARTICULARS</u>
1	MAPPING OF B.PHARM
2	MAPPING OF PHARM D
3	MAPPING OF PHARM D P.B
4	MAPPING OF M.PHARM
5	ATTAINMENT OF B.PHARM
6	ATTAINMENT OF PHARM D
7	ATTAINMENT OF PHARM D P.B
8	ATTAINMENT OF M.PHARM



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### GA PO MAPPING- B.PHARM

PROGRAM OUTCOME	GA 1	GA 2	GA 3	GA 4	GA 5	GA 6	GA 7	GA 8	GA 9	GA 10
PO1	2	1	1	2	1	2	-	1	2	1
PO2	2	2	1	2	-	1	2	-	1	2
PO3	2	2	1	2	-	-	1	1	1	1
PO4	2	1	1	-	1	-	1	-	2	2
PO5	1	1	2	2	-	1	1	2	1	2
PO6	2	1	2	1	1	2	1	1	2	1
PO7	2	1	2	1	-	3	1	2	-	-
PO8	2	2	2	3	1	-	1	-	1	2
PO9	2	2	2	2	1	1	-	1	2	1
PO10	1	1	1	1	3	1	-	-	-	-
PO11	2	2	-	1	-	1	1	-	3	1



*Sujithram*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode

KMCT Medical College Campus, Manassery, P.O, Mukkam Ph:-04952297440,Email:-pharmacy@kmct.edu.in,www.nationalcollegeofpharmacy.org



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### GA PO MAPPING- PHARM D

PROGRAM OUTCOME	GA 1	GA 2	GA 3	GA 4	GA 5	GA 6	GA 7	GA 8	GA 9	GA1 0
PO1	2	1	1	2	1	1	1	-	2	2
PO2	2	2	2	2	1	3	1	1	2	3
PO3	2	1	1	2	1	1	1	1	2	2
PO4	1	-	2	2	1	3	-	1	1	1
PO5	1	2	2	2	-	2	2	2	2	1
PO6	2	2	2	2	-	2	1	1	2	2
PO7	2	1	1	2	1	2	1	1	1	2
PO8	2	2	1	2	-	2	-	1	2	2
PO9	2	1	2	2	2	1	-	1	3	2



*Sujitha*  
**PRINCIPAL**  
National College of Pharmacy  
Manassery, Kozhikode

KMCT Medical College Campus, Manassery, P.O, Mukkam Ph:-04952297440,Email:-pharmacy@kmct.edu.in,www.nationalcollegeofpharmacy.org



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### GA PO MAPPING- PHARM D P.B

PROGRAM OUTCOME	GA 1	GA 2	GA 3	GA 4	GA 5	GA 6	GA 7	GA 8	GA 9	GA1 0
PO1	2	1	1	2	1	1	1	-	2	2
PO2	2	2	2	2	1	3	1	1	2	3
PO3	2	1	1	2	1	1	1	1	2	2
PO4	1	-	2	2	1	3	-	1	1	1
PO5	1	2	2	2	-	2	2	2	2	1
PO6	2	2	2	2	-	2	1	1	2	2
PO7	2	1	1	2	1	2	1	1	1	2
PO8	2	2	1	2	-	2	-	1	2	2
PO9	2	1	2	2	2	1	-	1	3	2



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode

KMCT Medical College Campus, Manassery, P.O, Mukkam Ph:-04952297440, Email:-pharmacy@kmct.edu.in, www.nationalcollegeofpharmacy.org



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### GA PO MAPPING- M. PHARM

PROGRAM OUTCOME	GA 1	GA 2	GA 3	GA 4	GA 5	GA 6	GA 7	GA 8	GA 9	GA 10
PO1	2	1	2	2	1	1	1	1	1	1
PO2	2	2	2	2	-	2	2	-	-	2
PO3	2	1	2	2	1	1	1	-	-	1
PO4	1	1	2	2	-	-	1	1	2	1
PO5	2	2	1	2	-	-	1	1	-	1
PO6	2	2	2	2	2	1	1	1	1	1
PO7	2	2	1	2	1	2	2	1	1	1
PO8	2	2	1	2	1	1	1	-	2	2
PO9	1	1	2	2	1	2	1	2	2	1
P10	2	2	2	2	2	1	1	1	1	1
P11	2	1	2	2	1	1	1	1	3	1



*Sujithra*  
**PRINCIPAL**  
National College of Pharmacy  
Manassery, Kozhikode

KMCT Medical College Campus, Manassery, P.O, Mukkam Ph:-04952297440,Email:-pharmacy@kmct.edu.in,www.nationalcollegeofpharmacy.org



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### MAPPING OF B.PHARM

*Srijith*  
**PRINCIPAL**

National College of Pharmacy  
Manassery, Kozhikode



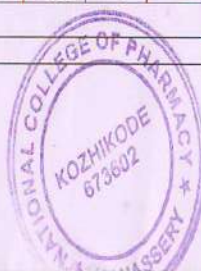
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B.PHARM CO PO PSO MAPPING																
B.PHARM																
FIRST SEMESTER																
BP101T HUMAN ANATOMY AND PHYSIOLOGY I(T)																
CO PO MAPPING											CO PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	1	1	3	1	3	3	3	1	3	1	C01	2	2	2	2
C02	3	1	1	2	1	2	2	3	1	3	2	C02	2	3	1	3
C03	3	1	1	3	1	3	2	2	3	1	1	C03	1	2	2	2
C04	3	1	3	3	1	3	3	2	3	1	3	C04	3	2	2	2
AVERAGE	3	1	1.5	2.75	1	2.75	2.5	2.5	2	2	1.75	AVERAGE	2	2.25	1.75	2.25
BP102T PHARMACEUTICAL ANALYSIS I (T)																
CO PO MAPPING											CO PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	2	3	3	2	3	1	1	1	1	1	C01	2	2	2	1
C02	3	2	3	3	2	3	1	1	1	1	1	C02	3	3	3	2
C03	3	2	3	3	1	2	1	1	1	1	1	C03	2	3	2	2
C04	2	2	3	3	2	2	1	1	1	1	1	C04	2	2	3	3
AVERAGE	2.75	2	3	3	1.75	2.5	1	1	1	1	1	AVERAGE	2.25	2.5	2.5	2
BP103T PHARMACEUTICS I (T)																
CO PO MAPPING											CO PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	1	2	1	1	3	1	2	1	1	1	C01	2	1	1	1
C02	3	2	2	3	1	3	1	2	3	1	1	C02	2	2	2	2
C03	3	2	2	1	1	3	1	3	2	1	1	C03	2	1	2	1
C04	2	1	2	1	1	3	1	3	3	1	2	C04	3	1	1	1
AVERAGE	2.75	1.5	2	1.5	1	3	1	2.5	2.25	1	1.25	AVERAGE	2.25	1.25	1.5	1.25
BP104T PHARMACEUTICAL INORGANIC CHEMISTRY (T)																
CO PO MAPPING											CO PSO MAPPING					



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
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Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	3	2	2	3	3	3	3	3	3	3	C01	2	1	2	1
C02	3	3	2	2	3	3	3	3	3	3	3	C02	3	2	2	2
C03	2	3	2	2	3	3	3	3	3	3	3	C03	1	2	1	2
C04	3	3	2	2	3	3	3	3	3	3	3	C04	1	1	1	3
AVERAGE	2.5	3	2	2	3	3	3	3	3	3	3	AVERAGE	1.75	1.5	1.5	2

## BP105T COMMUNICATION SKILLS(T)

CO PO MAPPING												CO PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	-	-	-	-	-	3	-	3	-	-	-	C01	2	3	2	3
C02	-	-	-	-	-	3	-	3	-	-	-	C02	3	3	1	3
C03	-	-	-	-	-	3	-	3	-	-	-	C03	2	2	2	3
C04	-	-	-	-	-	3	-	3	-	-	-	C04	1	2	2	3
AVERAGE	-	-	-	-	-	3	-	3	-	-	-	AVERAGE	2	2.5	1.75	3

## BP107P HUMAN ANATOMY AND PHYSIOLOGY I(P)

CO PO MAPPING												CO PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	1	2	1	1	1	1	2	2	2	1	1	C01	1	-	-	-
C02	3	2	2	2	1	1	1	2	1	2	2	C02	1	-	1	-
C03	3	3	3	1	1	1	2	2	2	1	1	C03	2	-	1	2
C04	1	2	1	1	2	2	2	2	2	2	2	C04	1	-	-	1
AVERAGE	2	2.25	1.75	1.25	1.25	1.25	1.75	2	1.75	1.5	1.5	AVERAGE	1.25	-	0.5	0.75

## BP108P PHARMACEUTICAL ANALYSIS I (P)

CO PO MAPPING												CO PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	2	3	3	1	3	1	1	1	1	1	C01	2	2	2	1
C02	3	2	3	3	3	3	1	1	1	1	1	C02	1	1	1	2
C03	3	2	3	3	1	2	1	1	1	1	1	C03	1	2	2	1



*[Signature]*  
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C04	2	2	3	3	2	2	1	1	1	1	1	C04	2	2	1	1
AVERAGE	2.75	2	3	3	1.25	2.5	1	1	1	1	1	AVERAGE	1.5	1.75	1.5	1.25
<b>BP109P PHARMACEUTICS I (P)</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	1	2	1	1	3	1	2	1	1	1	C01	3	2	1	1
C02	3	2	2	3	1	3	1	2	3	1	1	C02	2	1	2	2
C03	3	2	2	1	1	3	1	2	2	1	1	C03	2	2	2	1
C04	2	1	2	1	1	3	1	2	3	1	2	C04	1	1	1	2
AVERAGE	2.75	1.5	2	1.5	1	3	1	2	2.25	1	1.25	AVERAGE	2	1.5	1.5	1.5
<b>BP110P PHARMACEUTICAL INORGANIC CHEMISTRY (P)</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	1	2	1	2	2	3	1	2	1	2	C01	2	1	1	1
C02	3	1	1	1	2	2	3	2	2	1	2	C02	1	1	1	1
C03	3	2	2	1	2	2	3	2	2	1	1	C03	1	2	2	1
C04	3	1	2	1	3	2	2	1	2	1	1	C04	2	1	1	2
AVERAGE	3	1.25	1.75	1	2.25	2	2.75	1.5	2	1	1.5	AVERAGE	1.5	1.25	1.25	1.25
<b>BP111P COMMUNICATION SKILLS</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	-	-	-	-	-	3	-	3	-	-	-	C01	1	-	1	3
C02	-	-	-	-	-	3	-	3	-	-	-	C02	1	-	-	3
C03	-	-	-	-	-	3	-	3	-	-	-	C03	1	-	1	3
C04	-	-	-	-	-	3	-	3	-	-	-	C04	1	-	1	3
AVERAGE	-	-	-	-	-	3	-	3	-	-	-	AVERAGE	1	-	0.75	3
<b>SECOND SEMESTER</b>																
<b>BP201T HUMAN ANATOMY AND PHYSIOLOGY II</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4



*[Signature]*  
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Outcome																		
C01	3	3	3	2	2	1	3	2	1	2	2	C01	2	2	1	2		
C02	3	3	3	2	1	3	2	1	3	1	3	C02	1	1	2	1		
C03	3	3	3	2	2	2	3	3	3	1	1	C03	1	1	1	2		
C04	3	2	2	2	1	1	2	2	3	1	2	C04	1	1	2	1		
AVERAGE	3	2.75	2.75	2	1.5	1.75	2.5	2	2.5	1.25	2	AVERAGE	1.25	1.25	1.5	1.5		
<b>BP202T PHARMACEUTICAL ORGANIC CHEMISTRY I</b>																		
CO-PO MAPPING												CO-PSO MAPPING						
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4		
C01	2	2	2	2	2	2	2	2	2	2	1	C01	1	2	1	2		
C02	2	2	1	1	1	2	2	2	2	2	2	C02	1	1	1	1		
C03	2	3	1	1	1	1	2	2	2	2	1	C03	1	1	2	1		
C04	3	2	3	2	1	3	1	1	2	1	1	C04	1	1	1	1		
AVERAGE	2.25	2.25	1.75	1.5	1.25	2	1.75	1.75	2	1.75	1.25	AVERAGE	1	1.25	1.25	1.25		
<b>BP203T BIOCHEMISTRY</b>																		
CO-PO MAPPING												CO-PSO MAPPING						
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4		
C01	3	3	2	3	3	3	3	3	3	2	3	C01	1	1	1	1		
C02	2	3	2	1	2	3	3	-	3	3	3	C02	1	1	1	1		
C03	3	3	2	3	3	3	3	2	-	3	3	C03	1	1	2	1		
C04	2	3	2	2	2	3	2	3	3	2	3	C04	2	2	2	1		
AVERAGE	2.5	3	2	2.25	2.5	3	2.75	2	2.25	2.25	3	AVERAGE	1.25	1.25	1.5	1		
<b>BP204T PATHOPHYSIOLOGY</b>																		
CO-PO MAPPING												CO-PSO MAPPING						
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4		
C01	2	2	3	3	3	2	3	2	3	-	1	C01	1	1	1	1		
C02	2	3	3	3	-	3	2	2	1	3	3	C02	1	2	1	2		
C03	2	2	3	3	2	3	3	2	2	3	2	C03	2	1	2	1		
C04	2	3	3	3	2	3	3	2	2	1	-	C04	1	2	1	2		



*Sujitha*  
**PRINCIPAL**  
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C05	2	2	3	2	1	2	1	2	1	1	-	C05	1	1	2	1
AVERAGE	2	2.4	3	2.2	2.2	1.4	2.6	2	2	1.2	1.2	AVERAGE	1.2	1.4	1.4	1.4
<b>BP205T COMPUTER APPLICATIONS IN PHARMACY</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	-	-	-	-	-	-	-	-	-	-	3	C01	1	2	1	2
C02	-	-	-	-	-	-	-	-	-	-	3	C02	2	1	2	2
C03	-	-	-	-	-	-	-	-	-	-	3	C03	1	2	1	2
C04	-	-	-	-	-	-	-	-	-	-	3	C04	2	1	1	2
AVERAGE	-	-	-	-	-	-	-	-	-	-	3	AVERAGE	1.5	1.5	1.25	2
<b>BP206T ENVIRONMENTAL SCIENCES</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	-	-	-	-	-	-	-	-	3	-	-	C01	-	-	-	-
C02	-	-	-	-	-	-	-	-	3	-	-	C02	-	-	-	-
C03	-	-	-	-	-	-	-	-	3	-	-	C03	-	-	-	-
C04	-	-	-	-	-	-	-	-	3	-	-	C04	-	-	-	-
AVERAGE	-	-	-	-	-	-	-	-	3	-	-	AVERAGE	-	-	-	-
<b>BP207P HUMAN ANATOMY AND PHYSIOLOGY II</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	2	2	2	1	1	2	2	1	1	C01	1	-	-	1
C02	2	1	1	1	1	1	1	2	1	1	1	C02	1	-	1	1
C03	2	2	1	2	2	2	2	2	2	2	2	C03	2	-	2	2
C04	2	1	1	1	1	1	1	1	1	1	1	C04	1	-	-	1
AVERAGE	2	1.5	1.25	1.25	1.25	1.25	1.25	1.75	1.5	1.25	1.25	AVERAGE	1.25	-	0.75	1.25
<b>BP208P PHARMACEUTICAL ORGANIC CHEMISTRY I</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4



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C01	2	2	2	2	0	2	1	2	2	1	1	C01	1	2	1	1
C02	2	2	1	2	2	1	1	1	1	1	1	C02	1	1	2	2
C03	2	3	2	1	2	1	2	3	3	1	1	C03	2	2	1	1
C04	3	2	1	2	3	2	1	2	1	1	1	C04	1	1	1	1
AVERAGE	2.25	2.25	1.5	1.75	1.75	1.5	1.25	2	1.75	1	1	AVERAGE	1.25	1.5	1.25	1.25

## BP209P BIOCHEMISTRY

### CO-PO MAPPING

Course Outcome	CO-PO MAPPING											CO-PSO MAPPING				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	3	3	3	2	3	2	3	-	1	C01	1	2	1	2
C02	2	3	3	-	3	-	3	2	2	1	3	C02	2	1	1	1
C03	2	2	3	3	2	3	3	2	2	3	2	C03	2	2	1	2
C04	2	3	3	3	2	-	3	2	2	1	-	C04	1	2	2	1
AVERAGE	2	2.5	3	2.25	2.5	1.25	3	2	2.25	1.25	1.5	AVERAGE	1.5	1.75	1.25	1.5

## THIRD SEMESTER

### BP301T PHARMACEUTICAL ORGANIC CHEMISTRY II

#### CO-PO MAPPING

Course Outcome	CO-PO MAPPING											CO-PSO MAPPING				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	2	2	3	3	2	3	3	3	3	C01	1	1	1	1
C02	3	3	2	2	3	3	2	3	3	3	3	C02	1	2	1	1
C03	3	3	2	2	3	3	2	3	3	3	3	C03	2	1	1	1
C04	3	3	2	2	3	3	2	3	3	3	3	C04	1	2	2	1
AVERAGE	3	3	2	2	3	3	2	3	3	3	3	AVERAGE	1.25	1.5	1.25	1

### BP302T PHYSICAL PHARMACEUTICS I

#### CO-PO MAPPING

Course Outcome	CO-PO MAPPING											CO-PSO MAPPING				
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	3	2	2	2	1	2	1	-	3	C01	1	2	1	1
C02	3	3	3	3	1	2	1	2	2	-	3	C02	1	1	2	1
C03	3	3	3	2	1	2	1	2	2	-	3	C03	2	2	2	2
C04	3	3	3	1	2	2	1	2	2	-	3	C04	1	2	1	1



*Sujitha Manassery*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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C05	3	3	3	2	1	2	1	1	3	-	3	C05	1	1	1	2
AVERAGE	3	3	3	2	1.4	2	1	1.8	2	-	3	AVERAGE	1.2	1.6	1.4	1.8
<b>BP303T PHARMACEUTICAL MICROBIOLOGY</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	2	1	3	1	3	2	1	3	1	3	C01	1	1	1	1
C02	3	3	2	3	1	3	2	2	2	1	3	C02	1	1	1	1
C03	3	2	1	3	2	3	2	2	2	1	3	C03	1	1	1	1
C04	3	2	2	3	2	3	2	1	2	1	3	C04	2	2	1	2
C05	3	1	3	3	1	3	2	2	2	1	3	C05	1	1	1	1
AVERAGE	3	2	1.8	3	1.4	3	2	1.6	2.2	1	3	AVERAGE	1.2	1.2	1	1.2
<b>BP304T PHARMACEUTICAL ENGINEERING</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	-	2	3	-	3	2	-	-	2	2	C01	1	1	1	1
C02	3	1	2	3	-	3	2	-	-	2	2	C02	2	2	1	1
C03	3	2	3	3	-	3	3	-	-	3	3	C03	2	1	2	1
C04	3	1	3	2	-	3	3	-	3	3	2	C04	2	1	1	1
AVERAGE	3	1	2	2.75	-	3	2.5	-	0.75	2.5	2.25	AVERAGE	1.75	1.25	1.25	1
<b>BP305P PHARMACEUTICAL ORGANIC CHEMISTRY II</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	1	1	1	3	2	2	3	2	3	C01	1	-	2	-
C02	2	-	1	-	-	-	-	-	1	-	3	C02	1	-	1	-
C03	2	-	-	-	2	-	2	-	1	-	3	C03	2	-	2	-
C04	2	2	1	1	-	3	2	2	3	2	3	C04	2	-	2	-
AVERAGE	2	1	0.75	0.5	0.75	1.5	1.5	1	2	1	3	AVERAGE	1.5	-	1.75	-
<b>BP306P PHYSICAL PHARMACEUTICS I</b>																



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	0	0	3	2	0	0	0	0	0	C01	3	-	2	-
C02	3	3	0	0	3	2	0	0	0	0	0	C02	3	-	1	-
C03	3	3	0	0	3	2	0	0	0	0	0	C03	3	-	2	-
C04	3	3	0	0	3	2	0	0	0	0	0	C04	3	-	1	-
AVERAGE	3	3	0	0	3	2	0	0	0	0	0	AVERAGE	3	-	1.5	-

## BP307P PHARMACEUTICAL MICROBIOLOGY

CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	1	3	3	1	2	2	0	3	1	3	C01	1	1	2	1
C02	3	2	3	3	2	3	1	1	2	2	3	C02	1	1	1	1
C03	3	1	2	3	1	2	1	1	2	3	3	C03	-	2	1	1
C04	3	2	2	3	2	3	1	0	2	1	3	C04	-	1	1	1
C05	3	1	3	3	1	3	1	2	2	2	3	C05	1	-	1	2
AVERAGE	3	1.4	2.6	3	1.4	2.6	1.2	0.8	2.2	1.8	3	AVERAGE	0.6	1	1.2	1.2

## BP307P PHARMACEUTICAL ENGINEERING

CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	-	2	3	-	3	2	-	-	2	2	C01	1	2	1	2
C02	3	1	2	3	-	3	2	-	-	2	2	C02	1	2	2	1
C03	3	2	3	3	-	3	3	-	-	3	3	C03	1	1	2	1
C04	3	1	3	2	-	3	3	-	3	3	2	C04	1	2	1	1
AVERAGE	3	1	2.5	2.75	-	3	2.5	-	0.75	2.5	2.25	AVERAGE	1	1.75	1.5	1.25

## FOURTH SEMESTER

### BP401T PHARMACEUTICAL ORGANIC CHEMISTRY III

CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	2	3	2	3	2	3	2	3	2	3	C01	2	1	2	1



*S. J. Thomas*  
PRINCIPAL  
National College of Pharmacy  
Manassery



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C02	3	2	3	2	3	2	3	2	3	2	3	C02	2	1	2	1
C03	3	2	3	2	3	2	3	2	3	2	3	C03	1	1	2	1
C04	3	2	3	2	3	2	3	2	3	2	3	C04	2	1	2	1
AVERAGE	3	2	3	2	3	2	3	2	3	2	3	AVERAGE	1.75	1	2	1
<b>BP402T MEDICINAL CHEMISTRY I</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	0	2	1	2	2	1	2	1	3	C01	2	2	3	1
C02	2	0	2	2	0	2	2	1	2	2	3	C02	2	2	2	1
C03	2	0	2	2	1	2	2	1	2	0	3	C03	2	1	3	1
C04	2	2	2	3	2	2	2	1	0	1	3	C04	2	1	2	2
AVERAGE	2	1	1.5	2.25	1	2	2	1	1.5	1	3	AVERAGE	2	1.5	2.5	1.25
<b>BP403T PHYSICAL PHARMACEUTICS II</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	2	3	1	2	2	2	3	1	3	C01	1	1	2	1
C02	3	3	3	3	1	2	2	1	2	1	3	C02	1	2	1	1
C03	3	3	3	3	2	2	2	2	3	1	3	C03	1	1	1	1
C04	3	3	3	3	2	2	3	1	2	-	3	C04	1	1	1	2
C05	3	3	3	3	3	3	3	3	3	1	3	C05	1	1	1	1
AVERAGE	3	3	2.8	3	1.8	2.2	2.4	1.8	2.6	0.8	3	AVERAGE	1	1.5	1.5	1.5
<b>BP404T PHARMACOLOGY I</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	1	0	0	1	2	1	2	1	0	1	C01	3	3	3	2
C02	3	0	0	1	1	1	0	1	1	0	1	C02	3	3	3	2
C03	3	0	0	1	1	1	0	1	1	0	1	C03	3	3	3	2
C04	3	0	0	1	1	1	0	1	1	0	1	C04	3	3	3	2
AVERAGE	3	0.25	0	0.75	0.75	1.25	0.25	1.25	1	0	1	AVERAGE	3	3	3	2



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BP405T PHARMACOGNOSY AND PHYTOCHEMISTRY I																
CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	3	3	1	1	1	1	1	0	1	C01	1	-	2	-
C02	3	3	3	3	1	1	1	1	1	2	1	C02	-	-	1	-
C03	3	3	3	3	1	1	1	1	1	1	1	C03	2	1	2	-
C04	3	3	2	3	1	1	1	1	3	1	1	C04	2	1	2	-
AVERAGE	3	3	3	3	1	1	1	1	1.5	1	1	AVERAGE	1.25	0.5	1.75	-

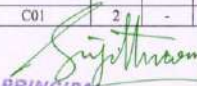
BP406P MEDICINAL CHEMISTRY I																
CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	0	2	1	2	2	1	2	1	3	C01	2	-	3	-
C02	2	0	2	2	0	2	2	1	2	2	3	C02	2	-	2	-
C03	2	0	2	2	1	2	2	1	2	0	3	C03	1	-	2	-
C04	2	2	2	3	2	2	2	1	0	1	3	C04	1	-	2	-
AVERAGE	2	1	1.5	2.5	1	2	2	1	1.5	1	3	AVERAGE	1.5	-	2.25	-

BP407P PHYSICAL PHARMACEUTICS II																
CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	2	2	2	2	2	1	1	2	-	3	C01	1	-	2	-
C02	3	3	3	2	2	2	2	2	2	2	3	C02	-	-	2	-
C03	3	2	2	1	2	2	1	1	2	-	3	C03	1	-	-	-
C04	3	2	2	2	2	2	2	2	1	-	3	C04	2	2	-	-
AVERAGE	3	2.25	2.25	1.75	2	2	1.5	1.5	1.75	0.5	3	AVERAGE	1	0.5	1	-

BP408P PHARMACOLOGY I																
CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	0	0	1	0	0	2	0	0	1	1	C01	2	-	-	-

  
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 673602  
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C02	2	1	0	3	0	0	0	0	0	1	1	C02	2	-	3	-
C03	2	1	0	3	0	0	0	0	0	1	1	C03	2	-	2	-
C04	2	1	0	3	0	0	0	0	0	1	1	C04	2	-	2	-
<b>AVERAGE</b>	<b>2</b>	<b>0.75</b>	<b>0</b>	<b>2.5</b>	<b>0</b>	<b>0</b>	<b>0.5</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>AVERAGE</b>	<b>2</b>	<b>-</b>	<b>2.5</b>	<b>-</b>

## BP409P PHARMACOGNOSY AND PHYTOCHEMISTRY I

CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	3	3	2	1	3	1	1	2	3	C01	1	-	1	-
C02	3	3	3	3	2	1	3	1	2	2	3	C02	1	-	-	-
C03	3	3	3	3	2	2	3	1	2	2	3	C03	2	-	-	-
C04	3	3	3	3	2	1	3	1	1	2	3	C04	2	2	2	1
<b>AVERAGE</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1.25</b>	<b>3</b>	<b>1</b>	<b>1.5</b>	<b>2</b>	<b>3</b>	<b>AVERAGE</b>	<b>1.5</b>	<b>0.5</b>	<b>0.75</b>	<b>0.25</b>

## FIFTH SEMESTER

### BP501T MEDICINAL CHEMISTRY II

CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	0	2	1	2	2	1	2	1	3	C01	2	2	1	1
C02	2	0	2	2	0	2	2	1	2	2	3	C02	1	1	1	-
C03	2	0	2	2	1	2	2	1	2	0	3	C03	1	1	1	-
C04	2	2	2	3	2	2	2	1	0	1	3	C04	2	2	1	-
<b>AVERAGE</b>	<b>2</b>	<b>1</b>	<b>1.5</b>	<b>2.25</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1.5</b>	<b>1</b>	<b>3</b>	<b>AVERAGE</b>	<b>1.5</b>	<b>1.5</b>	<b>1</b>	<b>0.25</b>

### BP502T FORMULATIVE PHARMACY

CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	3	2	1	1	1	1	1	1	1	1	C01	2	-	1	1
C02	3	1	1	2	1	3	3	3	3	1	2	C02	2	-	1	-
C03	3	1	1	1	1	3	3	3	3	1	1	C03	2	-	2	-
C04	3	2	1	2	2	3	3	3	3	1	2	C04	2	-	2	-
C05	3	1	2	2	2	2	2	3	3	2	2	C05	2	-	2	-

*Sujitha*  
PRINCIPAL  
National College of Pharmacy,  
Manassery, Kozhikode

NATIONAL COLLEGE OF PHARMACY  
KOZHIKODE  
873002  
MANASSERY



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AVERAGE	2.8	1.6	1.4	1.6	1.4	2.4	2.4	2.6	2.6	1.2	1.6	AVERAGE	2	-	1.6	0.6
<b>BP503T PHARMACOLOGY II</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	0	0	2	1	1	0	1	1	0	1	C01	3	3	3	2
C02	3	0	0	2	1	1	0	1	1	0	1	C02	3	3	3	2
C03	3	0	0	2	1	1	0	1	1	0	1	C03	3	2	3	2
C04	3	0	0	2	1	1	0	1	1	0	1	C04	3	2	3	2
AVERAGE	3	0	0	2	1	1	0	1	1	0	1	AVERAGE	3	2.5	3	2
<b>BP504T PHARMACOGNOSY AND PHYTOCHEMISTRY II</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	1	2	3	3	-	1	2	1	2	2	3	C01	2	1	2	1
C02	2	1	3	2	-	1	1	-	2	-	3	C02	2	1	1	1
C03	2	2	2	1	-	1	2	-	3	1	3	C03	2	1	2	1
C04	1	1	1	2	-	1	1	-	2	1	3	C04	1	1	1	1
AVERAGE	1.5	1.5	2.25	2	0	1	1.5	0.25	2.25	1.25	3	AVERAGE	1.75	1	1.5	1
<b>BP505T PHARMACEUTICAL JURISPRUDENCE</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	1	1	1	1	1	1	2	1	1	C01	-	2	-	1
C02	2	2	1	1	2	1	3	2	3	1	2	C02	-	2	-	1
C03	2	2	2	2	1	1	1	1	3	2	3	C03	-	1	-	1
C04	2	2	2	3	3	3	2	2	3	2	3	C04	-	1	-	1
AVERAGE	2	2	1.5	1.75	1.75	1.5	1.75	1.5	2.75	1.5	2.25	AVERAGE	-	1.5	-	1
<b>BP506P FORMULATIVE PHARMACY</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4



*S. S. Manassery*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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C01	2	3	2	1	1	1	1	1	1	1	1	C01	2	-	2	1
C02	3	1	1	2	1	3	3	3	3	1	2	C02	2	-	1	-
C03	3	1	1	1	1	3	3	3	3	1	1	C03	2	-	1	-
C04	3	2	1	2	2	3	3	3	3	1	2	C04	2	-	1	-
<b>AVERAGE</b>	2.75	1.75	1.25	1.5	1.25	2.5	2.5	2.5	2.5	1	1.5	<b>AVERAGE</b>	2	-	1.25	0.25

## BP507P PHARMACOLOGY II

CO-PO MAPPING

CO-PSO MAPPING

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	0	1	3	1	1	1	0	1	0	2	C01	2	-	2	-
C02	2	0	1	3	1	1	1	0	1	0	2	C02	2	-	2	-
C03	2	0	1	3	1	1	1	0	1	0	2	C03	2	-	2	-
C04	2	0	1	3	1	1	1	0	1	0	2	C04	2	-	2	-
<b>AVERAGE</b>	2	0	1	3	1	1	1	0	1	0	2	<b>AVERAGE</b>	2	-	2	-

## BP508P PHARMACOGNOSY AND PHYTOCHEMISTRY II

CO-PO MAPPING

CO-PSO MAPPING

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	1	1	-	-	1	-	2	2	3	C01	1	-	1	2
C02	2	2	1	-	-	-	1	-	2	-	3	C02	2	-	1	-
C03	2	2	2	-	-	-	1	-	2	1	3	C03	2	-	2	2
C04	2	2	-	-	-	-	1	-	2	1	3	C04	2	2	2	1
<b>AVERAGE</b>	2	2	1	0.25	0	0	1	0	2	1	3	<b>AVERAGE</b>	1.75	0.5	1.5	1.25

## SIXTH SEMESTER

### BP601T MEDICINAL CHEMISTRY III

CO-PO MAPPING

CO-PSO MAPPING

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	0	2	1	2	2	1	2	1	3	C01	3	-	3	-
C02	2	0	2	2	0	2	2	1	2	2	3	C02	2	-	3	-
C03	2	0	2	2	1	2	2	1	2	0	3	C03	3	2	2	1
C04	2	2	2	3	2	2	2	1	0	1	3	C04	2	-	2	-



*S. J. Princy*  
**PRINCIPAL**  
National College of Pharmacy  
Manassery, Kozhikode



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AVERAGE	2	1	1.5	2.25	1	2	2	1	1.5	1	3	AVERAGE	2.5	0.5	2.5	0.25
<b>BP602T PHARMACOLOGY III</b>																
CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	0	0	2	1	1	0	1	1	0	1	C01	3	2	2	2
C02	3	0	0	2	1	1	0	1	1	0	1	C02	3	1	2	2
C03	3	0	0	2	1	1	0	1	1	0	1	C03	3	1	2	2
C04	3	0	0	2	1	1	0	1	1	0	1	C04	3	1	2	2
AVERAGE	3	0	0	2	1	1	0	1	1	0	1	AVERAGE	3	1.25	2	2
<b>BP603T HERBAL DRUG TECHNOLOGY</b>																
CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	1	1	1	2	-	-	1	-	1	3	2	C01	3	1	2	1
C02	3	3	-	3	-	2	2	-	3	-	3	C02	3	2	1	2
C03	3	1	2	3	-	1	1	-	1	-	3	C03	3	2	-	1
C04	3	-	-	-	-	-	-	-	3	1	2	C04	2	-	-	-
AVERAGE	2.5	1.25	0.75	2	0	0.75	1.0	0	2	1	2.5	AVERAGE	2.75	1.25	0.75	1
<b>BP604T BIOPHARMACEUTICS AND PHARMACOKINETICS</b>																
CO-PO MAPPING											CO-PSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	2	3	2	-	3	2	-	2	-	3	C01	2	-	2	1
C02	3	1	2	2	-	3	1	-	3	-	3	C02	2	-	2	-
C03	3	2	3	2	-	3	2	-	3	-	3	C03	2	-	2	-
C04	3	2	3	2	-	3	2	-	3	-	3	C04	2	-	1	-
AVERAGE	3	1.75	2.75	2	-	3	1.75	-	2.75	-	3	AVERAGE	2	-	1.75	0.25
<b>BP605T PHARMACEUTICAL BIOTECHNOLOGY</b>																
CO-PO MAPPING											CO-PSO MAPPING					



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	2	3	2	2	1	2	2	2	3	C01	3	-	2	-
C02	3	2	2	3	3	2	2	3	1	1	3	C02	3	-	2	-
C03	3	2	2	2	3	2	3	3	2	1	3	C03	2	-	1	-
C04	3	1	1	2	2	2	2	2	2	1	3	C04	3	-	2	-
AVERAGE	3	2	1.75	2.5	2.5	2	2	2.5	1.75	1.25	3	AVERAGE	2.75	-	1.75	-

## BP606T QUALITY ASSURANCE

CO-PO MAPPING

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	2	2	3	-	1	2	3	-	1	2	C01	3	2	1	1
C02	1	2	3	-	1	2	3	2	2	3	-	C02	2	2	1	1
C03	2	1	2	3	2	2	3	2	2	3	-	C03	3	1	2	1
C04	3	2	2	3	-	1	2	3	-	1	2	C04	3	1	2	1
AVERAGE	2.25	1.75	2.25	2.25	0.75	1.5	2.5	2.5	1	2	1	AVERAGE	2.75	1.5	1.5	1

CO-PSO MAPPING

## BP607P MEDICINAL CHEMISTRY III

CO-PO MAPPING

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	0	2	1	2	2	1	2	1	3	C01	2	1	2	-
C02	2	0	2	2	0	2	2	1	2	2	3	C02	2	2	2	-
C03	2	0	2	2	1	2	2	1	2	0	3	C03	2	2	2	-
C04	2	2	2	3	2	2	2	1	0	1	3	C04	2	2	2	-
AVERAGE	2	1	1.5	2.25	1	2	2	1	1.5	1	3	AVERAGE	2	1.75	2	-

CO-PSO MAPPING

## BP608P PHARMACOLOGY III

CO-PO MAPPING

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	0	1	3	1	1	1	0	1	0	2	C01	2	-	1	-
C02	2	0	1	3	1	1	1	0	1	0	2	C02	2	-	1	-
C03	2	0	1	3	1	1	1	0	1	0	2	C03	2	-	-	-

CO-PSO MAPPING



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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C04	2	0	1	3	1	1	1	0	1	0	2	C04	2	-	1	-
AVERAGE	2	0	1	3	1	1	1	0	1	0	2	AVERAGE	2	-	0.75	-
<b>BP609P HERBAL DRUG TECHNOLOGY</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	2	1	-	-	1	1	-	2	1	2	C01	1	-	-	-
C02	3	2	-	1	-	1	-	-	2	-	3	C02	1	-	-	-
C03	3	2	1	2	-	2	-	-	2	-	3	C03	1	-	-	-
C04	3	1	-	2	-	1	1	-	1	-	2	C04	1	-	-	-
AVERAGE	3	1.75	0.5	1.25	0	1.25	0.5	0	1.75	0.25	2.5	AVERAGE	1	-	-	-
<b>SEVENTH SEMESTER</b>																
<b>BP701T INSTRUMENTAL METHODS OF ANALYSIS</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	3	3	1	2	1	1	-	-	3	C01	3	-	2	-
C02	3	1	2	3	1	2	1	2	1	-	3	C02	3	-	2	2
C03	3	3	3	3	2	3	1	1	1	1	3	C03	3	-	3	-
C04	3	3	3	3	2	3	-	2	-	-	3	C04	3	-	2	-
AVERAGE	3	2.5	2.75	3	1.5	2.5	0.75	1.5	0.5	0.25	3	AVERAGE	3	-	2.25	0.5
<b>BP702T INDUSTRIAL PHARMACY</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	3	2	2	2	1	2	2	1	3	C01	3	2	2	1
C02	3	2	2	1	2	2	2	2	2	1	3	C02	3	2	2	1
C03	3	2	3	1	2	2	3	2	2	1	3	C03	3	2	3	1
C04	3	2	2	3	3	2	2	2	1	2	3	C04	3	2	2	1
AVERAGE	3	2.25	2.5	1.75	2.25	2	2	2	1.75	1.25	3	AVERAGE	3	2	2.25	1
<b>BP703T PHARMACY PRACTICE</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4



Principal  
National College of Pharmacy  
Manassery, Kozhikode



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Outcome																	
C01	2	2	2	3	2	2	3	3	2	2	2	C01	3	2	3	3	
C02	2	3	2	2	2	3	2	2	3	1	2	C02	3	2	3	3	
C03	1	2	2	3	2	2	3	2	2	3	2	C03	3	2	3	3	
C04	3	2	3	2	2	2	1	2	2	3	2	C04	3	2	3	3	
AVERAGE	2	2.25	2.25	2.5	2	2.25	2.25	2.25	2.25	2.25	2	AVERAGE	3	2	3	3	

## BP704T NOVEL DRUG DELIVERY SYSTEM

CO-PO MAPPING

CO-PSO MAPPING

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	3	3	1	2	3	2	3	1	3	C01	3	-	2	-
C02	3	3	3	3	2	2	3	2	3	1	3	C02	3	-	2	-
C03	3	3	3	3	2	2	3	2	3	1	3	C03	3	-	2	-
C04	3	3	3	3	2	2	3	2	3	1	3	C04	3	-	3	-
C05	3	3	3	3	2	2	3	2	3	1	3	C05	3	-	3	-
AVERAGE	3	3	3	3	1.8	2	3	2	3	1	3	AVERAGE	3	-	2.4	-

## BP705P INSTRUMENTAL METHODS OF ANALYSIS

CO-PO MAPPING

CO-PSO MAPPING

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	1	3	3	1	1	3	2	3	2	1	C01	3	-	3	-
C02	3	1	1	2	2	1	3	1	2	1	1	C02	3	-	3	-
C03	3	1	1	1	1	1	2	1	1	1	1	C03	3	-	3	-
C04	3	1	1	1	1	1	2	1	1	1	1	C04	3	-	3	-
AVERAGE	3	1	1.5	1.75	1.25	1	2.5	1.25	1.75	1.25	1	AVERAGE	3	-	3	-

## EIGHTH SEMESTER

### BP801T BIostatISTICS AND RESEARCH METHODOLOGY

CO-PO MAPPING

CO-PSO MAPPING

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	3	3	2	2	3	2	2	1	2	3	C01	2	-	-	-
C02	3	3	3	3	2	3	3	2	2	2	3	C02	2	-	1	-



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode





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C03	3	3	3	3	2	2	3	2	2	1	3	C03	2	-	-	-
C04	3	3	3	3	2	1	3	2	1	0	3	C04	2	-	-	-
AVERAGE	3	3	3	2.75	2	2.25	2.75	2	1.5	1.25	3	AVERAGE	2	-	0.25	-

## BP802T SOCIAL AND PREVENTIVE PHARMACY

CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	2	2	2	2	3	2	2	2	2	2	C01	3	3	3	3
C02	2	2	-	2	2	3	1	2	2	1	1	C02	3	3	3	3
C03	2	2	2	2	-	2	2	2	2	2	1	C03	3	3	3	3
C04	2	2	2	2	2	2	2	2	2	2	1	C04	3	3	3	3
AVERAGE	2	2	1.5	2	1.5	2.5	1.75	2	2	1.75	1.25	AVERAGE	3	3	3	3

## BP805ET PHARMACOVIGILANCE

CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	2	3	2	2	1	2	2	3	2	2	2	C01	2	3	3	3
C02	2	1	2	1	3	2	1	2	2	2	2	C02	2	3	3	3
C03	3	3	2	3	3	2	3	2	3	1	2	C03	2	3	3	3
C04	2	2	2	2	2	2	2	2	2	3	2	C04	2	3	3	3
AVERAGE	2.25	2.25	2	2	2.25	2	2	2.25	2.25	2	2	AVERAGE	2	3	3	3

## BP806ET QUALITY CONTROL AND STANDARDISATION OF HERBS

CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	2	3	3	2	2	2	2	2	2	2	C01	2	1	-	-
C02	3	2	3	3	2	2	2	2	2	2	2	C02	2	1	-	-
C03	3	1	3	2	2	3	3	3	3	1	1	C03	2	1	-	-
C04	3	2	3	3	2	2	2	2	2	2	2	C04	2	1	-	-
AVERAGE	3	1.75	3	2.75	2	2.25	2.25	2.25	2.25	1.75	1.75	AVERAGE	2	1	-	-

## BP808ET CELL AND MOLECULAR BIOLOGY

CO-PO MAPPING												CO-PSO MAPPING				
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4



*Srijitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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Outcome																	
C01	2	1	1	2	-	1	2	2	2	1	2	C01	2	-	-	-	-
C02	2	1	1	2	-	1	2	2	2	1	2	C02	2	-	-	-	-
C03	2	1	1	2	-	1	2	2	2	1	2	C03	2	-	-	-	-
C04	2	1	1	2	-	1	2	2	2	1	2	C04	2	-	-	-	-
<b>AVERAGE</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>AVERAGE</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

<b>BP809ET COSMETIC SCIENCE</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	2	3	3	2	2	2	2	3	2	2	C01	3	2	3	1
C02	3	2	3	3	2	2	2	2	3	2	2	C02	3	2	3	1
C03	3	2	3	3	2	3	3	2	2	1	2	C03	3	3	2	1
C04	3	2	3	3	2	2	2	2	3	2	2	C04	3	3	2	1
<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2.25</b>	<b>2.25</b>	<b>2</b>	<b>2.75</b>	<b>1.75</b>	<b>2</b>	<b>AVERAGE</b>	<b>3</b>	<b>2.5</b>	<b>2.5</b>	<b>1</b>

<b>BP811ET ADVANCED INSTRUMENTATION TECHNIQUES</b>																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C01	3	1	3	3	1	1	3	2	3	2	1	C01	3	2	3	-
C02	3	1	1	2	2	1	3	1	2	1	1	C02	3	2	3	-
C03	3	1	1	1	1	1	2	1	1	1	1	C03	3	2	2	-
C04	3	1	1	1	1	1	2	1	1	1	1	C04	3	1	2	-
<b>AVERAGE</b>	<b>3</b>	<b>1</b>	<b>1.5</b>	<b>1.75</b>	<b>1.25</b>	<b>1</b>	<b>2.5</b>	<b>1.25</b>	<b>1.75</b>	<b>1.25</b>	<b>1</b>	<b>AVERAGE</b>	<b>3</b>	<b>1.75</b>	<b>2.5</b>	<b>-</b>



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**PRINCIPAL**  
National College of Pharmacy  
Manassery, Kozhikode

KMCT Medical College Campus, Manassery, P.O, Mukkam Ph:-04952297440,Email:-pharmacy@kmct.edu.in,www.nationalcollegeofpharmacy.org



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HUMAN ANATOMY AND PHYSIOLOGY THEORY-1.1														
CO-POMAPPING										CO-PSOMAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	-	2	-	1	2	2	1	2	C101	3	-	2	1
C102	2	-	2	-	1	1	2	3	1	C102	2	2	1	2
C103	3	1	1	1	1	1	-	3	3	C103	2	3	2	2
C104	1	-	1	2	2	3	1	1	1	C104	1	2	3	2
C105	3	3	2	3	3	1	1	2	1	C105	2	2	2	2
C106	3	1	1	2	-	1	1	1	1	C106	2	1	3	1
AVERAGE	2.5	0.83	1.5	1.3	1.3	1.5	1.16	1.8	1.5	AVERAGE	2	1.6	2.1	1.6
HUMAN ANATOMY AND PHYSIOLOGY PRACTICAL-1.1														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	2	3	3	2	2	3	1	C101	3	2	2	3
C102	3	1	1	2	2	1	2	1	3	C102	2	3	1	2
C103	3	1	2	3	1	1	3	3	1	C103	3	2	2	2
C104	2	2	3	1	3	2	2	2	3	C104	2	2	3	1
C105	3	1	3	3	2	2	3	1	2	C105	3	2	1	3
C106	2	2	1	3	2	3	3	2	2	C106	2	3	3	2
AVERAGE	2.6	2	2.5	2.5	2.1	1.8	2.5	2	2	AVERAGE	2.5	2.3	2	2.1
PHARMACEUTICS THEORY 1.2														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	2	1	2	2	1	3	2	C101	3	3	3	3
C102	3	3	-	2	1	1	2	1	1	C102	3	2	2	3



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C103	3	3	1	1	3	-	2	2	1	C103	2	3	3	3
C104	2	1	2	2	2	2	1	2	3	C104	3	3	3	3
C105	3	3	3	2	3	1	2	2	2	C105	3	3	2	3
C106	2	2	1	1	2	2	1	1	2	C106	2.8	2.8	2.6	3
AVERAGE	2.6	2.6	1.8	1.5	2.1	1.6	1.5	2	1.8	AVERAGE	3	3	3	3

## PHARMACEUTICS PRACTICAL 1.2

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	2	1	2	2	1	3	2	C101	3	3	3	3
C102	3	2	1	2	3	1	2	1	1	C102	3	3	3	3
C103	3	3	1	1	3	1	2	2	1	C103	2	3	3	3
C104	2	1	2	2	2	2	1	3	3	C104	3	3	3	3
C105	3	3	3	2	3	2	2	2	2	C105	2	2	2	3
C106	2	2	1	1	2	2	1	1	3	C106	2.6	2.8	2.8	3
AVERAGE	2.6	2.1	1.6	1.5	2.5	1.6	1.5	2	2	AVERAGE	3	3	3	3

## MEDICINAL BIOCHEMISTRY THEORY 1.3

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	1	1	1	2	1	3	1	2	C101	2	2	2	3
C102	3	1	3	2	1	2	2	2	1	C102	3	2	2	3
C103	1	2	1	3	1	2	1	2	2	C103	2	3	3	3
C104	2	2	2	2	3	2	2	1	2	C104	3	2	1	2
C105	3	3	3	1	1	3	1	2	1	C105	2	3	3	2
C106	2	1	1	1	2	1	2	1	1	C106	2	2	2	1
AVERAGE	2.1	1.6	1.8	1.6	1.6	1.8	1.8	1.5	1.6	AVERAGE	2.3	2.3	2.1	2.3

## MEDICINAL BIOCHEMISTRY PRACTICAL-1.3



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CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	3	2	2	2	2	2	2	C101	1	2	2	1
C102	3	2	2	2	2	2	2	2	2	C102	2	3	2	2
C103	3	3	3	2	2	2	2	2	2	C103	3	3	2	2
C104	3	3	3	2	2	3	3	3	3	C104	1	2	2	1
C105	3	3	3	2	2	2	2	2	3	C105	2	2	3	2
C106	3	3	3	2	2	3	3	3	3	C106	2	2	1	2
AVERAGE	3	2.8	2.8	2	2	2.3	2.3	2.3	2.5	AVERAGE	1.8	2.3	2	1.6

## PHARMACEUTICAL ORGANIC CHEMISTRY THEORY 1.4

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	3	2	3	1	1	1	1	C101	2	-	2	2
C102	3	3	2	2	2	2	2	2	2	C102	3	3	3	3
C103	3	2	2	2	3	3	2	1	1	C103	2	2	2	1
C104	2	2	3	2	2	2	2	1	1	C104	3	3	2	3
C105	2	3	3	3	3	2	2	2	2	C105	2	3	3	3
AVERAGE	2.6	2	2.6	2.2	2.6	2	1.8	1.4	1.4	AVERAGE	2.4	2.2	2.4	2.4

## PHARMACEUTICAL ORGANIC CHEMISTRY PRACTICAL 1.4

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	2	2	3	2	1	1	1	C101	2	1	3	3
C102	3	2	3	1	2	2	2	2	2	C102	3	1	3	3
C103	3	3	3	3	2	3	2	2	2	C103	2	1	3	3
C104	2	2	3	3	2	3	2	1	1	C104	3	2	3	3
C105	3	3	3	3	3	3	2	2	2	C105	3	2	2	2



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C106	3	3	2	3	2	3	3	1	1	C106	3	2	2	2
AVERAGE	2.83	2.66	2.5	2.5	2.3	2.66	2	1.5	1.5	AVERAGE	2.83	1.5	2.66	2.66
<b>PHARMACEUTICAL INORGANIC CHEMISTRY THEORY 1.5</b>														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	3	3	1	2	1	1	-	C101	1	2	1	2
C102	3	1	2	3	1	2	1	2	1	C102	-	-	1	-
C103	3	3	3	3	2	3	1	1	1	C103	2	-	2	2
C104	3	3	3	3	2	3	-	2	-	C104	1	2	1	3
C105	3	2	2	1	3	2	3	2	2	C105	1	1	2	1
AVERAGE	3	2.4	2.6	2.6	1.8	2.4	1.4	1.8	0.8	AVERAGE	1	1	1.4	1.6
<b>PHARMACEUTICAL INORGANIC CHEMISTRY PRACTICAL 1.5</b>														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	1	2	2	1	1	2	1	1	-	C101	1	3	2	2
C102	-	1	2	-	1	-	1	-	1	C102	-	-	1	-
C103	2	-	-	1	2	2	1	-	1	C103	2	-	2	2
C104	-	2	1	2	-	3	-	1	-	C104	-	1	1	2
C105	2	1	1	1	1	1	2	-	2	C105	1	1	2	1
AVERAGE	1	1.2	1.2	1	1	1.6	1	0.4	0.8	AVERAGE	0.8	1	1.6	1.4



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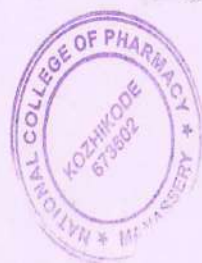


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SECONDYEAR															
PATHOPHYSIOLOGY THEORY-2.1															
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4	
C101	2	3	3	2	1	2	1	3	3	C101	3	2	2	1	
C102	3	2	3	2	1	2	1	2	3	C102	2	2	2	2	
C103	3	2	3	2	1	2	2	3	2	C103	2	3	2	2	
C104	3	2	3	3	1	3	2	3	3	C104	2	2	3	2	
C105	3	2	3	2	-	3	2	3	3	C105	2	2	2	2	
C106	2	3	2	2	1	2	2	3	3	C106	2	2	3	1	
AVERAGE	2.6	2.3	2.8	2.1	0.83	2.3	1.6	2.8	2.8	AVERAGE	2.1	2.1	2.3	1.6	

*Srinivasan*



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PHARMACEUTICAL MICROBIOLOGY THEORY 2.2														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	3	2	2	3	3	3	2	C101	3	2	3	2
C102	3	2	3	2	2	3	2	3	3	C102	3	2	3	3
C103	3	3	3	2	3	3	2	2	2	C103	3	2	3	3
C104	3	2	3	3	3	3	2	3	3	C104	3	2	3	3
C105	3	2	3	3	2	3	2	3	3	C105	3	2	3	3
C106	3	3	3	3	2	3	3	3	3	C106	3	2	3	3
AVERAGE	3	2.3	3	2.5	2.3	3	2.3	2.8	2.3	AVERAGE	3	2	3	2.8

PHARMACEUTICAL MICROBIOLOGY PRACTICAL 2.2														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	3	2	2	2	2	2	2	C101	3	2	2	2
C102	3	2	2	2	2	2	2	2	2	C102	3	2	2	2
C103	3	3	3	2	2	2	2	2	2	C103	3	2	2	2
C104	3	3	3	2	2	3	3	3	3	C104	3	3	3	3
C105	3	3	3	2	2	2	2	2	3	C105	3	2	2	2
C106	3	3	3	2	2	3	3	3	3	C106	3	3	3	2
AVERAGE	3	2.8	2.8	2	2	2.3	2.3	2.3	2.5	AVERAGE	3	2.3	2.3	2.1

PHARMACOGNOSY AND PHYTOPHARMACEUTICALS THEORY 2.3														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	1	-	-	-	1	-	-	-	C101	1	2	1	2
C102	2	2	1	-	-	1	-	-	-	C102	-	-	1	-
C103	2	1	1	-	-	1	1	-	-	C103	2	-	2	2
C104	3	1	1	-	-	1	-	-	-	C104	1	2	1	3



*Sujitha*  
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C105	2	1	1	-	-	1	1	-	-	C105	1	1	2	1
C106	2	2	1	-	-	1	-	-	-	C106	2	1	2	3
AVERAGE	2.1	1.3	0.83	-	-	1	0.33	-	-	AVERAGE	1.1	1	1.5	1.8
<b>PHARMACOGNOSY AND PHYTOPHARMACEUTICALS PRACTICAL 2.3</b>														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	1	-	1	1	-	-	-	-	1	C101	1	2	1	2
C102	1	-	2	1	-	-	-	-	1	C102	-	-	1	-
C103	1	-	1	1	-	-	-	-	1	C103	2	-	2	2
C104	1	-	1	1	-	-	-	-	1	C104	1	2	1	3
C105	1	-	1	1	-	-	-	-	1	C105	1	1	2	1
AVERAGE	1	-	1	1	-	-	-	-	1	AVERAGE	0.83	0.83	1.16	1.3
<b>PHARMACOLOGY-I THEORY 2.4</b>														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	-	1	2	2	-	3	3	-	-	C101	1	1	-	-
C102	-	3	2	2	-	3	3	-	-	C102	1	1	-	-
C103	-	3	2	2	-	3	3	-	-	C103	2	1	-	-
C104	-	3	2	2	-	3	3	-	-	C104	2	1	-	-
C105	-	3	2	2	-	3	3	-	-	C105	2	1	-	-
C106	-	3	2	2	-	3	3	-	-	C106	2	1	-	-
AVERAGE	-	2.83	2	2	-	3	3	-	-	AVERAGE	1.6	1	-	-
<b>COMMUNITY PHARMACY THEORY 2.5</b>														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	-	1	3	2	-	-	1	C101	3	3	2	3



*Sujith Manassery*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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C102	2	3	2	1	2	3	2	-	1	C102	2	3	1	1
C103	3	1	-	-	-	-	-	-	-	C103	3	3	1	2
C104	-	-	-	-	-	-	-	-	-	C104	1	3	2	3
C105	-	-	-	-	-	-	-	-	-	C105	2	1	2	2
C106	3	1	-	3	2	2	-	-	1	C106	-	3	-	1
AVERAGE	1.8	1.3	0.3	0.8	1.16	1.16	0.3	-	0.5	AVERAGE	1.8	2.5	1.3	2

## PHARMACOTHERAPEUTICS I THEORY 2.6

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	3	3	3	3	3	3	3	C101	3	3	3	3
C102	3	2	2	2	3	3	3	2	3	C102	3	3	3	3
C103	3	3	2	2	3	3	3	3	3	C103	3	2	3	3
C104	2	3	3	3	3	2	2	3	2	C104	2	3	3	2
C105	3	3	3	3	3	2	3	2	3	C105	3	3	3	3
C106	3	3	3	3	3	3	3	3	3	C106	3	3	3	3
AVERAGE	2.8	2.8	2.6	2.6	3	2.6	2.8	2.6	2.8	AVERAGE	2.8	2.8	3	2.8

## PHARMACOTHERAPEUTICS I PRACTICAL 2.6

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	3	0	0	1	1	1	1	C101	2	3	1	3
C102	3	3	2	0	0	2	2	1	3	C102	3	2	3	2
C103	3	3	3	0	1	3	2	2	3	C103	3	2	3	3
C104	2	2	1	0	1	3	3	2	2	C104	2	3	3	2
C105	2	2	1	0	2	3	1	4	3	C105	3	2	3	3
C106	3	3	2	0	2	3	2	2	3	C106	3	3	3	2
AVERAGE	2.5	2.5	2.16	0	1	2.5	1.83	2	2.5	AVERAGE	2.6	2.5	2.6	2



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THIRD YEAR														
PHARMACOLOGY II THEORY 3.1														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	-	3	2	-	-	3	3	-	-	C101	1	-	2	2
C102	-	3	2	-	-	3	3	-	-	C102	2	-	2	2
C103	-	3	2	-	-	3	3	-	-	C103	2	-	2	2
C104	-	3	2	-	-	3	3	-	-	C104	2	-	2	2
C105	-	3	2	-	-	3	3	-	-	C105	2	-	2	2
C106	-	2	2	-	-	2	2	-	-	C106	2	-	2	2
AVERAGE	-	2.83	2	-	-	2.83	2.83	-	-	AVERAGE	1.8	-	2	2
PHARMACOLOGY II PRACTICAL 3.1														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	-	-	3	-	-	3	-	-	-	C101	1	-	-	-
C102	-	-	3	-	-	3	-	-	-	C102	1	-	-	-
C103	-	-	3	3	-	3	-	-	-	C103	1	-	-	-
C104	-	-	3	3	-	3	-	-	-	C104	1	-	-	-
C105	-	-	3	3	-	3	-	-	-	C105	1	-	-	-
C106	-	-	3	3	-	3	-	-	-	C106	1	-	-	-
AVERAGE	-	-	3	2	-	3	-	-	-	AVERAGE	1	-	-	-
PHARMACEUTICAL ANALYSIS THEORY 3.2														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	1	1	1	1	1	1	1	1	1	C101	2	1	1	1
C102	1	1	1	1	1	1	1	1	1	C102	2	1	1	1
C103	1	1	1	1	1	1	1	1	1	C103	2	1	1	1



*Syith...*  
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National College of Pharmacy  
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C104	1	1	1	1	1	1	1	1	1	1	C104	2	1	1	1
C105	1	1	1	1	1	1	1	1	1	1	C105	2	1	1	1
C106	1	1	1	1	1	1	1	1	1	1	C106	2	1	1	1
AVERAGE	1	1	1	1	1	1	1	1	1	1	AVERAGE	2	1	1	1

### PHARMACEUTICAL ANALYSIS PRACTICAL 3.2

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	1	1	1	1	1	1	1	1	1	C101	2	1	1	1
C102	1	1	1	1	1	1	1	1	1	C102	2	1	1	1
C103	1	1	1	1	1	1	1	1	1	C103	2	1	1	1
C104	1	1	1	1	1	1	1	1	1	C104	2	1	1	1
C105	1	1	1	1	1	1	1	1	1	C105	2	1	1	1
C106	1	1	1	1	1	1	1	1	1	C106	2	1	1	1
AVERAGE	1	1	1	1	1	1	1	1	1	AVERAGE	2	1	1	1

### PHARMACOTHERAPEUTICS II THEORY 3.3

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	2	3	3	3	3	3	3	C101	2	3	1	3
C102	3	2	2	2	3	3	3	2	3	C102	3	2	3	2
C103	3	3	2	2	3	3	3	3	3	C103	2	2	3	3
C104	2	3	3	3	3	2	2	3	2	C104	2	3	3	2
C105	3	3	2	3	3	2	3	2	3	C105	3	2	3	3
C106	2	3	3	2	3	2	2	3	2	C106	2	3	3	2
AVERAGE	2.6	2.6	2.3	2.5	3	2.5	2.6	2.6	2.6	AVERAGE	2.3	2.5	2.6	2

### PHARMACOTHERAPEUTICS II PRACTICAL 3.3

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
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C101	3	3	3	2	2	3	2	3	3	C101	3	2	3	3
C102	2	3	3	3	2	3	2	3	3	C102	3	2	3	3
C103	3	3	3	3	2	3	2	3	3	C103	3	2	3	3
C104	3	3	3	2	2	3	2	3	3	C104	3	3	3	3
C105	2	2	2	2	2	3	2	3	3	C105	2	2	3	2
C106	2	2	3	3	2	3	3	3	2	C106	3	3	3	2
AVERAGE	2.5	2.6	2.8	2.5	2.0	3.0	2.1	3	2.8	AVERAGE	2.8	2.3	3.0	2.6

## PHARMACEUTICAL JURISPRUDENCE THEORY 3.4

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	1	3	3	1	2	1	1	3	C101	3	3	3	2
C102	2	2	2	3	2	3	2	2	3	C102	3	3	2	3
C103	1	2	2	3	2	3	2	2	3	C103	2	2	3	2
C104	1	1	2	2	2	1	1	1	1	C104	2	2	2	2
C105	1	2	2	3	2	2	2	3	3	C105	3	3	3	3
C106	1	1	2	2	2	3	3	3	3	C106	3	3	3	3
AVERAGE	1.3	1.5	2.2	2.7	1.8	2.3	1.8	2	2.7	AVERAGE	2.3	2.7	2.7	2.5

## MEDICINAL CHEMISTRY THEORY 3.5

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	-	2	1	2	2	1	2	C101	3	-	3	-
C102	2	-	2	2	-	2	2	1	-	C102	1	-	2	-
C103	2	-	2	2	1	2	2	1	1	C103	3	2	1	1
C104	2	2	2	3	2	2	2	1	2	C104	2	-	1	1
C105	2	1	2	2	1	2	2	1	1	C105	1	1	2	1
C106	2	2	2	1	1	2	2	1	2	C106	1	-	2	1

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AVERAGE	2					2	2	1			AVERAGE				
<b>MEDICINAL CHEMISTRY PRACTICAL 3.5</b>															
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4	
C101	2	2	-	2	1	2	2	1	2	C101	2	-	3	-	
C102	2	-	2	2	-	2	2	1	2	C102	2	-	2	-	
C103	2	-	2	2	1	2	2	1	2	C103	1	-	2	-	
C104	2	2	2	3	2	2	2	1	-	C104	1	-	2	-	
AVERAGE	2	1	1.5	2.5	1	2	2	1	1.5	AVERAGE	1.5	-	2.25	-	
<b>PHARMACEUTICAL FORMULATIONS THEORY 3.6</b>															
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	3	3	2	3	2	2	3	3	C101	3	3	3	3	
C102	3	3	3	2	3	2	2	3	3	C102	3	2	2	3	
C103	3	3	3	3	3	3	3	3	3	C103	2	3	3	3	
C104	3	3	3	2	3	2	2	3	3	C104	3	3	3	3	
C105	3	3	3	3	3	3	3	3	3	C105	3	3	2	3	
AVERAGE	3	3	3	2.4	3	2.4	2.4	3	3	AVERAGE	2.8	2.8	2.6	3	
<b>PHARMACEUTICAL FORMULATIONS PRACTICAL 3.6</b>															
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	3	3	2	3	2	2	3	3	C101	3	3	3	3	
C102	3	3	3	2	3	2	2	3	3	C102	3	3	3	3	
C103	3	2	3	3	3	3	3	3	3	C103	2	3	3	3	
C104	3	3	2	2	3	2	2	3	3	C104	3	3	3	3	



*Sujitha*  
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C105	3	3	3	3	3	3	3	3	3	C105	2	2	2	3
AVERAGE	3	2.8	2.8	2.4	3	2.4	2.4	3	3	AVERAGE	2.6	2.8	2.8	3
<b>FOURTH YEAR</b>														
<b>PHARMACOTHERAPEUTICS III THEORY 4.1</b>														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	3	3	2	1	3	2	3	3	C101	3	2	3	3
C102	2	3	3	2	1	3	2	3	3	C102	3	2	3	3
C103	2	3	3	2	1	3	2	3	3	C103	3	2	3	3
C104	2	3	3	2	1	3	2	3	3	C104	3	3	3	3
C105	2	3	3	2	1	3	2	3	3	C105	3	2	3	3
C106	2	2	3	3	-	3	3	3	2	C106	3	3	3	2
AVERAGE	2.0	2.8	3.0	2.1	0.83	3.0	2.1	3.0	2.8	AVERAGE	3.0	2.3	3.0	2.8
<b>PHARMACOTHERAPEUTICS III PRACTICAL 4.1</b>														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	3	2	2	3	2	3	3	C101	3	2	3	3
C102	2	3	3	3	2	3	2	3	3	C102	3	2	3	3
C103	3	3	3	3	2	3	2	3	3	C103	3	2	3	3
C104	3	3	3	2	2	3	2	3	3	C104	3	3	3	3
C105	3	3	3	2	2	3	2	3	3	C105	3	2	3	3
C106	2	2	3	3	2	3	3	3	2	C106	3	3	3	2
AVERAGE	2.6	2.8	3	2.5	2.0	3.0	2.1	3	2.8	AVERAGE	3.0	2.3	3.0	2.8
<b>HOSPITAL PHARMACY THEORY 4.2</b>														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	3	2	3	1	3	2	2	C101	2	3	2	3



*Sujith Manassery*

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C102	2	3	2	2	2	2	2	3	3	C102	2	2	2	3
C103	3	2	2	3	2	2	2	2	3	C103	3	3	3	2
C104	2	1	2	1	1	2	2	2	2	C104	3	2	2	2
C105	3	2	3	2	2	3	1	2	2	C105	2	3	3	1
C106	2	3	2	1	2	2	2	2	1	C106	2	2	3	3
AVERAGE	2.5	2.1	2.3	2	2	2	2	2.1	2.1	AVERAGE	2.3	2.5	2.5	2.3

### HOSPITAL PHARMACY PRACTICAL 4.2

Course/Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	1	2	1	2	2	3	2	2	C101	2	3	3	1
C102	2	2	3	2	3	3	2	3	3	C102	3	2	1	2
C103	3	2	2	1	2	2	3	2	2	C103	3	1	3	2
C104	2	2	2	2	3	2	2	3	3	C104	2	1	3	3
C105	2	2	2	3	2	3	3	2	2	C105	2	3	2	1
C106	3	2	1	3	2	2	2	2	2	C106	2	3	1	3
AVERAGE	2.5	1.8	2	2	2.3	2.3	2.5	2.3	2.3	AVERAGE	2.3	2.1	2.1	2

### CLINICAL PHARMACY THEORY 4.3

Course/Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	3	2	2	2	2	3	2	C101	3	2	3	3
C102	2	3	1	3	3	2	3	3	3	C102	3	3	3	2
C103	2	2	3	3	3	2	1	2	3	C103	2	3	3	2
C104	1	1	1	3	3	2	2	3	3	C104	3	3	1	2
C105	1	2	2	2	2	1	1	3	2	C105	3	2	3	2
C106	3	3	3	3	3	2	3	1	2	C106	1	2	3	2
AVERAGE	2.0	2.3	2.5	2.7	2.7	1.8	1.7	2.6	2.5	AVERAGE	2.6	2.5	3.0	2.3



*Sujitha Manassery*  
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CLINICAL PHARMACY PRACTICAL -4.3														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	2	2	2	2	3	2	2	C101	3	3	3	3
C102	2	1	2	3	2	2	2	2	2	C102	3	3	3	3
C103	2	2	2	2	2	2	2	2	2	C103	3	3	3	3
C104	2	2	2	2	2	2	2	2	2	C104	3	3	3	3
AVERAGE	2	1.75	2	2.25	2	2	2.25	2	2	AVERAGE	3	3	3	3
BIostatISTICS AND RESEARCH METHODOLOGY THEORY 4.4														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	-	1	2	-	1	-	-	-	1	C101	-	3	1	-
C102	1	-	3	1	-	-	-	1	-	C102	-	2	2	-
C103	1	-	1	-	-	-	-	1	-	C103	-	1	1	-
C104	-	-	3	-	-	-	-	1	-	C104	-	-	-	-
C105	3	1	3	-	-	2	-	-	-	C105	-	-	1	-
C106	3	3	3	-	-	3	2	3	1	C106	2	2	2	2
AVERAGE	1.3	0.83	2.5	0.16	0.16	0.83	0.3	1	0.33	AVERAGE	0.3	1.3	1.1	0.3
BIOPHARMACEUTICS AND PHARMACOKINETICS THEORY 4.5														
CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	3	2	1	3	3	3	3	C101	3	3	3	2
C102	3	3	3	3	1	3	3	3	3	C102	3	3	3	2
C103	3	3	3	3	1	3	3	3	3	C103	3	3	2	2
C104	3	3	3	3	1	3	3	3	3	C104	3	3	3	2



*S. Jithu*  
PRINCIPAL  
National College of Pharmacy  
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C105	3	3	3	3	2	3	3	3	3	C105	3	3	3	2
AVERAGE	3	3	3	2.8	1.2	3	3	3	3	AVERAGE	3	3	2.8	2
<b>BIOPHARMACEUTIC AND PHARMACOKINETICS PRACTICAL 4.5</b>														
Course/Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	3	2	1	2	1	1	1	C101	1	1	2	1
C102	3	3	3	2	1	2	1	1	1	C102	2	2	2	1
C103	3	3	3	2	1	3	2	3	3	C103	3	2	3	2
C104	3	3	3	2	1	3	2	3	3	C104	3	1	3	3
C105	3	3	3	2	1	3	2	3	3	C105	3	1	3	3
AVERAGE	3	3	3	2	1	2.6	1.6	2.2	2.2	AVERAGE	2.4	1.4	2.6	2
<b>CLINICAL TOXICOLOGY THEORY 4.6</b>														
Course/Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	3	2	1	2	2	2	1	C101	2	2	1	3
C102	3	2	2	1	2	1	2	2	1	C102	2	2	1	3
C103	2	3	1	2	2	3	2	2	3	C103	3	2	3	2
C104	2	2	2	2	2	3	3	2	2	C104	2	2	2	2
C105	2	2	1	1	3	2	2	2	2	C105	1	3	3	1
C106	3	2	3	2	1	1	2	3	2	C106	2	2	2	2
AVERAGE	2.3	2.1	2	1.6	1.8	2	2.1	2.1	1.8	AVERAGE	2	2.1	2	2.1
<b>FIFTH YEAR</b>														
<b>CLINICAL RESEARCH THEORY 5.1</b>														
Course/Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4



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C101	3	2	3	3	2	2	2	2	2	C101	3	2	2	2
C102	2	3	2	2	2	3	2	3	3	C102	2	3	2	3
C103	2	3	2	3	2	3	2	3	2	C103	2	2	3	3
C104	2	3	3	2	3	2	3	2	3	C104	3	2	3	3
C105	2	1	2	1	2	2	2	2	2	C105	2	3	2	1
AVERAGE	2.2	2.4	2.4	2.2	2.2	2.4	2.2	2.4	2.4	AVERAGE	2.4	2.4	2.4	2.4

## PHARMACOEPIDEMIOLGYANDPHARMACOECONOMICSTHEORYS.2

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	3	2	3	2	3	3	2	C101	1	1	1	1
C102	2	3	1	3	3	2	3	3	3	C102	3	2	1	1
C103	2	2	3	3	2	2	1	1	3	C103	2	2	1	1
C104	2	2	2	3	3	2	2	3	3	C104	2	3	1	2
AVERAGE	2.25	2.25	2.25	2.7	2.75	2	2.25	2.5	2.75	C105	2	2	1	1.25

## CLINICAL PHARMACOKINETICS & PHARMACOTHERAPEUTIC DRUG MONITORING THEORYS.3

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	3	3	2	2	2	2	2	C101	3	2	2	3
C102	2	3	2	2	2	3	2	3	3	C102	2	3	2	3
C103	2	3	2	3	2	3	2	3	2	C103	2	3	3	2
C104	2	3	3	2	3	2	3	2	3	C104	3	2	3	3
C105	2	1	2	1	2	2	2	2	2	C105	2	3	2	3



*Sujitha*  
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C106	3	2	3	2	3	2	3	2	3	C106	2	3	3	3
AVERAGE	2.3	2.3	2.5	2.1	2.3	2.3	2.3	2.3	2.5	AVERAGE	2.3	2.6	2.5	2.8



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*Sugithamma*  
**PRINCIPAL**  
National College of Pharmacy  
Manassery, Kozhikode

KMCT Medical College Campus, Manassery, P.O, Mukkam Ph:-04952297440, Email:-pharmacy@kmct.edu.in, www.nationalcollegeofpharmacy.org



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PHARM D.P.B														
FIRST YEAR														
PHARMACOTHERAPEUTICS I & II THEORY 1.1														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	3	3	2	1	3	2	3	3	C101	3	2	3	3
C102	2	3	3	2	1	3	2	3	3	C102	3	2	3	3
C103	2	3	3	2	1	3	2	3	3	C103	3	2	3	3
C104	2	3	3	2	1	3	2	3	3	C104	3	3	3	3
C105	2	3	3	2	1	3	2	3	3	C105	3	2	3	3
C106	2	2	3	3	-	3	3	3	2	C106	3	3	3	2
AVERAGE	2.0	2.8	3.0	2.1	0.83	3.0	2.1	3.0	2.8	AVERAGE	3.0	2.3	3.0	2.8
PHARMACOTHERAPEUTICS I & II PRACTICAL 1.1														
C101	3	3	3	2	2	3	2	3	3	C101	3	2	3	3
C102	2	3	3	3	2	3	2	3	3	C102	3	2	3	3
C103	3	3	3	3	2	3	2	3	3	C103	3	2	3	3
C104	3	3	3	2	2	3	2	3	3	C104	3	3	3	3
C105	3	3	3	2	2	3	2	3	3	C105	3	2	3	3
AVERAGE	2.8	3	3	2.4	2.0	3.0	2	3	3	AVERAGE	3.0	2.2	3.0	3.0
PHARMACOTHERAPEUTICS III THEORY 1.2														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	3	3	2	1	3	2	3	3	C101	3	2	3	3



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C102	2	3	3	2	1	3	2	3	3	C102	3	2	3	3
C103	2	3	3	2	1	3	2	3	3	C103	3	2	3	3
C104	2	3	3	2	1	3	2	3	3	C104	3	3	3	3
C105	2	3	3	2	1	3	2	3	3	C105	3	2	3	3
C106	2	2	3	3	-	3	3	3	2	C106	3	3	3	2
AVERAGE	2.0	2.8	3.0	2.1	0.83	3.0	2.1	3.0	2.8	AVERAGE	3.0	2.3	3.0	2.8

## PHARMACOTHERAPEUTICS III PRACTICAL 1.2

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	3	2	2	3	2	3	3	C101	3	2	3	3
C102	2	3	3	3	2	3	2	3	3	C102	3	2	3	3
C103	3	3	3	3	2	3	2	3	3	C103	3	2	3	3
C104	3	3	3	2	2	3	2	3	3	C104	3	3	3	3
C105	3	3	3	2	2	3	2	3	3	C105	3	2	3	3
C106	2	2	3	3	2	3	3	3	2	C106	3	3	3	2
AVERAGE	2.6	2.8	3	2.5	2.0	3.0	2.1	3	2.8	AVERAGE	3.0	2.3	3.0	2.8

## HOSPITAL PHARMACY THEORY 1.3

CourseOutcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	3	2	3	1	3	2	2	C101	2	3	2	3



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C102	2	3	2	2	2	2	2	3	3	C102	2	2	2	3
C103	3	2	2	3	2	2	2	2	3	C103	3	3	3	2
C104	2	1	2	1	1	2	2	2	2	C104	3	2	2	2
C105	3	2	3	2	2	3	1	2	2	C105	2	3	3	1
C106	2	3	2	1	2	2	2	2	1	C106	2	2	3	3
AVERAGE	2.5	2.1	2.3	2	2	2	2	2.1	2.1	AVERAGE	2.3	2.5	2.5	2.3

### HOSPITAL PHARMACY PRACTICAL 1.3

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	1	2	1	2	2	3	2	2	C101	2	3	3	1
C102	2	2	3	2	3	3	2	3	3	C102	3	2	1	2
C103	3	2	2	1	2	2	3	2	2	C103	3	1	3	2
C104	2	2	2	2	3	2	2	3	3	C104	2	1	3	3
C105	2	2	2	3	2	3	3	2	2	C105	2	3	2	1
C106	3	2	1	3	2	2	2	2	2	C106	2	3	1	3
AVERAGE	2.5	1.8	2	2	2.3	2.3	2.5	2.3	2.3	AVERAGE	2.3	2.1	2.1	2

### CLINICAL PHARMACY THEORY 1.4

Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	3	2	2	2	2	3	2	C101	3	2	3	3
C102	2	3	1	3	3	2	3	3	3	C102	3	3	3	2
C103	2	2	3	3	3	2	1	2	3	C103	2	3	3	2
C104	1	1	1	3	3	2	2	3	3	C104	3	3	1	2
C105	1	2	2	2	2	1	1	3	2	C105	3	2	3	2
C106	3	3	3	3	3	2	3	1	2	C106	1	2	3	2
AVERAGE	2.0	2.3	2.5	2.7	2.7	1.8	1.7	2.6	2.5	AVERAGE	2.6	2.5	3.0	2.3



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CLINICAL PHARMACY PRACTICAL -1.4														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	2	2	2	2	3	2	2	C101	3	3	3	3
C102	2	1	2	3	2	2	2	2	2	C102	3	3	3	3
C103	2	2	2	2	2	2	2	2	2	C103	3	3	3	3
C104	2	2	2	2	2	2	2	2	2	C104	3	3	3	3
AVERAGE	2	1.75	2	2.25	2	2	2.25	2	2	C105	3	3	3	3
BIOSTATISTICS AND RESEARCH METHODOLOGY THEORY 1.5														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	-	1	2	-	1	-	-	-	1	C101	-	3	1	-
C102	1	-	3	1	-	-	-	1	-	C102	-	2	2	-
C103	1	-	1	-	-	-	-	1	-	C103	-	1	1	-
C104	-	-	3	-	-	-	-	1	-	C104	-	-	-	-
C105	3	1	3	-	-	2	-	-	-	C105	-	-	1	-
C106	3	3	3	-	-	3	2	3	1	C106	2	2	2	2
AVERAGE	1.3	0.83	2.5	0.16	0.16	0.83	0.3	1	0.33	AVERAGE	0.3	1.3	1.1	0.3
BIOPHARMACEUTICS AND PHARMACOKINETICS THEORY 1.6														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	3	2	1	3	3	3	3	C101	3	3	3	2
C102	3	3	3	3	1	3	3	3	3	C102	3	3	3	2
C103	3	3	3	3	1	3	3	3	3	C103	3	3	2	2
C104	3	3	3	3	1	3	3	3	3	C104	3	3	3	2



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C105	3	3	3	3	2	3	3	3	3	C105	3	3	3	2
AVERAGE	3	3	3	2.8	1.2	3	3	3	3	AVERAGE	3	3	2.8	2
<b>BIOPHARMACEUTICS AND PHARMACOKINETICS PRACTICAL 1.6</b>														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	3	2	1	2	1	1	1	C101	1	1	2	1
C102	3	3	3	2	1	2	1	1	1	C102	2	2	2	1
C103	3	3	3	2	1	3	2	3	3	C103	3	2	3	2
C104	3	3	3	2	1	3	2	3	3	C104	3	1	3	3
C105	3	3	3	2	1	3	2	3	3	C105	3	1	3	3
AVERAGE	3	3	3	2	1	2.6	1.6	2.2	2.2	AVERAGE	2.4	1.4	2.6	2
<b>CLINICAL TOXICOLOGY THEORY 1.7</b>														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	3	2	1	2	2	2	1	C101	2	2	1	3
C102	3	2	2	1	2	1	2	2	1	C102	2	2	1	3
C103	2	3	1	2	2	3	2	2	3	C103	3	2	3	2
C104	2	2	2	2	2	3	3	2	2	C104	2	2	2	2
C105	2	2	1	1	3	2	2	2	2	C105	1	3	3	1
C106	3	2	3	2	1	1	2	3	2	C106	2	2	2	2
AVERAGE	2.3	2.1	2	1.6	1.8	2	2.1	2.1	1.8	AVERAGE	2	2.1	2	2.1
<b>SECOND YEAR</b>														
<b>CLINICAL RESEARCH THEORY 2.1</b>														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4



*S. Jithan*  
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Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	3	3	2	2	2	2	2	C101	3	2	2	2
C102	2	3	2	2	2	3	2	3	3	C102	2	3	2	3
C103	2	3	2	3	2	3	2	3	2	C103	2	2	3	3
C104	2	3	3	2	3	2	3	2	3	C104	3	2	3	3
C105	2	1	2	1	2	2	3	2	3	C105	2	3	2	1
AVERAGE	2.2	2.4	2.4	2.2	2.2	2.4	2.2	2.4	2.4	AVERAGE	2.4	2.4	2.4	2.4


  

PHARMACOEPIDEMIOLOGY AND PHARMACOECONOMICS THEORY 2.2														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	3	2	3	2	3	3	2	C101	1	1	1	1
C102	2	3	1	3	3	2	3	3	3	C102	3	2	1	1
C103	2	2	3	3	2	2	1	1	3	C103	2	2	1	1
C104	2	2	2	3	3	2	2	3	3	C104	2	3	1	2
AVERAGE	2.25	2.25	2.25	2.7	2.75	2	2.25	2.5	2.75	C105	2	2	1	1.25

CLINICAL PHARMACOKINETICS & PHARMACOTHERAPEUTIC DRUG MONITORING THEORY 2.3														
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	3	3	2	2	2	2	2	C101	3	2	2	3
C102	2	3	2	2	2	3	2	3	3	C102	2	3	2	3
C103	2	3	2	3	2	3	2	3	2	C103	2	3	3	2
C104	2	3	3	2	3	2	3	2	3	C104	3	2	3	3
C105	2	1	2	1	2	2	2	2	2	C105	2	3	2	3



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C106	3	2	3	2	3	2	3	2	3	C106	2	3	3	3
AVERAGE	2.3	2.3	2.5	2.1	2.3	2.3	2.3	2.3	2.5	AVERAGE	2.3	2.6	2.5	2.8

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### MAPPING OF M.PHARM



*Sujitha*  
**PRINCIPAL**  
National College of Pharmacy  
Manassery, Kozhikode

KMCT Medical College Campus, Manassery, P.O, Mukkam Ph:-04952297440,Email:-pharmacy@kmct.edu.in,www.nationalcollegeofpharmacy.org



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MPHARM PHARMACY PRACTICE																
SEMESTER I																
CLINICAL PHARMACY PRACTICE (MPP101T)																
COPO MAPPING											COPSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	3	2	2	2	2	3	2	3	3	C101	3	2	3	3
C102	2	3	1	3	3	2	3	3	3	3	2	C102	3	3	3	2
C103	2	2	3	3	3	2	1	2	3	3	2	C103	2	3	3	2
C104	1	1	1	3	3	2	2	3	3	1	2	C104	3	3	1	2
C105	1	2	2	2	2	1	1	3	2	3	2	C105	3	2	3	2
C106	3	3	3	3	3	2	3	1	2	3	2	C106	1	2	3	2
AVERAGE	2.0	2.3	2.5	2.7	2.7	1.8	1.7	2.6	2.5	3.0	2.3	AVERAGE	2.6	2.5	3.0	2.3
PHARMACOTHERAPEUTICS I (MPP102T)																
COPO MAPPING											COPSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	1	2	2	2	2	3	3	2	1	C101	3	3	3	3
C102	2	1	2	2	2	3	2	3	2	2	2	C102	2	3	3	2
C103	3	2	2	2	3	3	3	2	2	2	1	C103	3	2	3	3
C104	2	3	3	1	2	2	3	3	2	2	2	C104	2	3	2	3
AVERAGE	2.5	2.0	2.0	1.75	2.25	2.5	2.5	2.75	2.25	2.0	1.5	AVERAGE	2.5	2.75	2.75	2.75
HOSPITAL AND COMMUNITY PHARMACY (MPP103T)																
COPO MAPPING											COPSO MAPPING					
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	1	2	2	2	2	2	3	2	1	C101	3	3	3	3
C102	2	2	2	2	2	3	2	3	2	2	2	C102	2	3	2	2



*Sujitha*  
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C103	2	2	2	2	3	3	3	3	2	2	1	C103	3	2	3	3
C104	2	1	3	1	2	2	3	2	2	2	2	C104	2	3	2	3
AVERAGE	2.25	1.25	2.0	1.75	2.25	2.6	2.5	2.25	2.25	2.0	1.5	AVERAGE	2.5	2.75	2.8	2.75
<b>CLINICAL RESEARCH (MPP104T)</b>																
COPSO MAPPING												COPSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PS01	PS02	PS03	PS04
C101	3	1	1	2	2	2	2	2	3	3	3	C101	2	2	3	3
C102	3	2	2	2	1	2	2	2	3	3	3	C102	2	2	3	2
C103	3	2	3	3	2	3	2	2	2	3	3	C103	2	2	2	3
C104	3	2	2	2	2	3	2	2	2	3	3	C104	2	2	2	3
AVERAGE	3.0	1.75	2.0	2.25	1.75	2.5	2.0	2.0	2.5	3.0	3.0	AVERAGE	2.0	2.0	2.5	2.7
<b>PHARMACY PRACTICE PRACTICAL I (MPP105P)</b>																
COPSO MAPPING												COPSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PS01	PS02	PS03	PS04
C101	2	2	2	2	2	2	3	2	2	2	2	C101	3	3	3	3
C102	2	1	2	3	2	2	2	2	2	2	1	C102	3	3	3	3
C103	2	2	2	2	2	2	2	2	2	2	1	C103	3	3	3	3
C104	2	2	2	2	2	2	2	2	2	2	2	C104	3	3	3	3
AVERAGE	2.0	1.75	2.0	2.25	2.0	2.0	2.2	2.0	2.0	2.0	1.5	AVERAGE	3.0	3.0	3.0	3.0
<b>SECOND SEMESTER</b>																
<b>PRINCIPLES OF QUALITY USE OF MEDICINE (MPP 201T)</b>																
COPSO MAPPING												COPSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PS01	PS02	PS03	PS04
C101	3	1	1	2	2	2	2	2	3	3	3	C101	2	2	3	3
C102	3	2	2	2	1	2	2	2	3	3	3	C102	2	2	3	2
C103	3	2	3	3	2	3	2	2	2	3	3	C103	2	2	2	3
C104	3	2	2	2	2	3	2	2	2	3	3	C104	2	2	2	3
AVERAGE	3.0	1.75	2.0	2.25	1.75	2.5	2.0	2.0	2.5	3.0	3.0	AVERAGE	2.0	2.0	2.5	2.7
<b>PHARMACOTHERAPEUTICS -II (MPP 202T)</b>																
COPSO MAPPING												COPSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PS01	PS02	PS03	PS04



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CBI	3	2	1	2	2	2	2	3	3	2	1	CBI	3	3	3	3
CB2	2	1	2	2	2	3	2	3	2	2	2	CB2	2	3	3	3
CB3	3	2	2	2	3	3	3	2	3	2	1	CB3	3	2	3	3
CB4	2	3	3	1	2	2	3	3	2	2	2	CB4	2	3	2	3
AVERAGE	2.5	2.0	2.0	1.75	2.25	2.5	2.5	2.75	2.25	2.0	1.5	AVERAGE	2.5	2.75	2.75	2.75
<b>CLINICAL PHARMACOKINETICS AND THERAPEUTIC DRUG MONITORING (MPP 203T)</b>																
COPO MAPPING												CO/PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
CBI	3	2	1	2	2	2	2	3	3	2	1	CBI	3	3	3	3
CB2	2	2	2	2	2	3	2	3	2	2	2	CB2	2	2	3	2
CB3	3	2	2	2	3	3	3	2	2	2	1	CB3	3	3	2	3
CB4	2	3	3	3	2	2	3	3	2	2	2	CB4	2	2	3	3
AVERAGE	2.5	2.25	2.0	2.25	2.25	2.5	2.5	2.75	2.25	2.0	1.5	AVERAGE	2.75	2.5	2.75	2.75
<b>PHARMACOEPIDEMIOLOGY AND PHARMACOECONOMICS (MPP 204T)</b>																
COPO MAPPING												CO/PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
CBI	3	2	3	2	3	2	3	3	2	3	3	CBI	1	1	1	1
CB2	2	3	1	3	3	2	3	3	3	3	2	CB2	3	2	1	1
CB3	2	2	3	3	2	2	1	1	3	2	3	CB3	2	2	1	1
CB4	2	2	2	3	3	2	2	3	3	2	2	CB4	2	3	1	2
AVERAGE	2.25	2.25	2.25	2.7	2.75	2.0	2.2	2.5	2.75	2.5	2.5	AVERAGE	2.0	2.0	1.0	1.25
<b>PHARMACY PRACTICE PRACTICAL II (MPP 205P)</b>																
COPO MAPPING												CO/PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
CBI	2	2	2	2	2	2	3	2	2	2	2	CBI	3	3	3	3
CB2	2	1	2	3	2	2	2	2	2	2	1	CB2	3	3	3	3
CB3	2	2	2	2	2	2	2	2	2	2	1	CB3	3	3	3	3
CB4	2	2	2	2	2	2	2	2	2	2	2	CB4	3	3	3	3
AVERAGE	2.0	1.75	2.0	2.25	2.0	2.0	2.2	2.0	2.0	2.0	1.5	AVERAGE	3.0	3.0	3.0	3.0
<b>THIRD SEMESTER</b>																



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RESEARCH METHODOLOGY AND BIostatISTICS (MRM 301T)																
CO-PO MAPPING												CO-PSO MAPPING				
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	-	-	2	3	-	-	1	2	3	C101	2	1	3	2
C102	3	2	-	-	3	2	-	-	-	3	3	C102	3	3	2	1
C103	2	-	3	3	2	-	-	-	-	-	2	C103	3	2	2	3
C104	2	1	2	3	-	-	-	-	-	-	1	C104	1	2	3	1
AVERAGE	2.25	1.25	1.25	1.5	1.75	1.25	-	-	0.25	1.25	2.25	AVERAGE	2.25	2.0	2.5	2.0

MPHARM PHARMACEUTICAL ANALYSIS																
SEMESTER I																
MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES-MPT 101T																
CO-PO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	-	2	-	-	2	-	-	2	-	1	C101	2	-	1	1
C102	3	3	-	2	-	3	-	-	3	-	2	C102	1	1	2	1
C103	2	-	-	-	-	3	-	-	2	2	2	C103	-	1	1	-
C104	2	2	2	2	-	-	-	-	2	2	1	C104	-	-	-	-
AVERAGE	2.5	1.25	1.0	1.0	00	2.0	00	00	2.0	1.0	1.25	AVERAGE	0.75	0.5	1.0	0.5

ADVANCED PHARMACEUTICAL ANALYSIS (MPA 102T)																
CO-PO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	1	2	1	1	-	-	1	1	1	C101	1	1	1	1
C102	2	2	1	-	3	1	-	-	1	-	-	C102	2	1	1	1
C103	2	3	1	1	-	-	-	-	-	2	3	C103	2	1	1	1
C104	1	1	1	1	-	-	-	-	1	1	1	C104	1	1	1	1



*Sujithram*  
 PRINCIPAL  
 National College of Pharmacy  
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AVERAGE	1.75	2.0	1.0	1.0	1.0	0.75	00	00	0.75	1.0	1.25	AVERAGE	1.5	1.0	1.0	1.0	
<b>PHARMACEUTICAL VALIDATION (MPA 103T)</b>																	
CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	2	-	2	1	-	-	-	1	1	1	C101	2	1	1	1	
C102	3	2	1	-	-	1	-	-	1	2	-	C102	1	1	1	1	
C103	3	2	-	1	2	-	-	-	-	-	1	C103	1	-	1	2	
C104	3	2	-	1	-	2	-	-	1	-	1	C104	1	1	-	1	
AVERAGE	3.0	2.0	0.25	1.0	0.75	0.75	00	00	0.75	0.75	0.75	AVERAGE	1.25	0.75	0.75	1.25	
<b>FOOD ANALYSIS (MPA 104T)</b>																	
CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	1	1	2	1	-	1	-	2	1	1	C101	1	2	1	3	
C102	2	1	-	2		1	-	-	1	-	-	C102	1	1	-	1	
C103	3	1	3	2	3	-	-	1	-	2	1	C103	-	1	1	1	
C104	2	1	-	2	-	-	-	-	3	-	1	C104	1	3	1	1	
AVERAGE	2.5	1.0	1.0	2.0	1.0	0.25	0.25	0.25	1.5	0.75	0.75	AVERAGE	0.75	1.75	0.75	1.5	
<b>PHARMACEUTICAL ANALYSIS PRACTICAL - I (MPA 105P)</b>																	
CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	2	1	2	1	-	1	-	1	1	1	C101	2	1	-	1	
C102	3	2	-	-	-	1	-	1	1	2		C102	-	-	2	2	



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C103	2	2	1	1	-	-	1	-	-	-	1	C103	3	-	2	1
C104	2	2	-	1	2	-	-	2	-	-	1	C104	1	2	1	1
AVERAGE	2.5	2.0	0.5	1.0	0.75	0.25	0.5	0.75	0.5	0.75	0.75	AVERAGE	1.5	0.75	1.25	1.25

## SECOND SEMESTER

### ADVANCED INSTRUMENTAL ANALYSIS (MPA 201T)

CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	2	2	-	-	1	-	-	1	1	1	C101	1	1	-	1	
C102	3	2	2	-	-	1	1	-	1	-	1	C102	2	1	1	-	
C103	3	2	2	-	-	1	-	1	1	-	1	C103	-	1	2	1	
C104	3	2	2	-	-	1	-	-	1	1	1	C104	1	1	1	1	
AVERAGE	3.00	2.00	2.00	00	00	1.00	0.25	0.2	1.0	0.50	1.00	AVERAGE	1.0	1.0	1.0	0.75	

### MODERN BIO-ANALYTICAL TECHNIQUES(MPA 202T)

CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	2	-	1	2	1	-	-	1	2	1	C101	1	1	-	1	
C102	3	2	-	1	-	1	-	-	1	-	1	C102	1	1	1	2	
C103	3	2	-	-	1	1	-	-	1	2	1	C103	1	-	1	1	
C104	2	1	-	2	-	-	-	-	-	-	-	C104	-	2	-	1	
AVERAGE	2.75	1.75	00	1.0	0.75	0.75	00	00	0.75	1.0	0.75	AVERAGE	0.75	1.0	0.50	1.25	

### QUALITY CONTROL AND QUALITY ASSURANCE (MPA 203T)

CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	



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C101	3	3	2	3	3	3	-	1	3	-	1	C101	2	1	1	1
C102	3	3	2	2	3	3	-	-	3	-	-	C102	1	-	1	-
C103	3	3	2	2	1	2	-	1	3	1	-	C103	1	2	-	1
C104	3	2	-	1	-	-	-	-	2	1	2	C104	1	1	1	1
AVERAGE	3.00	2.75	1.5	2.0	1.25	2.0	00	0.50	2.0	0.50	0.75	AVERAGE	2.5	1.0	0.75	0.75
<b>HERBAL AND COSMETIC ANALYSIS(MPA 204T)</b>																
CO-PO MAPPING	CO-PSO MAPPING															
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	2	-	-	1	-	-	1	-	1	C101	1	1	-	1
C102	2	2	2	-	3	1	-	3	1	2	1	C102	1	1	1	1
C103	2	2	2	-	-	-	-	-	-	-	-	C103	1	2	-	-
C104	2	2	2	-	3	1	-	3	-	1	2	C104	1	-	1	2
AVERAGE	2.0	2.0	2.0	00	1.5	1.0	00	1.2	0.5	0.75	1.0	AVERAGE	1.0	1.0	0.50	1.0
<b>PHARMACEUTICAL ANALYSIS PRACTICAL - II ( MPA 205P)</b>																
CO-PO MAPPING	CO-PSO MAPPING															
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	-	2	1	-	-	-	2	1	1	C101	2	1	-	1
C102	3	2	-	-	-	1	-	-	1	-	-	C102	1	-	2	1
C103	2	3	-	1	2	2	-	-	-	2	1	C103	1	2	1	2
C104	3	2	-	1	-	-	-	-	-	-	1	C104	1	1	1	1
AVERAGE	2.75	2.25	00	1.0	0.75	0.75	00	00	0.75	0.75	0.75	AVERAGE	2.5	1.0	1.0	1.25
<b>THIRD SEMESTER</b>																
<b>RESEARCH METHODOLOGY AND BIostatISTICS (MRM 301T)</b>																
CO-PO MAPPING	CO-PSO															



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Course Outcome	MAPPING															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	-	-	2	3	-	-	1	2	3	C101	2	1	3	2
C102	3	2	-	-	3	2	-	-	-	3	3	C102	3	3	2	1
C103	2	-	3	3	2	-	-	-	1	-	2	C103	3	2	2	3
C104	2	1	2	3	-	-	-	-	1	-	1	C104	1	2	3	1
AVERAGE	2.25	1.25	1.25	1.5	1.75	1.25	00	00	0.75	1.25	2.0	AVERAGE	2.2	2.0	2.5	1.75

## MPHARM PHARMACEUTICAL CHEMISTRY

### SEMESTER I

#### MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES (MPT 101T)

CO-PO MAPPING																	
Course Outcome	CO-PSO MAPPING																
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	2	-	-	-	2	-	-	2	-	1	C101	2	2	1	2	
C102	3	3	-	2	-	3	-	-	3	-	2	C102	-	-	2	3	
C103	2	-	-	-	-	3	-	-	2	2	2	C103	2	2	-	2	
AVERAGE	2.6	1.6	00	0.66	00	2.6	00	00	2.3	0.66	1.6	AVERAGE	1.33	1.33	1.0	2.33	

#### ADVANCED ORGANIC CHEMISTRY -I(MPC 102T)

CO-PO MAPPING																	
Course Outcome	CO-PSO MAPPING																
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	2	-	2	1	1	-	-	1	1	1	C101	2	-	1	2	
C102	2	2	-	-	-	1	-	-	1	-	-	C102	3	1	2	-	
C103	2	3	-	1	-	-	-	-	-	-	1	C103	1	2	-	1	
C104	3	2	-	1	-	-	-	-	-	-	1	C104	-	2	1	1	
AVERAGE	2.5	2.25	00	1.0	0.25	0.5	00	00	0.50	0.25	0.75	AVERAGE	1.5	1.25	1.0	1.0	

#### ADVANCED MEDICINAL CHEMISTRY(MPC 103T)



*S. Jithanand*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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CO-PO MAPPING																
Course Outcome	CO-PSO MAPPING															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	-	2	1	-	-	-	2	1	1	C101	2	-	1	1
C102	3	2	-	-	-	1	-	-	1	-	-	C102	1	1	2	-
C103	2	3	-	1	-	-	-	-	-	-	1	C103	1	2	-	2
C104	3	2	-	1	-	-	-	-	-	-	1	C104	1	-	1	1
AVERAGE	2.75	2.25	00	1.0	0.25	0.25	00	00	0.75	0.25	0.75	AVERAGE	1.25	0.75	1.0	1.0
<b>CHEMISTRY OF NATURAL PRODUCTS(MPC 104T)</b>																
CO-PO MAPPING																
Course Outcome	CO-PSO MAPPING															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	-	2	1	-	-	-	2	1	1	C101	2	1	1	
C102	3	2	-	-	-	1	-	-	1	-	-	C102	1	-	2	3
C103	2	3	-	1	-	-	-	-	-	-	1	C103	-	2	1	1
C104	3	2	-	1	-	-	-	-	-	-	1	C104	1	-		1
AVERAGE	2.0	2.25	00	1.0	0.25	0.25	00	00	0.75	0.25	0.75	AVERAGE	1.0	0.75	1.0	1.25
<b>PHARMACEUTICAL CHEMISTRY PRACTICAL – I(MPC 105P)</b>																
CO-PO MAPPING																
Course Outcome	CO-PSO MAPPING															
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	-	2	1	-	-	-	2	1	1	C101	2	1	1	-
C102	3	2	-	-	-	1	-	-	1	-	-	C102	1	-	2	3
C103	2	3	-	1	-	-	-	-	-	-	1	C103	-	2	1	1
AVERAGE	2.6	2.3	00	1.0	0.33	0.33	00	00	1.0	0.33	0.66	AVERAGE	1.0	1.0	1.33	1.33
<b>SEMESTER II</b>																
<b>ADVANCED SPECTRAL ANALYSIS(MPC 201T)</b>																



*Sujitha Manassery*  
**PRINCIPAL**  
National College of Pharmacy  
Manassery, Kozhikode



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CO-PO MAPPING																
CO-PSO MAPPING	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	-	-	-	1	-	-	1	-	1	C101	2	1	1	1
C102	2	2	-	-	-	1	-	-	1	-	1	C102	-	1	2	1
C103	2	2	-	-	-	1	-	-	1	-	1	C103	1	2	1	1
AVERAGE	2.0	2.0	00	00	00	1.00	00	00	1.00	00	1.00	AVERAGE	1.0	1.33	1.33	1.0
ADVANCED ORGANIC CHEMISTRY -II(MPC 202T)																
CO-PSO MAPPING	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	-	1	2	1	-	-	1	2	1	C101	3	2	1	1
C102	3	2	-	1	-	1	-	-	1	-	1	C102	1	1	-	1
C103	3	2	-	-	-	1	-	-	1	-	1	C103	-	-	1	2
C104	3	2	-	-	-	-	-	-	-	-	-	C104	1	2	2	1
AVERAGE	3.0	2.0	00	0.5	00	0.75	00	00	0.75	00	0.75	AVERAGE	1.25	1.25	1.0	1.25
COMPUTER AIDED DRUG DESIGN(MPC 203T)																
CO-PSO MAPPING	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	-	3	3	3	-	1	3	-	2	C101	2	1	-	1
C102	3	3	-	2	3	3	-	-	3	-	-	C102	-	2	1	1
C103	3	3	-	2	1	2	-	2	3	1	-	C103	1	1	1	2
C104	3	3	-	1	-	-	-	-	-	1	2	C104	1	-	2	1
AVERAGE	3.00	3.00	00	2	1.75	2.00	00	0.75	2.25	0.75	1.00	AVERAGE	1.00	1.00	1.00	1.25
PHARMACEUTICAL PROCESS CHEMISTRY(MPC 204T)																



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CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	2	2	-	-	-	1	-	-	1	-	1	C101	1	2	-	1	
C102	2	2	-	-	-	1	-	-	1	-	1	C102	1	2	2	2	
AVERAGE	2.00	2.00	00	00	00	1.00	00	00	1.00	00	1.00	AVERAGE	1.0	2.0	1.0	1.5	

### PHARMACEUTICAL CHEMISTRY PRACTICAL II(MPC 205P)

CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	2	-	2	1	-	-	-	2	1	1	C101	1	-	2	1	
C102	3	2	-	-	-	1	-	-	1	-	-	C102	-	2	-	2	
C103	2	3	-	1	-	-	-	-	-	-	1	C103	2	1	1	-	
C104	3	2	-	1	-	-	-	-	-	-	1	C104	2	1	1	1	
AVERAGE	2.75	2.25	00	1.00	0.25	0.25	00	00	0.75	0.25	0.75	AVERAGE	1.25	1.00	1.00	1.00	

### SEMESTER III

### RESEARCH METHODOLOGY AND BIostatISTICS (MRM 301T)

CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	2	2	-	-	2	3	-	-	1	2	3	C101	2	1	3	2	
C102	3	2	-	-	3	2	-	-	-	3	3	C102	3	3	2	1	
C103	2	-	3	3	2	-	-	-	-	-	2	C103	3	2	2	3	
C104	2	1	2	3	-	-	-	-	-	-	1	C104	1	2	3	1	
C105	2	1	-	-	2	-	-	-	-	3	2	C105	2	1	2	2	
C106	3	2	-	2	-	3	-	-	1	2	2	C106	2	1	3	3	
AVERAGE	2.33	1.33	0.83	1.33	1.5	1.33	00	00	0.33	1.66	2.16	AVERAGE	2.2	1.7	2.5	2.0	



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MPHARM PHARMACEUTICS																
SEMESTER I																
MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES (MPT101T)																
CO-PO MAPPING	CO-PSO MAPPING															
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	2	2	2	2	2	2	2	2	1	C101	3	3	3	3
C102	3	3	2	2	1	3	2	3	3	2	2	C102	3	3	3	2
C103	2	2	2	2	2	3	2	2	2	2	2	C103	3	2	3	2
AVERAGE	2.6	2.3	2.0	2.0	1.6	2.6	2.0	2.3	2.3	2.0	1.6	AVERAGE	3.0	3.0	3.0	3.0
DRUG DELIVERY SYSTEMS(MPH 102T)																
CO-PO MAPPING	CO-PSO MAPPING															
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	2	3	3	1	2	2	1	1	2	C101	2	3	3	3
C102	1	2	1	1	2	2	1	1	1	2	2	C102	2	2	3	2
C103	2	2	1	2	2	1	2	3	1	2	1	C103	2	2	2	2
C104	2	2	2	3	2	2	2	2	2	2	2	C104	2	2	2	2
AVERAGE	1.75	2.0	1.5	2.25	2.25	1.5	1.75	2.0	1.25	1.75	1.75	AVERAGE	2.0	2.4	2.8	2.5
MODERN PHARMACEUTICS (MPH 103T)																
CO-PO MAPPING	CO-PSO MAPPING															



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Course Outcome	NG	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	2	-	2	1	-	2	1	1	1	1	1	C101	3	3	3	3
C102	3	2	2	-	-	1	2	2	1	1	2	2	C102	2	3	3	3
C103	3	2.5	1	1.5	1	2	2	2	2	1	1	1	C103	3	2	3	3
C104	3	2	-	1	2	2	2	2	1	1	1	1	C104	2	3	3	3
AVERAGE	3.0	2.1	0.75	1.12	1.0	1.25	2.0	1.75	1.25	1.0	1.25	1.25	AVERAGE	2.8	2.9	3.0	3.0
<b>REGULATORY AFFAIRS(MPH 104T)</b>																	
CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	1	1	2	2	2	2	2	3	3	3	C101	2	2	3	3	
C102	3	2	2	2	1	2	2	2	3	3	3	C102	2	2	3	2	
C103	3	2	3	3	2	3	2	2	2	3	3	C103	2	2	2	3	
C104	3	2	2	2	2	3	2	2	2	3	3	C104	2	2	2	3	
AVERAGE	3.0	1.75	2.0	2.25	1.75	2.5	2.0	2.0	2.5	3.0	3.0	AVERAGE	2.0	2.0	2.5	2.7	
<b>PHARMACEUTICS PRACTICAL I (MPH105P)</b>																	
CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	1	1	2	2	2	2	2	3	3	3	C101	3	3	3	3	



*Sujitha*  
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C102	3	2	2	2	1	2	2	2	3	3	3	C102	2	3	3	3
C103	3	2	3	3	2	3	2	2	2	3	3	C103	3	2	3	3
C104	3	2	2	2	2	3	2	2	2	3	3	C104	2	3	3	3
AVERAGE	3.0	1.75	2.0	2.25	1.75	2.5	2.0	2.0	2.5	3.0	3.0	AVERAGE	2.8	2.9	3	3

### MOLECULAR PHARMACEUTICS(NANOTECH & TARGETTED DDS) (MPH201T)

CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	2	1	2	2	2	2	3	3	2	1	C101	2	2	3	3	
C102	2	1	2	2	2	3	2	3	2	2	2	C102	2	2	3	2	
C103	3	2	2	2	3	3	3	2	2	2	1	C103	2	2	2	3	
C104	2	3	3	1	2	2	3	3	2	2	2	C104	2	2	2	3	
AVERAGE	2.3	2.16	2.2	1.8	2.3	2.5	2.5	2.6	2.3	2.0	1.6	AVERAGE	2.0	2.0	2.5	2.7	

### ADVANCED BIOPHARMACEUTICS & PHARMACOKINETICS(MPH 202T)

CO-PO MAPPING	CO-PSO MAPPING																
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4	
C101	3	2	1	2	2	2	2	3	3	2	1	C101	3	3	3	3	
C102	2	1	2	2	2	3	2	3	2	2	2	C102	2	3	3	2	
C103	3	2	2	2	3	3	3	2	2	2	1	C103	3	2	3	3	



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AVERAGE	2.3	2.16	2.2	1.8	2.3	2.5	2.5	2.6	2.3	2.0	1.6	AVERAGE	2.5	2.6	2.6	2.5
<b>COMPUTER AIDED DRUG DEVELOPMENT(MPH 203T)</b>																
CO-PO MAPPING	CO-PSO MAPPING															
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	3	3	2	3	2	3	-	1	3	2	2	C101	3	3	3	3
C102	3	2.5	2	1.5	2	3	-	-	3	-	-	C102	2	2	3	2
C103	3	3	2	1.5	2	2	-	-	3	1	-	C103	3	3	2	3
C104	3	2.5	-	1	-	-	-	3	2	1	2	C104	2	2	3	3
AVERAGE	3.00	2.75	1.5	1.75	1.5	2.00	00	1.00	2.60	1.0	1.0	AVERAGE	2.5	2.3	2.6	2.5
<b>COSMETICS AND COSMECEUTICALS(MPH 204T)</b>																
CO-PO MAPPING	CO-PSO MAPPING															
Course Outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3	PSO4
C101	2	2	-	-	2	3	-	-	1	2	3	C101	3	3	3	3
C102	3	2	-	-	3	2	-	-	-	3	3	C102	2	3	3	2
C103	2	-	3	3	2	-	-	-	-	-	2	C103	3	2	3	3
C104	2	1	2	3	-	-	-	-	-	-	1	C104	2	3	2	3
AVERAGE	2.25	1.25	1.25	1.5	1.75	1.25	-	-	0.25	1.25	2.25	AVERAGE	2.5	2.6	2.6	2.5
<b>PHARMACEUTICS PRACTICAL II(MPH205P)</b>																
CO-PO MAPPING	CO-PSO MAPPING															



*Sujitha*  
**PRINCIPAL**  
 National College of Pharmacy,  
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Course Outcome	NG											CO	PSO1	PSO2	PSO3	PSO4
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11					
C101	3	2	-	2	1	-	-	2	2	2	2	C101	2	1	1	-
C102	2	2	-	1	1	-	-	1	1	3	3	C102	-	-	2	3
C103	3	1	-	1	2	3	-	-	1	2	3	C103	3	2	2	1
C104	2	1	-	2	1	-	-	-	1	2	2	C104	-	1	-	2
AVERAGE	2.5	1.5	00	1.5	1.25	0.75	00	0.75	1.25	2.25	2.5	AVERAGE	1.25	1.0	1.25	1.5

## SEMESTER III

### RESEARCH METHODOLOGY AND BIostatISTICS(MRM 301T)

CO-PO MAPPING																
Course Outcome	CO-PSO MAPPING	PO											PSO			
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	CO	PSO1	PSO2	PSO3
C101	2	2	-	-	2	3	-	-	1	2	3	C101	2	1	3	2
C102	3	2	-	-	3	2	-	-	-	3	3	C102	3	3	2	1
C103	2	-	3	3	2	-	-	-	-	-	2	C103	3	2	2	3
C104	2	1	2	3	-	-	-	-	-	-	1	C104	1	2	3	1
C105	2	1	-	-	2	-	-	-	-	3	2	C105	2	1	2	2
C106	3	2	-	2	-	3	-	-	1	2	2	C106	2	1	3	3
AVERAGE	2.33	1.3	0.83	1.3	1.5	1.33	00	00	0.33	1.6	2.16	AVERAGE	2.2	1.7	2.5	2.0



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### ATTAINMENT OF B.PHARM



*Sujitha*

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National College of Pharmacy  
Manassery, Kozhikode

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### PROGRAM OUTCOME B.PHARM (2021-2022)

#### COURSE: HERBAL DRUG TECHNOLOGY

##### PROGRAM OUTCOME

**PO1 Pharmacy Knowledge:** Possess knowledge and comprehension of the core and basic associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.

**PO2 Planning Abilities:** Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.

**PO3 Problem analysis:** Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.

**PO4 Modern tool usage:** Learn, select, and apply appropriate methods and procedures resources, and modern pharmacy-related computing tools with an understanding of the limitations.

**PO5 Leadership skills:** Understand and consider the human reaction to change, motivation issues, leadership and teambuilding when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and wellbeing.

**PO6 Professional Identity:** Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).

**PO7 Pharmaceutical Ethics:** Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and personal variability in

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*Sujitha*  
Principal  
National College of Pharmacy  
Manassery, Kozhikode





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values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.

**PO8 Communication:** Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.

**PO9 The Pharmacist and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice.

**PO10 Environment and sustainability:** Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO11 Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. Self-assess and use feedback effectively from others to identify learning needs and satisfy these needs on an ongoing basis.

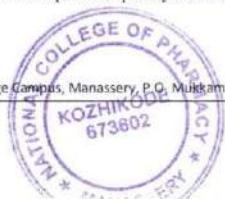
### PROGRAM-SPECIFIC OUTCOME

**PSO1:** Equip a profound understanding of different subjects of pharmaceutical sciences and enable them to fulfill industry and healthcare standards.

**PSO2:** Provide high levels of professionalism, ethical conduct, and leadership qualities, ensuring responsible contributions to the healthcare community.

**PSO3:** Provide proficiency in problem-solving methodologies for designing innovative solutions for drug development, quality assurance, and patient care.

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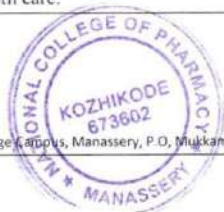
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**PSO4:** Empower with strong communication skills to effectively convey pharmaceutical information to diverse audiences and cultivate an ability to excel in teamwork for collaborating seamlessly with healthcare teams to optimize patient care outcomes.

### COURSE OUTCOME (CO)

BP 603 T	HERBAL DRUG TECHNOLOGY
CO1	To understand about selection of herbs from its sources, good agricultural practices, processing and development of herbal medicinal products. Learn about Indian systems of medicines, formulation and standardization of medicines. Understand GMP of Indian systems of medicines.
CO2	Understand the importance and applications of nutraceuticals in healthcare and its market demand. Analyze herbal drug interactions and its importance in health care.
CO3	To understand the sources and description of raw materials from herbs used in personal care products. Also, learn about the use/application of herbal excipients in formulations and novel dosage forms.
CO4	To understand the evaluation and stability testing of herbal drugs as per WHO & ICH guidelines. Also to explain the patenting aspects of natural products.

SL NO	COURSE OUTCOME (CO)	KNOWLEDGE LEVEL (BLOOMS LEVEL)
CO1	To understand about selection of herbs from its sources, good agricultural practices, processing and development of herbal medicinal products. Learn Indian systems of medicines, formulation and standardization of medicines. Understand GMP of Indian systems of medicines.	L1, L2, L4, L6
CO2	Understand the importance and applications of nutraceuticals in healthcare and its market demand. Analyze herbal drug interactions and its importance in health care.	L1, L2, L4



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<b>CO3</b>	To understand the sources and description of raw materials from herbs used in personal care products. Also, learn about the use/application of herbal excipients in formulations and in novel dosage forms.	L2, L3, L4
<b>CO4</b>	To understand the evaluation and stability testing of herbal drugs as per WHO & ICH guidelines. Also to explain the patenting aspects of natural products.	L2, L3, L5

SL NO	COURSE OUTCOME	PO	PSO
CO1	To understand about selection of herbs from its sources, good agricultural practices, processing and development of herbal medicinal products. Learn about Indian systems of medicines, formulation and standardization of medicines. Understand GMP of Indian systems of medicines.	1,2,3,4,7,9,10,11	1,2,3,4
CO2	Understand the importance and applications of nutraceuticals in healthcare and its market demand. Analyze herbal drug interactions and its importance in health care.	1,2,4,6,7,9,11	1,2,3,4
CO3	To understand the sources and description of raw materials from herbs used in personal care products. Also learn about the use/application of herbal excipients in formulations and in novel dosage forms.	1,2,3,4,6,7,9,11	1,2,4
CO4	To understand the evaluation and stability testing of herbal drugs as per WHO & ICH guidelines. Also to explain about the patenting aspects of natural products.	1,9,10,11	1



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PRINCIPAL  
National College of Pharmacy  
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### CO Vs PO MAPPING (PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	1	1	1	2	-	-	1	-	1	3	2
CO2	3	3	-	3	-	2	2	-	3	-	3
CO3	3	1	2	3	-	1	1	-	1	-	3
CO4	3	-	-	-	-	-	-	-	3	1	2
AVG	2.5	1.25	0.75	2	0	0.75	1.0	0	2	1	2.5

INFERENCE: 1- LOW, 2- MEDIUM, 3 -HIGH

### COURSE OUTCOME – PROGRAM SPECIFIC OUTCOME MATRIX

SL NO	COURSE OUTCOME	PROGRAM SPECIFIC OUTCOME MATRIX			
		PSO 1	PSO 2	PSO 3	PSO 4
CO1	To understand about selection of herbs from its sources, good agricultural practices, processing and development of herbal medicinal products. Learn about Indian systems of medicines, formulation and standardization of medicines. Understand GMP of Indian systems of medicines.	3	1	2	1
CO2	Understand the importance and applications of nutraceuticals in healthcare and its market demand. Analyze herbal drug interactions and its importance in health care.	3	2	1	2
CO3	To understand the sources and description of raw materials from herbs used in personal care products. Also, learn about the use/application of herbal excipients in formulations and novel dosage forms.	3	2	-	1
CO4	To understand the evaluation and stability testing of herbal drugs as per WHO & ICH guidelines. Also to explain the patenting aspects of natural products.	2	-	-	-
AVERAGE		2.75	1.25	0.75	1

INFERENCE: 1- LOW, 2- MEDIUM, 3 -HIGH



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### COMPUTATION OF COURSE OUTCOME – PROGRAM OUTCOME/ PROGRAM SPECIFIC OUTCOME ATTAINMENT

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4
HDT	3	1	1	2	0	1	1	0	2	1	3	3	1	1	1
AVERAGE	2.5	1.25	0.75	2	0	0.75	1.0	0	2	1	2.5	2.75	1.25	0.75	1

### COURSE OUTCOME ATTAINMENT

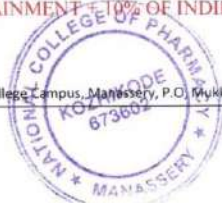
#### ASSESSMENT PATTERN

ASSESSMENT TYPE	ASSESSMENT TOOL
DIRECT ATTAINMENT	FIRST INTERNAL EXAMINATION (CM-10+SM-15) THEORY - 25
	SECOND INTERNAL EXAMINATION (CM-10+SM-15) THEORY - 25
	END SEMESTER EXAMINATION THEORY - 75
INDIRECT ATTAINMENT	COURSE END SURVEY/ ONE MINUTE PAPER WRITING

DIRECT COURSE OUTCOME ATTAINMENT = 20% OF INTERNAL EXAMINATION (IE) ATTAINMENT + 80% OF END SEMESTER EXAMINATION (EE) ATTAINMENT.

OVERALL COURSE OUTCOME ATTAINMENT = 90% DIRECT COURSE OUTCOME ATTAINMENT + 10% OF INDIRECT ATTAINMENT

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*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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### CO ATTAINMENT TARGET LEVEL

ASSESSMENT METHOD	ATTAINMENT LEVEL	
END SEMESTER EXAMINATIONS	THRESHOLD VALUE FOR THEORY -75 THRESHOLD VALUE IS 50%. i.e 0.5 X (75) = 37.5	
	LEVEL 1	50% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 2	60% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 3	70% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
ASSESSMENT METHOD	ATTAINMENT LEVEL	
INTERNAL EXAMINATIONS	INTERNAL ASSESSMENT (25) (CM+SM-10+15=25) THRESHOLD VALUE IS 50%. i.e 0.5 X (10 +15) = 12.5	
	LEVEL 1	50% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 2	60% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 3	70% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY

### COMPUTATION OF CO DIRECT ATTAINMENT

COs	Assessment tool (Internal examination /End Semester examination)	INTERNAL EXAMINATION (IE)		END SEMESTER EXAMINATION (EE)	DIRECT CO ATTAINMENT = (0.2 <sup>IE</sup> ATTAINMENT LEVEL) + (0.8 <sup>EE</sup> ATTAINMENT LEVEL)
		ATTAINMENT LEVEL	AVERAGE ATTAINMENT LEVEL	ATTAINMENT LEVEL	
CO1	THEORY	2.1	2.1	3	2.82
CO2	THEORY	1.8	1.8	3	2.76
CO3	THEORY	2.25	2.25	3	2.85
CO4	THEORY	2.0	2.0	3	2.80

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*Sujitha*  
National College of Pharmacy  
Manassery, Kozhikode



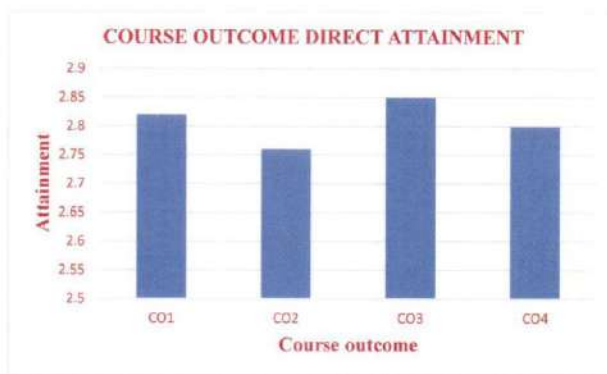
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### COMPUTATION OF CO INDIRECT ATTAINMENT IN THE COURSE:

**Attainment of CO HDT= (Level-1 X No of Students Attempted)  
+ (Level-2x No of Students Attempted) + (Level-3 X No of  
Students Attempted)/Total No of Students**

COS	CO1	CO2	CO3	CO4
Students Answered Level-1	21	13	14	8
Students Answered Level-2	25	26	30	27
Students Answered Level-3	28	35	30	39
<b>TOTAL STUDENTS PARTICIPATED</b>	<b>74</b>	<b>74</b>	<b>74</b>	<b>74</b>
<b>CO AttainmentLevel</b>	<b>2.09</b>	<b>2.29</b>	<b>2.21</b>	<b>2.41</b>

INFERENCE: 1- LOW, 2- MEDIUM, 3 -HIGH

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*Sujithram*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kerala



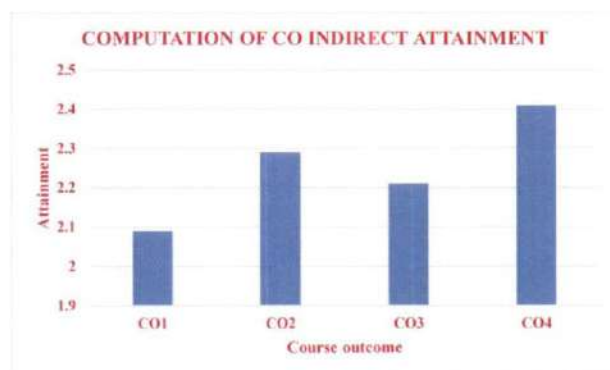
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### COMPUTATION OF COURSE OUTCOME OVERALL ATTAINMENT

CO	DIRECT CO ATTAINMENT LEVEL(DA)	INDIRECT CO ATTAINMENT LEVEL(IDA)	OVERALL CO ATTAINMENT LEVEL ( $0.9 \times DA + 0.1 \times IDA$ )
CO1	2.82	2.09	2.74
CO2	2.76	2.29	2.71
CO3	2.85	2.21	2.78
CO4	2.80	2.41	2.76
AVERAGE CO ATTAINMENT			2.74

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*Sijithamma*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode





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### PO\PSO ASSESMENT PROCESS

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
HERBAL DRUG TECHNOLOGY	3	1	1	2	0	1	1	0	2	1	3
AVERAGE	2.5	1.25	0.75	2	0	0.75	1.0	0	2	1	2.5

PO	ATTAINMENT LEVEL
PO1	$2.5 \times 2.74/3 = 2.28$
PO2	$1.25 \times 2.74/3 = 1.14$
PO3	$0.75 \times 2.74/3 = 0.68$
PO4	$2.0 \times 2.74/3 = 1.82$
PO6	$0.75 \times 2.74/3 = 0.68$
PO7	$1.0 \times 2.74/3 = 0.91$
PO9	$2.0 \times 2.74/3 = 1.82$
PO10	$1.0 \times 2.74/3 = 0.91$
PO11	$2.5 \times 2.74/3 = 2.28$

### RESULT OF PO ATTAINMENT

COURSE	PO1	PO2	PO3	PO4	PO6	PO7	PO9	PO10	PO11
HDT	3	1	1	2	1	1	2	1	3
ATTAINMENT	2.28	1.14	0.68	1.82	0.68	0.91	1.82	0.91	2.28

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### PSO's ATTAINMENT RESULTS

PSO= Average value of PSO\*CO attainment average/3

#### PSO MAPPING

COURSE	PSO1	PSO2	PSO3	PSO4
HDT	3	1	1	1
AVERAGE	2.75	1.25	0.75	1

### PSO ATTAINMENT COMPUTATION

PSO	ATTAINMENT LEVEL
PSO1	$2.75 \times 2.74 / 3 = 2.51$
PSO2	$1.25 \times 2.74 / 3 = 1.14$
PSO3	$0.75 \times 2.74 / 3 = 0.68$
PSO4	$1.0 \times 2.74 / 3 = 0.91$

### PSO ATTAINMENT LEVELS

COURSE	PSO1	PSO2	PSO3	PSO4
HDT	3	1	1	1
ATTAINMENT	2.51	1.14	0.68	0.91



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode

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### ATTAINMENT OF PHARM D



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### PROGRAM OUTCOME PHARM. D

#### COURSE: PHARMACOLOGY I

##### PROGRAM OUTCOME

**PO1:** Demonstrate comprehension of basic principles of pharmaceutical sciences along with the ability to acquire manage and use current evidence-based care to promote safe and optimal pharmacotherapy outcomes.

**PO2:** Apply critical thinking skill, including investigation, applications, analysis, creativity and evaluation of data and document related to drug, clinical investigation, pharmaceutical care and practice

**PO3:** The students are in an ideal position to provide a link between prescriber and patient and to communicate information on health and medicines to the public

**PO4:** Using the best available evidence students will provide patient-centered care to diverse patients.

**PO5:** Students will design, implement and assess initiatives to improve health and wellness

**PO6:** The students are able to use the evidences effectively in health care team including optimizing patient care and outcomes from their documenting experiences.

**PO7:** Students are able to increase the accessibility of unbiased health and medicine related to the public and other health care professionals.

**PO8:** Students will engage in innovative activities by using creative thinking for developing technological products in healthcare practices.

**PO9:** Students will exhibit professional ethics, attitudes and behaviors by demonstrating compassion, integrity and respect for others. Students should gain the ability to assume a leadership position in the overall welfare of the patient and community.



*Sujitha*

National College of Pharmacy  
Manassery, P.O., Mukkam

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### PROGRAM- SPECIFIC OUTCOME

**PSO1:** Acquire a thorough knowledge and solid foundation in different subjects of pharmaceutical sciences to fulfill industry and healthcare standards.

**PSO2:** Provide culturally and socially appropriate pharmaceutical care, fostering inclusion, diversity and advocating for health equity.

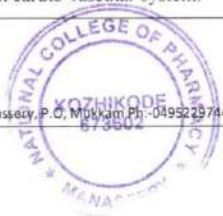
**PSO3:** Understand the significance of pharmaceutical care, medication management, pharmacoconomics, and pharmacogenomics, as well as the fundamentals of hospital, community, and clinical pharmacy in providing for the needs of the community.

**PSO4:** Provide effective and empathic communication with members of the healthcare team, patients, and their care partners to enhance patient care through creative problem-solving.

### COURSE OUTCOME (CO)

2.4	PHARMACOLOGY I
CO1	To remember the general pharmacology (such as definitions, scope, routes of drug administration, pharmacokinetics, pharmacodynamics, factors modifying drug effects, drug toxicity, pre-clinical evaluations and drug interactions)
CO2	Understand the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on autonomic nervous system
CO3	Implement the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on cardio vascular system.

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*Sujithra*  
National College of Pharmacy  
Manassery, Kozhikode



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CO4	Apply the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on central nervous system
CO5	Analyze the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on respiratory system
CO6	Create the importance of hormones and hormone antagonist, autocooids and and their antagonist.

CO's	COURSE OUTCOME (CO)	KNOWLEDGE LEVEL (BLOOMS LEVEL)
CO1	To remember the general pharmacology (such as definitions, scope, routes of drug administration, pharmacokinetics, pharmacodynamics, factors modifying drug effects, drug toxicity, pre-clinical evaluations and drug interactions)	L1, L2
CO2	Understand the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on autonomic nervous system	L1, L2, L3
CO3	Implement the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on cardio vascular system.	L3, L4

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*Sujithamma*

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<b>CO4</b>	Apply the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on central nervous system	L1, L2, L3, L4
<b>CO5</b>	Analyze the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on respiratory system	L1, L2, L3, L4
<b>CO6</b>	Create the importance of hormones and hormone antagonist, autocooids and and their antagonist.	L1, L2, L4

SL NO	COURSE OUTCOME	PO	PSO
CO1	To remember the general pharmacology (such as definitions, scope, routes of drug administration, pharmacokinetics, pharmacodynamics, factors modifying drug effects, drug toxicity, pre-clinical evaluations and drug interactions)	2	1,2
CO2	Understand the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on autonomic nervous system	2, 8	1,2
CO3	Implement the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on cardio vascular system.	-	1,2

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*Sujitha*  
**PRINCIPAL**  
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CO4	Apply the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on central nervous system	-	1,2
CO5	Analyze the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on respiratory system	2, 5, 7, 8	1,2
CO6	Create the importance of hormones and hormone antagonist, autocooids and and their antagonist.	2, 5, 8	1,2

### CO Vs PO MAPPING (PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	-	1	2	2	-	3	3	-	-
CO2	-	3	2	2	-	3	3	-	-
CO3	-	3	2	2	-	3	3	-	-
CO4	-	3	2	2	-	3	3	-	-
CO5	-	3	2	2	-	3	3	-	-
CO6	-	3	2	2	-	3	3	-	-
AVG	-	2.83	2	2	-	3	3	-	-

INFERENCE: 1- LOW, 2- MEDIUM, 3-HIGH



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode

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### COURSE OUTCOME – PROGRAM SPECIFIC OUTCOME MATRIX

SL NO	COURSE OUTCOME	PROGRAM SPECIFIC OUTCOME MATRIX			
		PSO 1	PSO 2	PSO 3	PSO 4
CO1	To remember the general pharmacology (such as definitions, scope, routes of drug administration, pharmacokinetics, pharmacodynamics, factors modifying drug effects, drug toxicity, pre-clinical evaluations and drug interactions)	1	1	-	-
CO2	Understand the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on autonomic nervous system	1	1	-	-
CO3	Implement the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on cardio vascular system.	2	1	-	-
CO4	Apply the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on central nervous system	2	1	-	-
CO5	Analyze the entire pharmacology (such as definitions, classifications, pharmacokinetics, pharmacodynamics, mechanisms of actions, pharmacological actions, adverse drug reactions, drug interactions contraindications, doses and uses) acting on respiratory system	2	1	-	-

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*Sujithra*  
National College of Pharmacy  
Manassery, Kozhikode



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CO6	Create the importance of hormones and hormone antagonist, autocooids and and their antagonist.	2	1	-	-
	AVERAGE	1.6	1	-	-

INFERENCE: 1- LOW, 2- MEDIUM, 3 -HIGH

### COMPUTATION OF COURSE OUTCOME – PROGRAM OUTCOME/ PROGRAM SPECIFIC OUTCOME ATTAINMENT

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
PHARMACOLOGY I	0	3	2	2	0	3	3	0	0	2	1	0	0
AVERAGE	0	2.83	2	2	0	3	3	0	0	1.6	1	0	0

### COURSE OUTCOME ATTAINMENT

#### ASSESSMENT PATTERN

ASSESSMENT TYPE	ASSESSMENT TOOL
DIRECT ATTAINMENT	FIRST INTERNAL EXAMINATION THEORY- 30
	SECOND INTERNAL EXAMINATION THEORY - 30
	THIRD INTERNAL EXAMINATION THEORY-30
	YEAR-END EXAMINATION THEORY- 70
INDIRECT ATTAINMENT	COURSE END SURVEY/ ONE MINUTE PAPER WRITING

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*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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DIRECT COURSE OUTCOME ATTAINMENT = 20% OF INTERNAL EXAMINATION (IE) ATTAINMENT + 80% OF YEAR END EXAMINATION (EE) ATTAINMENT.

OVERALL COURSE OUTCOME ATTAINMENT = 90% DIRECT COURSE OUTCOME ATTAINMENT + 10% OF INDIRECT ATTAINMENT

### CO ATTAINMENT TARGET LEVEL

ASSESSMENT METHOD	ATTAINMENT LEVEL	
YEAR-END EXAMINATION	THRESHOLD VALUE FOR THEORY - 70 THRESHOLD VALUE IS 50%. i.e 0.5X(70)=35	
	LEVEL1	50% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL2	60% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL3	70% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
ASSESSMENT METHOD	ATTAINMENT LEVEL	
INTERNAL EXAMINATIONS	INTERNAL ASSESSMENT (30) THRESHOLD VALUE IS 50%. i.e 0.5 X (30) = 15	
	LEVEL 1	50% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 2	60% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 3	70% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY



*Sujitha*

PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode

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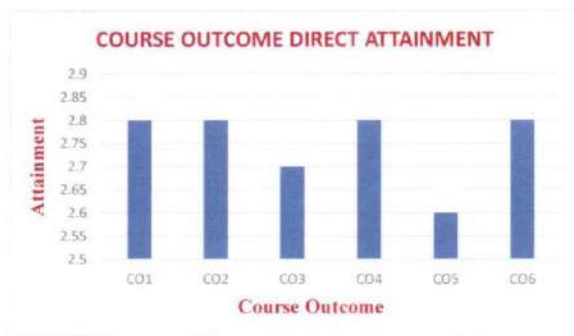


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### COMPUTATION OF CO DIRECT ATTAINMENT

COs	Assessment tool (internal examination /year end examination)	INTERNAL EXAMINATION(IE)		YEAR-END EXAMINATION (EE)	DIRECT CO ATTAINMENT =(0.2*IE ATTAINMENT LEVEL)+(0.8*EE ATTAINMENT LEVEL)
		Attainment level	Average attainment level	Attainment level	
CO1	THEORY	2	2	3	2.8
CO2	THEORY	2	2	3	2.8
CO3	THEORY	1.5	1.5	3	2.7
CO4	THEORY	2	2	3	2.8
CO5	THEORY	1	1	3	2.6
CO6	THEORY	2	2	3	2.8



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PRINCIPAL  
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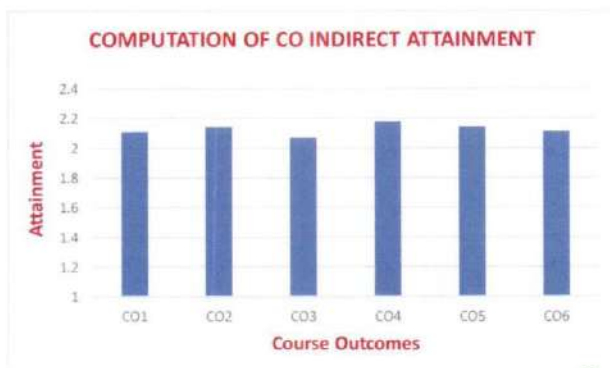
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### COMPUTATION OF CO INDIRECT ATTAINMENT IN THE COURSE:

Attainment of CO of Pharmacology I= (Level-1 X No of Students Attempted) + (Level-2x No of Students Attempted) + (Level-3 X No of Students Attempted)/Total No of Students

COMPUTATION OF CO INDIRECT ATTAINMENT IN THE COURSE						
COS	CO1	CO2	CO3	CO4	CO5	CO6
Students Answered Level -1	5	6	7	7	7	7
Students Answered Level -2	14	11	11	8	9	10
Students Answered Level -3	8	10	9	12	11	10
TOTAL STUDENTS PARTICIPATED	27	27	27	27	27	27
CO AttainmentLevel	2.11	2.14	2.07	2.18	2.14	2.11

INFERENCE: 1- LOW, 2- MEDIUM, 3 –HIGH



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### COMPUTATION OF COURSE OUTCOME OVERALL ATTAINMENT

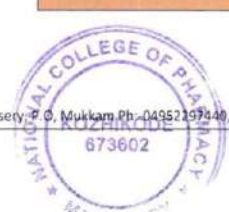
CO	DIRECT CO ATTAINMENT LEVEL (DA)	INDIRECT CO ATTAINMENT LEVEL (IDA)	OVERALL CO ATTAINMENT LEVEL (0.9*DA+0.1*IDA)
CO1	2.8	2.11	2.73
CO2	2.8	2.14	2.73
CO3	2.7	2.07	2.63
CO4	2.8	2.18	2.73
CO5	2.6	2.14	2.55
CO6	2.8	2.11	2.73
AVERAGE CO ATTAINMENT			2.68

### PO\PSO ASSESMENT PROCESS

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
PHARMACOLOGY I	0	3	2	2	0	3	3	0	0
AVERAGE	0	2.83	2	2	0	3	3	0	0

PO	ATTAINMENT LEVEL
PO2	$2.83 \times 2.68 / 3 = 2.52$
PO3	$2.0 \times 2.68 / 3 = 1.78$
PO4	$2.0 \times 2.68 / 3 = 1.78$
PO6	$3.0 \times 2.68 / 3 = 2.68$
PO7	$3.0 \times 2.68 / 3 = 2.68$

*Sujithra*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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### RESULT OF PO ATTAINMENT

COURSE	PO2	PO3	PO4	PO6	PO7
PHARMACOLOGY I	3	2	2	3	3
ATTAINMENT	2.52	1.78	1.78	2.68	2.68

### PSO's ATTAINMENT RESULTS

PSO=Average value of PSO\*CO attainment average/3

### PSO MAPPING

COURSE	PSO1	PSO2	PSO3	PSO4
PHARMACOLOGY I	2	1	-	-
AVERAGE	1.6	1	-	-

### PSO ATTAINMENT COMPUTATION

PSO	ATTAINMENT LEVEL
PSO1	$1.6 * 2.68 / 3 = 1.42$
PSO2	$1.0 * 2.68 / 3 = 0.89$

### PSO ATTAINMENT LEVELS

COURSE	PSO1	PSO2
PHARMACOLOGY I	2	1
ATTAINMENT	1.42	0.89



*Sujithamma*  
Principal  
National College of Pharmacy  
Manassery, Kozhikode

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### ATTAINMENT OF PHARM D P.B

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### PROGRAM OUTCOME PHARM D POST BACCALAUREATE (2021-2022)

#### COURSE: PHARMACOTHERAPEUTICS I & II

#### PROGRAM OUTCOME

PO1: The Pharmacy program aims to equip students to understand the fundamental principles in pharmaceutical sciences which are essential for the pharmacy profession.

PO2: The students are trained to develop skills in formulating and dispensing medications, considering patient needs and overcoming potential incompatibilities.

PO3: Applying critical thinking skills in pharmacy involves investigating, analyzing, evaluating, and creatively applying data and documents related to drugs, clinical investigations, pharmaceutical care, and practice.

PO4: Gain the ability to demonstrate and communicate ethical values and a commitment to societal welfare. Also must ensure that patient privacy and confidentiality are protected..

PO5: To enhance the entrepreneurial capabilities and develop a sense of professional responsibility.

PO6: To develop a strong sense of professional responsibility to use medications safely and effectively.

PO7: The students learn to regulate and utilize marketed drugs in patient care and use evidence based practices in healthcare teams

PO8: The students are able to use the evidences effectively in health care team including optimizing patient care and outcomes from their documenting experiences..

PO9: The students are in an ideal position to provide a link between prescriber and patient and to communicate information on health and medicines to the public.

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*Sujithrasree*  
Principal  
National College of Pharmacy  
Manassery, Kozhikode



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### PROGRAM-SPECIFIC OUTCOME

**PSO1:** Acquire a thorough knowledge and solid foundation in different subjects of pharmaceutical sciences to fulfill industry and healthcare standards.

**PSO2:** Provide culturally and socially appropriate pharmaceutical care, fostering inclusion, diversity and advocating for health equity.

**PSO3:** Understand the significance of pharmaceutical care, medication management, pharmacoconomics, and pharmacogenomics, as well as the fundamentals of hospital, community, and clinical pharmacy in providing for the needs of the community.

**PSO4:** Provide effective and empathic communication with members of the healthcare team, patients, and their care partners to enhance patient care through creative problem-solving.

### COURSE OUTCOME (CO)

1.1	PHARMACOTHERAPEUTICS I& II-THEORY
CO1	Understand the pathophysiology, clinical manifestations and management of common diseases associated with different systems of human body.
CO2	Understand the therapeutic approach to the management of the diseases based on latest guidelines.
CO3	Understand the guidelines for rational use of antibiotics.
CO4	Understand the role of pharmacist in essential drug concept and rational drug use.
CO5	Understand the basic principle of cancer and to know cancer chemotherapeutic agents.
CO6	Understand the general prescribing guidelines for special population such as geriatrics, paediatrics, pregnancy and lactating women.



*Sujithamma*  
Principal

National College of Pharmacy  
Manassery, Kozhikode

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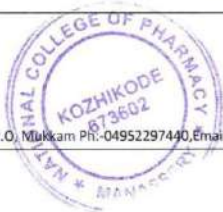


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SL NO	COURSE OUTCOME (CO)	KNOWLEDGE LEVEL (BLOOMS LEVEL)
C01	Understand the pathophysiology, clinical manifestations and management of common diseases associated with different systems of human body.	L2, L1
C02	Understand the therapeutic approach to the management of the diseases based on latest guidelines.	L2
C03	Understand the guidelines for rational use of antibiotics.	L2
C04	Understand the role of pharmacist in essential drug concept and rational drug use.	L2
C05	Understand the basic principle of cancer and to know cancer chemotherapeutic agents.	L2
C06	Understand the general prescribing guidelines for special population such as geriatrics, paediatrics, pregnancy and lactating women.	L2

SL NO	COURSE OUTCOME	PO	PSO
C01	Understand the pathophysiology, clinical manifestations and management of common diseases associated with different systems of human body.	1,2,3,4,5,6,7,8,9	1,2,3,4
C02	Understand the therapeutic approach to the management of the diseases based on latest guidelines.	1,2,3,4,5,6,7,8,9	1,2,3,4
C03	Understand the guidelines for rational use of antibiotics.	1,2,3,4,5,6,7,8,9	1,2,3,4



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
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CO4	Understand the role of pharmacist in essential drug concept and rational drug use.	1,2,3,4,5,6,7,8,9	1,2,3,4
CO5	Understand the basic principle of cancer and to know cancer chemotherapeutic agents.	1,2,3,4,5,6,7,8,9	1,2,3,4
CO6	Understand the general prescribing guidelines for special population such as geriatrics, paediatrics, pregnancy and lactating women.	1,2,3,4,6,7,8,9	1,2,3,4

### PROGRAM OUTCOME (PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
CO1	2	3	3	2	1	3	2	3	3
CO2	2	3	3	2	1	3	2	3	3
CO3	2	3	3	2	1	3	2	3	3
CO4	2	3	3	2	1	3	2	3	3
CO5	2	3	3	2	1	3	2	3	3
CO6	2	2	3	3	-	3	3	3	2
AVG	2	2.8	3	2.1	0.83	3	2.1	3	2.8

INFERENCE: 1- LOW, 2- MEDIUM, 3 -HIGH

### COURSE OUTCOME – PROGRAM-SPECIFIC OUTCOME MATRIX

SL NO	COURSE OUTCOME	PROGRAM SPECIFIC OUTCOME MATRIX			
		PSO 1	PSO 2	PSO 3	PSO 4
CO1	Understand the pathophysiology, clinical manifestations and management of common diseases associated with different systems of human body.	3	2	3	3



*Sujithrasama*  
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CO2	Understand the therapeutic approach to the management of the diseases based on latest guidelines.	3	2	3	3
CO3	Understand the guidelines for rational use of antibiotics.	3	2	3	3
CO4	Understand the role of pharmacist in essential drug concept and rational drug use.	3	3	3	3
CO5	Understand the basic principle of cancer and to know cancer chemotherapeutic agents.	3	2	3	3
CO6	Understand the general prescribing guidelines for special population such as geriatrics, paediatrics, pregnancy and lactating women.	3	3	3	2
AVERAGE		3	2.3	3	2.8

INFERENCE: 1- LOW, 2- MEDIUM, 3 -HIGH

### COMPUTATION OF COURSE OUTCOME – PROGRAM OUTCOME/ PROGRAM SPECIFIC OUTCOME ATTAINMENT

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PSO1	PSO2	PSO3	PSO4
(PHARMACOTHERAPEUTICS I & II)	2	3	3	2	1	3	2	3	3	3	2	3	3
AVERAGE	2	2.8	3	2.1	0.83	3	2.1	3	2.8	3	2.3	3	2.8



*Sujithra*  
PRINCIPAL  
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### COURSE OUTCOME ATTAINMENT

#### ASSESSMENT PATTERN

ASSESSMENT TYPE	ASSESSMENT TOOL
DIRECT ATTAINMENT	FIRST INTERNAL EXAMINATION THEORY- 30
	SECOND INTERNAL EXAMINATION THEORY - 30
	THIRD INTERNAL EXAMINATION THEORY-30
	YEAR-END EXAMINATION THEORY- 70
INDIRECT ATTAINMENT	COURSE END SURVEY/ ONE MINUTE PAPER WRITING

DIRECT COURSE OUTCOME ATTAINMENT = 20% OF INTERNAL EXAMINATION (IE)  
ATTAINMENT +80% OF YEAR END EXAMINATION (EE) ATTAINMENT.

OVERALL COURSE OUTCOME ATTAINMENT = 90% DIRECT COURSE OUTCOME  
ATTAINMENT + 10% OF INDIRECT ATTAINMENT



*Srijithvaran*

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### CO ATTAINMENT TARGET LEVELS

ASSESSMENT METHOD	ATTAINMENT LEVEL	
YEAR-END EXAMINATION	THRESHOLD VALUE FOR THEORY - 70 THRESHOLD VALUE IS 50%. i.e $0.5 \times (70) = 35$	
	LEVEL 1	50% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 2	60% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 3	70% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
ASSESSMENT METHOD	ATTAINMENT LEVEL	
INTERNAL EXAMINATIONS	INTERNAL ASSESSMENT (30) THRESHOLD VALUE IS 50%. i.e $0.5 \times (30) = 15$	
	LEVEL 1	50% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 2	60% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 3	70% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY

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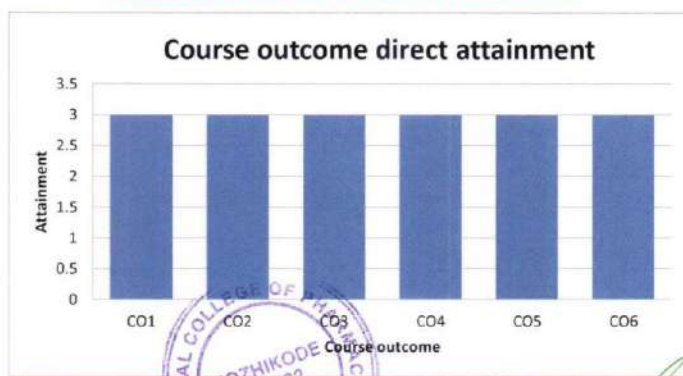
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### COMPUTATION OF CO DIRECT ATTAINMENT

COs	Assessment tool (internal examination /year end examination)	INTERNAL EXAMINATION(IE)		YEAR END EXAMINATION (EE)	DIRECT CO ATTAINMENT =(0.2*IE ATTAINMENT LEVEL)+(0.8*EE ATTAINMENT LEVEL)
		ATTAINMENT LEVEL	AVERAGE ATTAINMENT LEVEL	ATTAINMENT LEVEL	
CO1	THEORY	3	3	3	3
CO2	THEORY	3	3	3	3
CO3	THEORY	3	3	3	3
CO4	THEORY	3	3	3	3
CO5	THEORY	3	3	3	3
CO6	THEORY	3	3	3	3

### COURSE OUTCOME DIRECT ATTAINMENT



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*Sujitha*  
Principal  
National College of Pharmacy  
Manassery, Kozhikode





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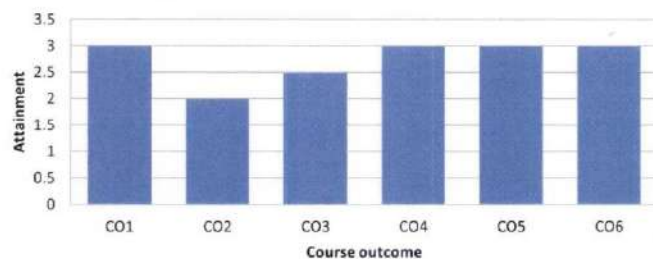
### COMPUTATION OF CO INDIRECT ATTAINMENT IN THE COURSE:

**Attainment of CO Pharmacotherapeutics I & II = (Level-1 X No of Students Attempted) + (Level-2 x No of Students Attempted) + (Level-3 X No of Students Attempted) / Total No of Students**

COs	CO1	CO2	CO3	CO4	CO5	CO6
Students Answered Level-1	0	0	0	0	0	0
Students Answered Level-2	0	2	1	0	0	0
Students Answered Level-3	2	0	1	2	2	2
<b>TOTAL STUDENTS PARTICIPATED</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>CO Attainment Level</b>	<b>3</b>	<b>2</b>	<b>2.5</b>	<b>3</b>	<b>3</b>	<b>3</b>

INFERENCE: 1- LOW, 2- MEDIUM, 3 -HIGH

### Computation of CO indirect method



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode

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### COMPUTATION OF COURSE OUTCOME OVERALL ATTAINMENT

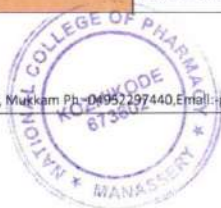
CO	DIRECT CO ATTAINMENT LEVEL(DA)	INDIRECT CO ATTAINMENT LEVEL(IDA)	OVERALL CO ATTAINMENT LEVEL (0.9*DA+0.1*IDA)
CO1	3	3	3
CO2	3	2	2.9
CO3	3	2.5	2.95
CO4	3	3	3
CO5	3	3	3
CO5	3	3	3
AVERAGE CO ATTAINMENT			2.97

### PO\PSO ASSESMENT PROCESS

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
PHARMACOTHERAPEUTICS I & II	2	3	3	2	1	3	2	3	3
AVERAGE	2	2.8	3	2.1	0.83	3	2.1	3	2.8

PO	ATTAINMENT LEVEL
PO1	$2.0 \times 2.97 / 3 = 1.98$
PO2	$2.8 \times 2.97 / 3 = 2.77$
PO3	$3.0 \times 2.97 / 3 = 2.97$
PO4	$2.1 \times 2.97 / 3 = 2.07$
PO5	$0.83 \times 2.97 / 3 = 0.82$
PO6	$3.0 \times 2.97 / 3 = 2.97$
PO7	$2.1 \times 2.97 / 3 = 2.07$
PO8	$3.0 \times 2.97 / 3 = 2.97$
PO9	$2.8 \times 2.97 / 3 = 2.77$

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*Sujitha*  
Principal  
National College of Pharmacy  
Manassery, Kozhikode



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### RESULT OF PO ATTAINMENT

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
PHARMACOTHERAPEUTICS I & II	2	3	3	2	1	3	2	3	3
ATTAINMENT	1.98	2.77	2.97	2.07	0.82	2.97	2.07	2.97	2.77

### PSO's ATTAINMENT RESULTS

PSO= Average value of PSO\*CO attainment average/3

### PSO MAPPING

COURSE	PSO1	PSO2	PSO3	PSO4
PHARMACOTHERAPEUTICS I & II	3	2	3	3
AVERAGE	3	2.3	3	2.8

### PSO ATTAINMENT COMPUTATION

PSO	ATTAINMENT LEVEL
PSO1	$3.0 \times 2.97 / 3 = 2.97$
PSO2	$2.3 \times 2.97 / 3 = 2.27$
PSO3	$3.0 \times 2.97 / 3 = 2.97$
PSO4	$2.8 \times 2.97 / 3 = 2.77$

### PSO ATTAINMENT LEVELS

COURSE	PSO1	PSO2	PSO3	PSO4
PHARMACOTHERAPEUTICS I & II	3	2	3	3
AVERAGE	2.97	2.27	2.97	2.77

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*Syithwary*  
Principal  
National College of Pharmacy  
Manassery, Kozhikode



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### ATTAINMENT OF M.PHARM



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### PROGRAM OUTCOME M.PHARM (2021-2022)

#### COURSE: MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES

##### PROGRAM OUTCOME

1. To clarify and regulate drug discovery, drug development, care, and practice, use the fundamentals of pharmaceutical chemistry, pharmaceutical analysis, pharmaceutics, and pharmacy practice.
2. The capacity to create, carry out, analyse, and interpret data for the right pharmaceutical system or procedure.
3. The capacity to design, synthesize, or isolate a drug and drug formulation system, component, or drug use process to satisfy desired needs within actual constraints, including economic, environmental, social, political, ethical, health and safety, and manufacturability and sustainability.
4. The capacity to work in multidisciplinary groups across various organizational levels in academia, business, research, and healthcare.
5. The capacity to recognize, define, and address professional issues in pharmaceutical concerns.
6. Knowledge of professional pharmacy values and ethical responsibility in carrying out professional tasks from societal, governmental, and international viewpoints.
7. The capacity to successfully communicate verbally and in writing to be recognized in social and professional circles.
8. The capacity to comprehend how pharmacy practice affects society, the economy, the environment, and the environment in general.
9. Understanding the value of, and capacity for, lifelong learning in line with the most recent developments in the professional sector in order to better serve the community.

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Principal  
National College of Pharmacy  
Manassery, Kozhikode



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10. Knowledge of current concerns relating to pharmaceutical product use in society and research, development, and manufacturing technologies.

11. The capacity to use the methods, abilities, and contemporary equipment required for professional practice research and development.

### PROGRAM-SPECIFIC OUTCOME

**PSO1:** Graduates will acquire in-depth knowledge of analytical techniques and regulatory procedures applicable to pharmaceuticals, food, cosmetics, and herbal products.

**PSO2:** Graduates will possess core knowledge of bioanalytical techniques, regulatory procedures, and a deep understanding of the responsibilities associated with Quality Control and Quality Assurance departments

**PSO3:** Graduates will demonstrate expertise in advanced pharmaceutical analytical techniques, showcasing competence in handling instruments used in spectroscopy and chromatography

**PSO4:** Graduates will develop, integrate, and apply their knowledge to critically evaluate scientific literature and conduct research projects related to product development, analytical method development, and validation.

### COURSE OUTCOME (CO)

MPT 101T	MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES
CO1	To understand the basic knowledge on assay of single and multiple component pharmaceuticals by using various analytical instruments. Skills in selecting suitable techniques for analysis of drugs and pharmaceuticals. To expand the theoretical knowledge on various instrumental techniques available for analysis of organic substances.
CO2	To develop basic practical skills using instrumentation techniques
CO3	To develop the Skills in selecting suitable techniques for analysis of drugs and pharmaceuticals

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CO4	To execute the theoretical knowledge on various instrumental techniques available for analysis of organic substances
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SL NO	COURSE OUTCOME (CO)	KNOWLEDGE LEVEL (BLOOMS LEVEL)
CO1	To understand the basic knowledge on assay of single and multiple component pharmaceuticals by using various analytical instruments. Skills in selecting the suitable techniques for analysis of drugs and pharmaceuticals. To expand the theoretical knowledge on various instrumental techniques available for analysis of organic substances.	L1, L2
CO2	To develop basic practical skills using instrumentation techniques	L1, L2
CO3	To develop the Skills in selecting suitable techniques for analysis of drugs and pharmaceuticals	L2, L3
CO4	To execute the theoretical knowledge on various instrumental techniques available for analysis of organic substances	L3

SL NO	COURSE OUTCOME	PO	PSO
CO1	To understand the basic knowledge on assay of single and multiple component pharmaceuticals by using various analytical instruments.	1,3,6,9,11	1,3,4



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kuttanadu

KMCT Medical College Campus, Manassery, P.O, Mukkam Ph:-04952297440, Email:-pharmacy@kmct.edu.in, www.nationalcollegeofpharmacy.org



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	Skills in selecting the suitable techniques for analysis of drugs and pharmaceuticals. To expand the theoretical knowledge on various instrumental techniques available for analysis of organic substances.		
CO2	To develop basic practical skills using instrumentation techniques	1,2,4,6,9,11	1,2,3,4
CO3	To develop the Skills in selecting suitable techniques for analysis of drugs and pharmaceuticals	1,6,9,10,11	2,3
CO4	To execute the theoretical knowledge on various instrumental techniques available for analysis of organic substances	1,2,3,4,9,10,11	---

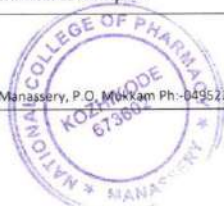
### CO Vs PO MAPPING (PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	3	-	2	-	-	2	-	-	2	-	1
CO2	3	3	-	2	-	3	-	-	3	-	2
CO3	2	-	-	-	-	3	-	-	2	2	2
CO4	2	2	2	2	-	-	-	-	2	2	1
Average	2.5	1.25	1.00	1.00	00	2.0	00	00	2.0	1.00	1.25

INFERENCE: 1- LOW, 2- MEDIUM, 3 -HIGH

SL NO	COURSE OUTCOME	PROGRAM SPECIFIC OUTCOME MATRIX			
		PSO 1	PSO 2	PSO 3	PSO 4
CO1	To understand the basic knowledge on assay of single and multiple component pharmaceuticals by using various analytical instruments Skills in selecting the suitable techniques for analysis of drugs and pharmaceuticals. To expand the theoretical knowledge on various instrumental techniques available for analysis of organic substances	2	-	1	1
CO2	To develop basic practical skills using instrumentation techniques	1	1	2	1

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*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode





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CO3	To develop the Skills in selecting suitable techniques for analysis of drugs and pharmaceuticals	-	1	1	-
CO4	To execute the theoretical knowledge on various instrumental techniques available for analysis of organic substances	-	-	-	-
AVERAGE		0.75	0.5	1.0	0.5

INFERENCE: 1- LOW, 2- MEDIUM, 3 -HIGH

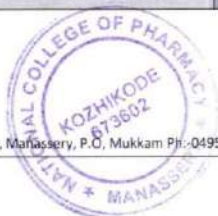
### COMPUTATION OF COURSE OUTCOME – PROGRAM OUTCOME/ PROGRAM SPECIFIC OUTCOME ATTAINMENT

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PSO1	PSO2	PSO3	PSO4
MPAT	3	1	1	1	0	2	0	0	2	1	1	1	1	1	1
AVERAGE	2.5	1.25	1.00	1.00	00	2.0	00	00	2.0	1.00	1.25	0.75	0.5	1.0	0.5

### COURSE OUTCOME ATTAINMENT

#### ASSESSMENT PATTERN

ASSESSMENT TYPE	ASSESSMENT TOOL
DIRECT ATTAINMENT	FIRST INTERNAL EXAMINATION (CM-10+SM-15) THEORY- 25
	SECOND INTERNAL EXAMINATION (CM-10+SM-15) THEORY - 25
	END SEMESTER EXAMINATION THEORY -75
INDIRECT ATTAINMENT	COURSE END SURVEY/ ONE MINUTE PAPER WRITING



*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode

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DIRECT COURSE OUTCOME ATTAINMENT = 20% OF INTERNAL EXAMINATION (IE) ATTAINMENT + 80% OF END SEMESTER EXAMINATION (EE) ATTAINMENT.

OVERALL COURSE OUTCOME ATTAINMENT = 90% DIRECT COURSE OUTCOME ATTAINMENT + 10% OF INDIRECT ATTAINMENT

### CO ATTAINMENT TARGET LEVEL

ASSESSMENT METHOD	ATTAINMENT LEVEL	
END SEMESTER EXAMINATIONS	THRESHOLD VALUE FOR THEORY (75) THRESHOLD VALUE IS 50%. i.e. $0.5 \times (75) = 37.5$	
	LEVEL 1	50% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 2	60% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 3	70% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
ASSESSMENT METHOD	ATTAINMENT LEVEL	
INTERNAL EXAMINATIONS	INTERNAL ASSESSMENT (25) (CM+SM-10+15=25) THRESHOLD VALUE IS 50%. i.e. $0.5 \times (10 + 15) = 12.5$	
	LEVEL 1	50% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 2	60% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY
	LEVEL 3	70% OF STUDENTS SCORING MORE THAN 50% MARKS IN THEORY



*Sujithamma*

PRINCIPAL  
National College of Pharmacy  
Kozhikode

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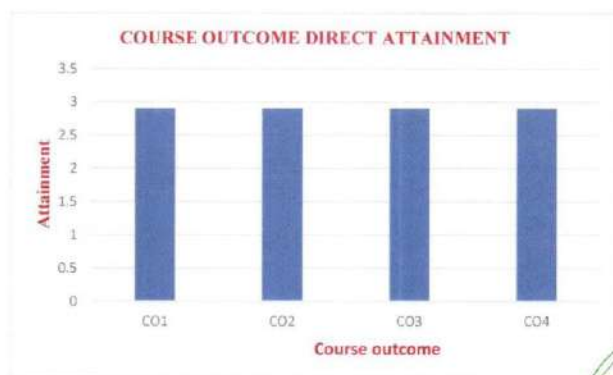


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### COMPUTATION OF CO DIRECT ATTAINMENT

COs	Assessment tool (Internal examination /End Semester examination)	INTERNAL EXAMINATION (IE)		END SEMESTER EXAMINATION (EE)	DIRECT CO ATTAINMENT = (0.2*IE ATTAINMENT LEVEL) + (0.8*EE ATTAINMENT LEVEL)
		ATTAINMENT LEVEL	AVERAGE ATTAINMENT LEVEL	ATTAINMENT LEVEL	
CO1	THEORY	2.5	2.5	3	2.9
CO2	THEORY	2.5	2.5	3	2.9
CO3	THEORY	2.5	2.5	3	2.9
CO4	THEORY	2.5	2.5	3	2.9



*Sujithram*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode

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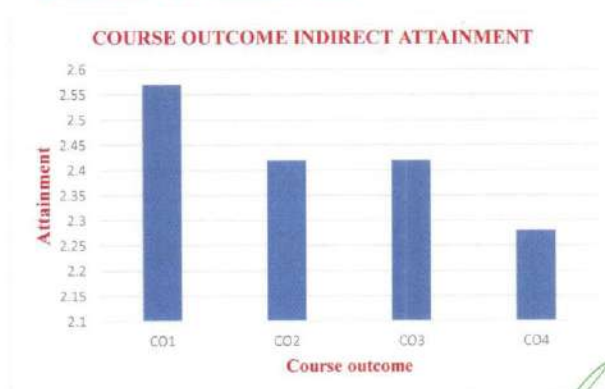
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### COMPUTATION OF CO INDIRECT ATTAINMENT IN THE COURSE:

Attainment of CO MPAT= (Level-1 X No of Students Attempted) + (Level-2x No of Students Attempted) + (Level-3 X No of Students Attempted)/Total No of Students

COS	CO1	CO2	CO3	CO4
Students Answered Level -1	1	1	1	2
Students Answered Level -2	1	2	2	1
Students Answered Level -3	5	4	4	4
<b>TOTAL STUDENTS PARTICIPATED</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>
<b>CO AttainmentLevel</b>	<b>2.57</b>	<b>2.42</b>	<b>2.42</b>	<b>2.28</b>

INFERENCE: 1- LOW, 2- MEDIUM, 3- HIGH



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*Sujitha*  
PRINCIPAL  
National College of Pharmacy  
Manassery, Kozhikode



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### COMPUTATION OF COURSE OUTCOME OVERALL ATTAINMENT

CO	DIRECT CO ATTAINMENT LEVEL(DA)	INDIRECT CO ATTAINMENT LEVEL(IDA)	OVERALL CO ATTAINMENT LEVEL (0.9*DA+0.1*IDA)
CO1	2.9	2.57	2.86
CO2	2.9	2.42	2.85
CO3	2.9	2.42	2.85
CO4	2.9	2.28	2.83
AVERAGE CO ATTAINMENT			2.85

### PO/PSO ASSESMENT PROCESS

COURSE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
MPAT	3	1	1	1	0	2	0	0	2	1	1
AVERAGE	2.5	1.25	1.00	1.00	00	2.0	00	00	2.0	1.00	1.25

PO	ATTAINMENT LEVEL
PO1	$2.5 \times 2.85 / 3 = 2.37$
PO2	$1.25 \times 2.85 / 3 = 1.18$
PO3	$1.0 \times 2.85 / 3 = 0.95$
PO4	$1.0 \times 2.85 / 3 = 0.95$
PO6	$2.0 \times 2.85 / 3 = 1.9$
PO9	$2.0 \times 2.85 / 3 = 1.9$
PO10	$1.0 \times 2.85 / 3 = 0.95$
PO11	$1.25 \times 2.85 / 3 = 1.18$

*Sujithamma*

PRINCIPAL

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### RESULT OF PO ATTAINMENT

COURSE	PO1	PO2	PO3	PO4	PO6	PO9	PO10	PO11
MPAT	3	1	1	1	2	2	1	1
ATTAINMENT	2.37	1.18	0.95	0.95	1.9	1.9	0.95	1.18

### PSO's ATTAINMENT RESULTS

PSO=Average value of PSO\*CO attainment average/3

### PSO MAPPING

COURSE	PSO1	PSO2	PSO3	PSO4
MPAT	1	1	1	1
AVERAGE	0.75	0.5	1.0	0.5

### PSO ATTAINMENT COMPUTATION

PSO	ATTAINMENT LEVEL
PSO1	$0.75 * 2.85 / 3 = 0.71$
PSO2	$0.5 * 2.85 / 3 = 0.47$
PSO3	$1.0 * 2.85 / 3 = 0.95$
PSO4	$0.5 * 2.85 / 3 = 0.47$

### PSO ATTAINMENT LEVELS

COURSE	PSO1	PSO2	PSO3	PSO4
MPAT	1	1	1	1
ATTAINMENT	0.71	0.47	0.95	0.47



*Syithamma*

PRINCIPAL

National College of Pharmacy  
Manassery, Kozhikode

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