

**PO Attainment**

Faculty Name: Saumya Tripathi

Class/Sem: B.Sc. Forensic II/Academic Year: 2022-23

Course Name: Chemistry III

Course Code: FST-303 Program Name: B.Sc. Forensic

**CO-PO MAPPING:**

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	1	2			2	1	2	3			
CO2	2	1	3		3		1	3		1	3	1
CO3	1		2	1	3	1	2		2		1	
CO4	2		3	1			3	1			2	
CO5	3	1		1	2		1	1		2		2
CO6	2	3		3	1	2	1	1			3	1

**CO ATTAINMENT:**

Saumya Tripathi	Att. Level
CO1	2.11
CO2	2.11
CO3	2.67
CO4	2.11
CO5	2.11
CO6	2.67

**PO ATTAINMENT :**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Overall PO Attainment	2.3	2.4	2.2	2.5	2.4	2.4	2.3	2.2	2.3	2.1	2.4	2.3

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*Ashwadeep Saumya*  
Faculty Signature

*[Signature]*  
Registrar  
Invertis University,  
Bareilly

Faculty Name: Saumya Tripathi

Class/Sem: B.Sc. Forensic III sem Academic Year: 2022-23

Course Name: Chemistry III

Course Code: FST-303

Program Name: B.Sc. Forensic

S. No.	University Reg. No.	Student Name	Theory (30)	Theory (30)	Theory (10)	Theory (10)	Theory (30)	Theory (10)	Internal Marks Scheme			Total Internal Marks	End Sem Exam Marks	Total Marks
									Unit Test(UT)	Attendance(AT)	Teacher Assessment(T.A)			
1	BFSC2021007	ABHISHEK SINGH	30	24	10	8	30	10	12	12	6	30	60	90
2	BFSC2021046	ADHYAYAN KALA	30	24	7	5	30	7	12	13	4	29	62	91
3	BFSC2021024	AKANKSHA ARUN TIWARI	15	12	3	3	15	3	6	4	2	12	60	72
4	BFSC2021043	AKANKSHA SINGH	30	24	7	5	30	7	12	11	4	27	64	91
5	BFSC2021040	AKSHITA KHANAL	25	20	7	5	25	7	10	7	4	21	36	57
6	BFSC2021001	AMISHA YADAV	25	20	7	5	25	7	10	9	4	23	30	53
7	BFSC2021029	ANANYA SAXENA	30	24	7	5	30	7	12	11	4	27	65	92
8	BFSC2021026	ANMOL SHARMA	15	12	3	3	15	3	6	4	2	12	38	50
9	BFSC2021005	ASHISH THAKUR	15	12	3	3	15	3	6	4	2	12	28	40
10	BFSC2021036	DIBAN DAS	25	20	7	5	25	7	10	8	4	22	42	64
11	BFSC2021037	DIKSHITA KAUSHIK	30	24	7	5	30	7	12	12	4	28	62	90
12	BFSC2021023	DIVYA SINGH	30	24	7	5	30	7	12	13	4	29	65	94
13	BFSC2021014	HARSH KUMAR	30	24	7	5	30	7	12	12	4	28	66	94
14	BFSC2021045	IFRA SALMAN	15	12	3	3	15	3	6	4	2	12	45	57
15	BFSC2021030	IMRA ZEHNAB KHAN	15	12	3	3	15	3	6	4	2	12	51	63
16	BFSC2021006	MUKUL KUMAR	25	20	7	5	25	7	10	10	4	24	38	62
17	BFSC2021042	PRATYAKSH AGARWAL	25	20	7	5	25	7	10	11	4	25	52	77
18	BFSC2021018	RAJ CHOUDHARY	15	12	3	3	15	3	6	6	2	14	28	42
19	BFSC2021033	RASHI SINGH	30	24	7	5	30	7	12	11	4	27	63	90
20	BFSC2021031	SHIMYLA PARVEEN	25	20	7	5	25	7	10	10	4	24	57	81
21	BFSC2021022	VANLALRUATSANGA PACHUAL	15	12	3	3	15	3	6	4	2	12	49	61
22	BFSC2021020	VANSHIKA JAIN	30	24	7	5	30	7	12	10	4	26	54	80
23	BFSC2021039	VISHAL BABU	25	20	7	5	25	7	10	10	4	24	60	84
24	BFSC2021002	ABDUL KADIR	15	12	3	3	15	3	6	4	2	12	AB	12
25	BFSC2021021	ABHISHEK DIXIT	15	12	3	3	15	3	6	4	2	12	AB	12
26	BFSC2021025	ABHISHEK KUMAR	15	12	3	3	15	3	6	4	2	12	AB	12
27	BFSC2021041	AKSHAY SINGH	15	12	3	3	15	3	6	4	2	12	39	51
28	BFSC2021027	AMBAR SINGH	15	12	3	3	15	3	6	4	2	12	AB	12
29	BFSC2021009	AURGHYA CHOWDHURY	15	12	3	3	15	3	6	4	2	12	AB	12
30	BFSC2021010	AYUSHI PANDEY	15	12	3	3	15	3	6	4	2	12	AB	12
31	BFSC2021011	BISHNU KUMAR RAY	15	12	3	3	15	3	6	4	2	12	AB	12
32	BFSC2021028	DIVYA KANTEKAR	15	12	3	3	15	3	6	4	2	12	AB	12
33	BFSC2021012	GAYATRI SHARMA							6	4	2	12	AB	12
Students appeared for the examination			32	32	32	32	32	33	33	33	33	22	24	33
Target / satisfactory mark set as benchmark			12	12	4	4	12	4	5	5	2	12	28	40
Students scored above the target set			32	32	16	16	32	16	33	17	16	12	24	24
% Students scored above the target set			100%	100%	50%	50%	100%	50%	100%	52%	48%	18	100%	73%
Attainment Level			3	3	1	1	3	1	3	2	1	15	3	2

	Overall														
CO1	3		1		3	1	3	2	1	15	3	2	2	2	11
CO2	3		1		3	1	3	2	1	15	3	2	2	2	11
CO3	3				3		3	2		15	3	2	2	2	67
CO4		3		1	3	1	3	2	1	15	3	2	2	2	11
CO5		3		1	3	1	3	2	1	15	3	2	2	2	11
CO6		3			3		3	2		15	3	2	2	2	67

Rubric:	
% Students	Level
<50%	1
50-75%	2
>75%	3

Overall attainment 2.30

Head of Department  
Department of Biotechnology  
Invertis University Bareilly (U)

Dean  
Faculty of Science  
Invertis University, Bareilly (U)

Faculty Signature

Date: 10/05/2023

10/27/2023



B.Sc. Forensic - III Semester

Course/Code: Chemistry III (FST-303)

Maximum Marks :70; Duration: 3 Hours

Q.No	Questions	Marks (70)	CO	BL
	<b>Explain the following:</b>			
1-I	Hybridization	01	CO1	L2
1-II	SN1 and SN2 reaction	01	CO2	L1
1-III	Atomic orbitals	01	CO2	L2
1-IV	+I and -I effect	01	CO2	L1
1-V	Calculate hybridization of $\text{XF}_4$ , $\text{XeO}_3$ .	01	CO2	L1
1-VI	Enantiomers	01	CO1	L1
1-VII	Polarity of bonds	01	CO1	L1
	<b>Explain the following:</b>			
2-I	Nucleophile	01	CO1	L1
2-II	Electrophile	01	CO1	L1
2-III	Inductive effect	01	CO1	L1
2-IV	Resonance	01	CO1	L2
2-V	Mesomeric effect	01	CO1	L1
2-VI	Conformations	01	CO1	L1
2-VII	Configurations	01	CO1	L1
3-I	Explain esterification of primary, secondary and tertiary alcohols.	7	CO2	L2
3-II	Elaborate electrophilic and free radical alkenes addition reaction.	7	CO3	L3
4-I	Explain the difference between enantiomers and diastereoisomerism.	7	CO3	L5
4-II	Write down the orbital representation methane, ethane, ethyne and benzene.	7	CO4	L3
5	Explain Diels – Alder reaction with example	14	CO5	L4
6	Explain Eliminations reactions: E1 and E2 mechanisms.	14	CO6	L6

BL – Bloom's Taxonomy Levels

(1- Remembering, 2- Understanding, 3 – Applying, 4 – Analysing, 5 – Evaluating, 6 - Creating)

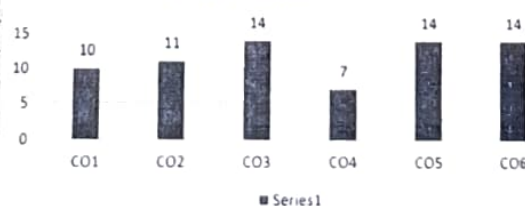
CO – Course Outcomes PO – Program Outcomes; PI Code – Performance Indicator Code

Level	Marks	CO	Marks
Level1	11	CO1	10
Level2	10	CO2	11
Level3	14	CO3	14
Level4	14	CO4	7
Level5	7	CO5	14
Level6	14	CO6	14
<b>Total</b>	<b>70</b>	<b>Total</b>	<b>70</b>

Bloom's Level wise Marks Distribution



Course Outcome wise Marks Distribution



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Q.No	Questions	Marks (30)	CO	BL
	<b>Explain the following in very short -</b>			
1-I	Define reaction	01	CO1	L1
1-II	Write full form DDT	01	CO1	L1
1-III	Agarose is consist of.....	01	CO2	L2
1-IV	The glucose isepimer of .....	01	CO1	L2
1-V	Conjugation leads to	01	CO1	L1
	<b>Explain</b>			
2-I	What is hydrogenation	01	CO2	L2
2-II	Write the factors affect inductive effect	01	CO2	L1
2-III	Define Eliminations reactions	01	CO2	L2
2-IV	Define stability of phenoxide anion	01	CO2	L2
2-V	Define Aldol reaction	01	CO2	L1
3	Discuss the SN 1 reaction mechanism	08	CO2	L3
4-A	Explain conformations and their stability	06	CO3	L4
4-B	Define projection formulae and its types	06	CO3	L4

BL – Bloom's Taxonomy Levels

(1- Remembering, 2- Understanding, 3 – Applying, 4 – Analysing, 5 – Evaluating, 6 - Creating)

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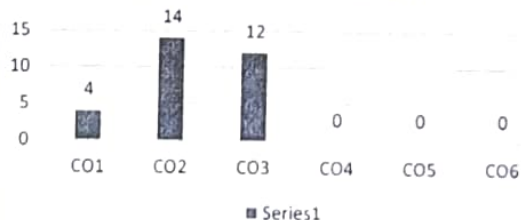
Level	Marks	CO	Marks
Level1	5	CO1	4
Level2	5	CO2	14
Level3	8	CO3	12
Level4	12	CO4	0
Level5	0	CO5	0
Level6	0	CO6	0
<b>Total</b>	<b>30</b>	<b>Total</b>	<b>30</b>

Bloom's Level wise Marks Distribution



■ Level1 ■ Level2 ■ Level3 ■ Level4 ■ Level5 ■ Level6

Course Outcome wise Marks Distribution



■ Series1

*Parky*  
Head

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Bareilly

Q.No	Questions	Marks (30)	CO	BL
	<b>Explain the following in very short -</b>			
1-I	Define reaction	01	CO4	L1
1-II	Write full form DDT	01	CO4	L1
1-III	Agarose is consist of.....	01	CO4	L2
1-IV	The glucose isepimer of .....	01	CO4	L1
1-V	Conjugation leads to	01	CO4	L1
	<b>Explain the following function -</b>			
2-I	What is hydrogenation	01	CO4	L2
2-II	Write the factors affect inductive effect	01	CO5	L2
2-III	Define Eliminations reactions	01	CO5	L2
2-IV	Define stability of phenoxide anion	01	CO5	L2
2-V	Define Aldol reaction	01	CO5	L2
3	Discuss the SN I reaction mechanism	08	CO5	L3
4-A	Explain conformations and their stability	12	CO6	L4

BL – Bloom's Taxonomy Levels

(1- Remembering, 2- Understanding, 3 – Applying, 4 – Analysing, 5 – Evaluating, 6 - Creating)

CO – Course Outcomes PO – Program Outcomes; PI Code – Performance Indicator Code

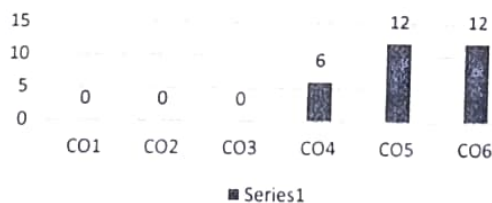
Level	Marks	CO	Marks
Level1	4	CO1	0
Level2	6	CO2	0
Level3	8	CO3	0
Level4	12	CO4	6
Level5	0	CO5	12
Level6	0	CO6	12
<b>Total</b>	<b>30</b>	<b>Total</b>	<b>30</b>

Bloom's Level wise Marks Distribution



■ Level1 ■ Level2 ■ Level3 ■ Level4 ■ Level5 ■ Level6

Course Outcome wise Marks Distribution



*Signature*  
Head

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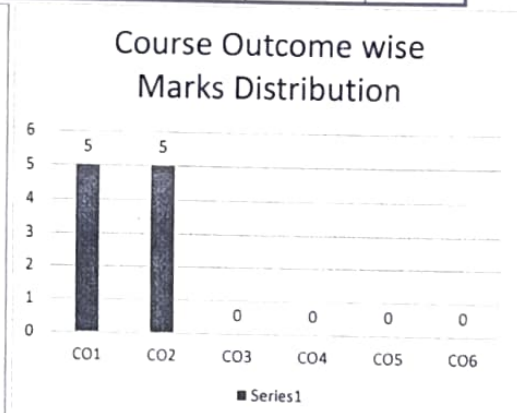
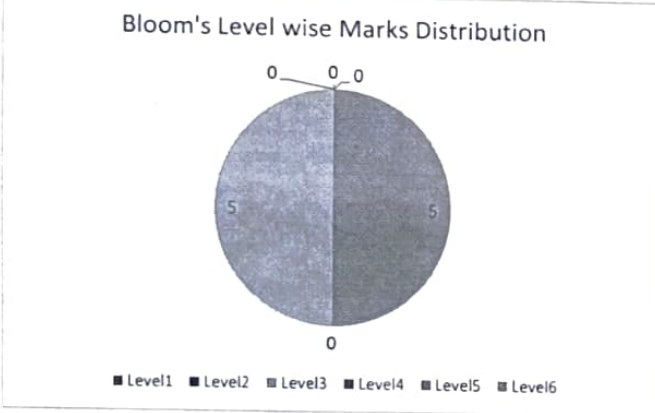
*Signature*

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Q.No	Questions	Marks (10)	CO	BL
1	Discuss addition and elimination reaction	05	CO1	L3
2	Discuss the resonance, conjugation in detail	05	CO2	L1

**BL – Bloom’s Taxonomy Levels**  
 (1- Remembering, 2- Understanding, 3 – Applying, 4 – Analysing, 5 – Evaluating, 6 - Creating)  
 CO – Course Outcomes PO – Program Outcomes; PI Code – Performance Indicator Code

Level	Marks	CO	Marks
Level1	5	CO1	5
Level2	0	CO2	5
Level3	5	CO3	0
Level4	0	CO4	0
Level5	0	CO5	0
Level6	0	CO6	0
<b>Total</b>	<b>10</b>	<b>Total</b>	<b>10</b>



*Rankey*  
 Head  
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*[Signature]*  
 Dean  
 Faculty of Science  
 Invertis University, Bareilly (U.P.)

*Kaunmya*  
*[Signature]*

**Registrar**  
**Invertis University**  
**Bareilly**

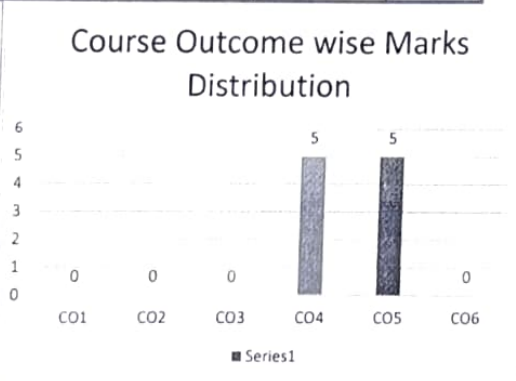
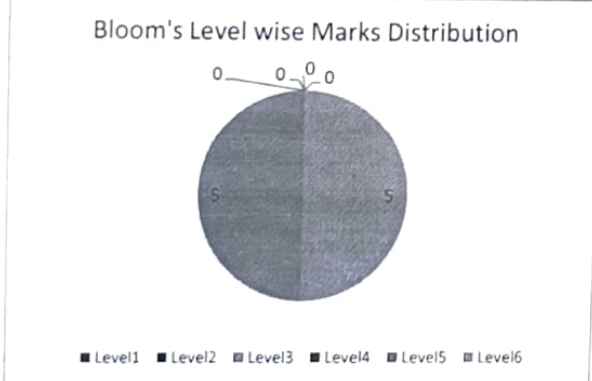


**Second Class Test 2022-23**  
**B.Sc. Forensic - III Semester**  
**Course/Code: Chemistry III (FST-303)**  
**Maximum Marks :10; Duration: 30 Minutes**

Q.No	Questions	Marks (10)	CO	BL
1	Write in short on stereoisomerism.	05	CO4	L2
2	b) What is Grignard reagent? Explain the Preparation and synthetic applications	05	CO5	L1

BL – Bloom’s Taxonomy Levels  
 (1- Remembering, 2- Understanding, 3 – Applying, 4 – Analysing, 5 – Evaluating, 6 - Creating)  
 CO – Course Outcomes PO – Program Outcomes; PI Code – Performance Indicator Code

Level	Marks	CO	Marks
Level1	5	CO1	0
Level2	5	CO2	0
Level3	0	CO3	0
Level4	0	CO4	5
Level5	0	CO5	5
Level6	0	CO6	0
<b>Total</b>	<b>10</b>	<b>Total</b>	<b>10</b>



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*[Signature]*  
Sanku

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