

 In Pursuit of Excellence	Lab Manual	SESSION-2019-2020 <hr/> SEM- I
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Faculty Details

Name of the Faculty: Dr. Nitin Kumar Agrawal

Designation: Assistant Professor

Department: Applied Sciences and Humanities

Course Details

Name of the Programme: B. Tech.

Batch: 2019-2023

Branch: CS

Semester: I

Name of Subject: Chemistry

Subject Code: KAS-102

Category of Course: Core Subject




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In Pursuit of Excellence

**Course Scheme & Exam
Scheme**

SESSION-2019-2020

SEM- I

B. Tech 1st Year (All branches except Bio Technology and Agriculture Engg.) Structure in accordance with AICTE Model Curriculum Effective w.e.f. Academic Session 2018-19, 2019-20

SEMESTER - I

Sl. No	Code	SUBJECT	PERIODS			EVALUATION SCHEME			END SEMESTER		TOTAL	CREDIT	
			L	T	P	CT	TA	Total	P	S	TE	PE	
3 WEEKS COMPULSORY INDUCTION PROGRAM													
1	KAS101/ KAS102	Physics/Chemistry	3	1	3	30	20	50	25	100	25	200	5.5
2	KAS103	Mathematics-I	3	1	0	30	20	50	-	100	-	150	4
3	KEE 101/ KCS101	Basic Electrical Engineering/Programming for Problem Solving	3	1	2	30	20	50	25	100	25	200	5
4	KCE101/ KWS101	Engineering Graphics & Design/Workshop Practices	1	0	4	-	-	-	25	-	25	50	3
MOOCs (For B.Tech. Hons. Degree)*													0
TOTAL												600	17.5

SEMESTER II

Sl. No.	Code	SUBJECT	PERIODS			EVALUATION SCHEME			END SEMESTER		TOTAL	CREDIT	
			L	T	P	CT	TA	Total	PS	TE	PE		
1	KAS201/ KAS202	Physics/Chemistry	3	1	3	30	20	50	25	100	25	200	5.5
2	KAS203	Mathematics II	3	1	0	30	20	50	-	100	-	150	4
3	KEE201/ KCS201	Basic Electrical Engineering/Programming for Problem Solving	3	1	2	30	20	50	25	100	25	200	5
4	KCE201/ KWS201	Engineering Graphics & Design/Workshop Practices	1	0	4	-	-	-	25	-	25	50	3
5	KAS204	Professional English	2	0	2	30	20	50	-	100	-	150	3
MOOCs (For B.Tech. Hons. Degree)*													0
TOTAL												750	20.5

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 In Pursuit of Excellence	Course Outcome of Practical	SESSION-2019-2020 SEM- I
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COURSE OUTCOMES

At the end of course, Students will be able to:

CO	Course Outcomes (COs)	Cognitive Levels
CO1	Find the value of the certain properties of water in terms of hardness , Iron and Chloride content.	Evaluate
CO2	Examine the some important physical properties like viscosity, surface tension etc of liquids.	Analyse
CO3	Use the pH-meter for finding the strength of solution.	Apply
CO4	Develop the polymeric compounds.	Create
CO5	Use different types of instruments for quick and accurate analysis.	Apply



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 In Pursuit of Excellence	List of Experiment as per University	SESSION-2019-2020 <hr/> SEM- I
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CHEMISTRY- PRACTICAL

LIST OF EXPERIMENTS

1. Determination of alkalinity in the given water sample.
2. Determination of temporary and permanent hardness in water sample using EDTA.
3. Determination of iron content in the given solution by Mohr's method.
4. Determination of viscosity of given liquid.
5. Determination of surface tension of given liquid.
6. Determination of chloride content in water sample.
7. Determination of available chlorine in bleaching powder.
8. Determination of pH by pH-metric titration.
9. Preparation of Phenol-formaldehyde and Urea-formaldehyde resin.
10. Determination of Cell constant and conductance of a solution.
11. Determination of rate constant of hydrolysis of esters.
12. Verification of Beer's law.

NOTE: Choice of any 10 experiments from the above. Institute can change any 02 experiments from the aforesaid experiments.



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 In Pursuit of Excellence	List of Experiment with enhancement by the Faculty Member	SESSION-2019-2020 <hr/> SEM- I
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Prescribed experiment list by University

1. Determination of alkalinity in the given water sample.
2. Determination of temporary and permanent hardness in water sample using EDTA.
3. Determination of iron content in the given solution by Mohr's method.
4. Determination of viscosity of given liquid.
5. Determination of surface tension of given liquid.
6. Determination of chloride content in water sample.
7. Determination of available chlorine in bleaching powder.
8. Determination of pH by pH-metric titration.
9. Preparation of Phenol-formaldehyde and Urea-formaldehyde resin.
10. Detection of elements and functional groups in the given organic compounds.

Practical beyond prescribed list

1. Identification of given organic compounds.
2. Determination of iodide content in iodized salt through iodometric titration with Sodium thiosulphate.

Neha

Dr. Abhishek
HOD (ASR)
M.I.T. Meladka

Course Name : Chemistry Practical
 Course Code : KAS102
 Batch : 2019 2023
 Semester : 1
 Session : 2019 2020
 L:T:P : 0.3

Course Outcomes(CO's)

Number of Course Outcomes : 5

At the end of course, Students will be able to :

Course Code	CO	Course Outcomes(COs)	Cognitive Levels
KAS102	CO1	KAS102.1 Find the value of the certain properties of water in terms of hardness , Iron and Chloride content.	Evaluate
	CO2	KAS102.2 Examine the some important physical properties like viscosity, surface tension etc of liquids.	Analyse
	CO3	KAS102.3 Use the pH-meter for finding the strength of solution.	Apply
	CO4	KAS102.4 Develop the polymeric compounds.	Create
	CO5	KAS102.5 Use different types of instruments for quick and accurate analysis.	Apply

Targets for CO Attainments

Level	Marks
3	≥ 80%
2	≥ 60% and < 80%
1	< 60%

Aim is to attain level 3

Course Code	CO	% of students getting marks ≥ 80%
KAS102	CO1	KAS102.1 80
	CO2	KAS102.2 80
	CO3	KAS102.3 80
	CO4	KAS102.4 80
	CO5	KAS102.5 80

Program Outcomes (PO's)

Engineering Graduates will be able to :

PO1	Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
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H.M.S


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PO2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
PO3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	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.




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Course Name Chemistry Practical
 Course Code KAS102
 Batch 2019 2023
 Semester 1
 Session 2019 2020
 L:T:P 0.0.3

CO-PO Mapping

Course Code	CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
KAS102	CO1 KAS102.1	2	2		2			2					2
	CO2 KAS102.2	2	2				2						2
	CO3 KAS102.3	2	1					2					
	CO4 KAS102.4	2		2				2					
	CO5 KAS102.5	3	2			2	2	2					2
Mapping Strength		KAS102	2.2	1.75	2	2	2	2	2				2



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Assessment using Continuous Internal Examination (CIE)

		High	Medium	Low		
Continuous Internal Evaluation	R1: Conduction (5 Marks)	Executed the Experiment/program with desired Input/output (5 Marks)	Partially executed the Experiment/program with Partial Input/output (1 - 4 Marks)	Experiment/program with desired Input/output was not executed (0 Marks)	Every Lab session	
	R2: File record (5 Marks)	Completed Record was submitted (5 Marks)	Record was submitted but having minor mistakes (3 - 4 Marks)	Record was submitted but having major mistakes or not submitted at all (0 - 2 Marks)		
	R3: Regularity (5 Marks)	Attended every lab session (5 Marks)	Attended lab sessions but missed few of them (3 - 4 Marks)	Not regular at all in labs (0 - 2 Marks)		
Internal lab Examination	R4: Execution (15Marks)					
	R5: Write-up (10 Marks)					
	R6: Viva voce (5 Questions 5 marks Each, i.e, 25 Marks)					

Lab Internal Examination is taken of 50 Marks and scaled to 10 marks

Assessment using Semester End Examination (SEE)

	SEE
Marks	25
CO1	Y
CO2	Y
CO3	Y
CO4	Y
CO5	Y


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 Course Code: KAS102
 Batch: 2019 2023
 Semester: 1
 Session: 2019 2020
 L:T:P: 0.0.3

CO Attainment using Continuous Internal Examination (CIE)

S.No.	Univ. Roll No.	Name	Lab Continuous Evaluation			Lab Internal Examination						Internal Marks	
			R1: Conduction	R2: File Record	R3: Regularity	R4: Execution	R5: Write-Up	R6: Viva Voce					
								CO1	CO2	CO3	CO4	CO5	
1	1900820100001	AAKASH KASHYAP	5	5	5	15	10	5	5	5	5	5	25
2	1900820100005	ABDUL BASIT	4	4	5	14	10	5	5	5	5	5	23
3	1900820100002	ABDUL HANNAN	3	3	5	15	9	5	5	5	5	5	22
4	1900820100003	ABDUL KAIF	4	3	4	14	9	5	5	5	5	5	21
5	1900820100004	ABDUL MUTTALIB	3	3	5	14	10	5	5	5	5	5	21
6	1900820100006	ABHIRAJ VARSHNEY	4	3	5	15	10	5	5	5	5	5	22
7	1900820100007	ABHISHEK KUMAR	4	4	4	14	10	5	5	5	5	5	22
8	1900820100009	ABHISHEK KUMAR YADAV	3	4	5	15	9	3	3	3	5	5	21
9	1900820100006	ABHISHEK RANA	4	3	4	14	10	5	5	5	5	5	21
10	1900820100010	ABHISHEK YADAV	3	3	5	14	10	5	5	5	5	5	21
11	1900820100011	ADITYA AGARWWAL	4	5	5	15	9	4	4	4	5	5	23
12	1900820100012	AKASH GUPTA	4	4	4	15	9	5	5	5	5	5	22
13	1900820100013	AKASH NAVEEN	3	4	5	15	9	5	5	5	5	5	22
14	1900820100014	AKSHITA SARIN	4	4	3	14	10	5	5	5	5	5	21
15	1900820100015	ALVIRA FAHEEM	4	4	3	14	10	5	5	5	5	5	21
16	1900820100017	AMAN KUMAR	4	4	5	15	8	2	2	2	5	5	21
17	1900820100018	AMAN KUMAR MAURYA	3	3	5	14	10	5	5	5	5	5	21
18	1900820100016	AMAN SAINI	4	4	4	15	9	5	5	5	5	5	22
19	1900820100019	ANANT TIWARI	4	4	3	15	8	5	5	5	5	5	21


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20	1900820100020	ANCHAL SINGH	3	3	5	13	10	5	5	5	5	5
21	1900820100021	ANIL	3	4	5	14	10	5	5	5	5	5
22	1900820100022	ANMOL SRIVASTAVA	3	3	5	13	10	5	5	5	5	5
23	1900820100023	ANTRA MAHESHWARI	4	4	3	15	9	5	5	5	5	5
24	1900820100024	ANU SHARMA	3	3	5	15	9	5	5	5	5	5
25	1900820100025	ANUBHAV BHARDWAJ	4	4	4	14	10	4	4	4	5	5
26	1900820100027	ARVIND MAURYA	3	3	5	14	9	5	5	5	5	5
27	1900820100028	ARYABH PRAJAPATI	4	4	5	15	9	5	5	5	5	5
28	1900820100030	ASHUTOSH SHARMA	4	4	5	15	9	5	5	5	5	5
29	1900820100031	AYUSH GUPTA	4	4	5	14	10	5	5	5	5	5
30	1900820100032	BHOOPENDRA SINGH GOLA	3	4	5	14	9	5	5	5	5	5
31	1900820100033	DEEKSHA GUPTA	4	5	5	15	8	5	5	5	5	5
32	1900820100034	DEVANSH BHATNAGAR	3	3	5	15	9	5	5	5	5	5
33	1900820100035	DEVANSH NATH TIWARI	3	3	5	13	10	5	5	5	5	5
34	1900820100036	DEVENDRA SINGH	4	4	5	14	10	5	5	5	5	5
35	1900820100037	DHAIRYA HANS	4	5	5	15	10	5	5	5	5	5
36	1900820100038	DHRUV RASTOGI	4	5	5	15	10	5	5	5	5	5
37	1900820100039	DIPENDRA	4	4	3	14	10	5	5	5	5	5
38	1900820100040	DIVYANG BHATNAGAR	3	3	5	15	8	5	5	5	5	5
39	1900820100041	DIVYANSH SHARMA	4	4	3	15	8	5	5	5	5	5
40	1900820100042	DIVYANSHU GAHLOT	3	4	5	15	9	5	5	5	5	5
41	1900820100043	FAIZ AYYUB	4	3	5	14	10	5	5	5	5	5
42	1900820100044	FARAZ AKBAR	4	4	3	13	10	5	5	5	5	5
43	1900820100045	GARIMA AGARWAL	4	4	5	14	10	5	5	5	5	5
44	1900820100046	GARVIT RAJPUT	3	3	5	14	9	5	5	5	5	5
45	1900820100047	GEETANJALI CHAUHAN	5	3	4	15	8	5	5	5	5	5
46	1900820100048	HAMMAD ALI	3	3	5	15	9	5	5	5	5	5
47	1900820100049	HARSH CHOUDHARY	4	4	4	14	10	4	5	4	5	4
48	1900820100050	HARSH RUHELA	4	4	5	14	10	5	5	5	5	5
49	1900820100051	HARSHIT SAXENA	4	3	4	15	9	5	5	5	5	5
50	1900820100052	HARSHIT SHARMA	5	5	4	15	9	4	4	4	5	5
51	1900820100053	HIMANSHU	4	3	4	14	10	5	5	5	5	5
52	1900820100055	ISHA CHAUDHARY	4	5	5	15	10	5	5	5	5	5
53	1900820100054	IQRA NAAZ	3	3	3	12	9	3	3	4	3	4

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54	1900820100056	JATIN	5	4	4	15	10	4	4	5	5	5
55	1900820100057	JAY PRAKASH	3	4	4	14	9	5	5	5	5	5
56	1900820100058	KASHISH SAXENA	4	4	4	12	8	5	5	5	5	5
57	1900820100059	KESHAV KUMAR MISHRA	4	5	4	15	8	5	5	5	5	5
58	1900820100060	KHAYATI SHANKHWAR	4	4	5	14	10	5	5	5	5	5
59	1900820100061	KISHAN KUMAR	5	4	4	14	9	5	5	5	5	5
60	1900820100062	KRATIKA	4	5	5	14	9	5	5	5	5	5
61	1900820100063	KUNAL VERMA	3	4	4	15	10	5	5	5	5	5
62	1900820100064	LAKSHYA DUGGAL	5	4	5	15	9	5	5	5	5	5
63	1900820100065	LAKSHYA PRATAP SINGH	4	5	4	15	8	5	5	5	5	5
64	1900820100066	MAAZ KHAN	5	3	4	15	9	5	5	5	5	5
65	1900820100067	MADHAV	4	5	5	15	8	4	4	4	5	5
66	1900820100068	MANAN MAHROTRA	5	4	4	15	8	5	5	5	5	5
67	1900820100069	MANSI VARSHNEY	5	3	4	13	10	5	5	5	5	5
68	1900820100070	MANU VERMA	4	5	4	14	10	5	5	5	5	5
69	1900820100071	MAYANK PRATAP SINGH	4	4	5	13	9	4	4	5	5	4
70	1900820100072	MITALI SINGH	4	4	5	15	9	5	5	5	5	5
71	1900820100074	MOHAMMAD ANAS ANSARI	4	3	4	15	8	5	5	5	5	5
72	1900820100076	MOHAMMAD FAISAL	4	4	4	15	9	3	3	5	3	5
73	1900820100077	MOHAMMAD FAZAL	4	5	4	15	10	4	4	5	5	5
74	1900820100080	MOHAMMED HAMMAD ZAID	4	4	5	14	10	5	5	5	5	5
75	1900820100073	MOHAMMAD RAZI	3	4	4	15	10	4	4	5	5	5
76	1900820100078	MOHAMMAD SHAVEZ SIDDIQUI	4	4	4	15	10	4	5	4	4	5
77	1900820100079	MOHAMMAD UVAIS	5	4	4	14	10	5	5	5	5	5
78	1900820100081	MOHAN KRISHNA GUPTA	5	5	5	15	10	4	4	5	5	3
79	1900820100082	MOHD. ADIL	4	4	4	14	10	4	4	5	5	4
80	1900820100086	MOHD. ARMAN UL HAQ	5	3	4	13	10	5	5	5	5	5
81	1900820100083	MOHD. ATIF	3	4	5	14	10	5	5	5	5	5
82	1900820100075	MOHD. BILAL	5	5	5	15	10	4	3	4	5	5
83	1900820100087	MOHD. HARIS	4	5	3	15	8	3	3	5	5	5
84	1900820100084	MOHD. MOHSIN	3	4	4	15	9	5	5	5	5	5
85	1900820100085	MOHD. SAHDEEN	4	5	5	15	8	4	4	3	5	5
86	1900820100088	MOHD. SHUAIB	4	4	4	14	10	3	3	5	5	3
87	1900820100089	MOHD. ZAID ULLAH KHAN	4	5	5	15	10	5	5	5	5	5

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88	1900820100090	MUSKAN SINGH	3	5	4	14	9	4	3	5	5	5
89	1900820100091	NAVJEET SINGH MALHOTRA	5	4	4	14	9	4	3	4	5	3
90	1900820100092	NAWAZ ARIF	5	4	4	13	10	5	5	5	5	5
91	1900820100093	NEERAJ KUMAR	3	5	5	14	10	5	5	5	5	5
92	1900820100094	NIDHI	4	4	4	13	10	5	5	5	5	5
93	1900820100095	NIKITA CHAUDHARY	5	4	4	15	9	5	5	5	5	5
94	1900820100096	NIKUNJ RASTOGI	4	4	4	14	9	5	5	5	5	5
95	1900820100097	NIPURN SINHA	5	4	5	15	10	5	5	5	5	5
96	1900820100098	NISHANT GUPTA	4	5	4	14	8	3	3	4	4	3
97	1900820100099	PALAK TRIPATHI	5	4	5	15	10	5	5	5	5	5
98	1900820100100	PANKAJ KUMAR PAL	5	4	5	15	10	5	5	5	5	5
99	1900820100101	PANKAJ KUMAR SINGH	4	5	4	15	10	5	5	5	5	5
100	1900820100102	PRACHI	5	4	3	14	9	5	5	5	5	5
101	1900820100103	PRAKHAR ARORA	4	5	5	15	10	5	5	5	5	5
102	1900820100104	PRAKRITI GAHLOT	3	3	5	14	9	5	5	5	5	5
103	1900820100105	PRANAV GAHLOT	3	4	5	14	9	4	5	4	5	4
104	1900820100106	PRANJAL RATHORE	4	4	5	14	10	5	5	5	5	5
105	1900820100107	PRATEEK KUMAR SHARMA	4	4	4	14	9	5	5	5	5	5
106	1900820100108	PRERIT AGARWAL	3	5	5	13	10	5	5	5	5	5
107	1900820100109	PRIYA VISHNOI	4	4	4	14	10	5	5	5	5	5
108	1900820100110	PRIYANSHI VARSHNEY	4	4	4	14	10	3	5	3	5	3
109	1900820100112	PRIYANSHU SAXENA	5	4	5	15	10	5	5	5	5	5
110	1900820100111	PRIYANSHU TYAGI	3	5	4	14	9	5	5	5	5	5
111	1900820100113	PULKIT SHARMA	3	4	5	15	9	5	5	5	5	5
112	1900820100115	PUNEET BHARDWAJ	4	4	4	14	10	5	5	5	5	5
113	1900820100114	PUNEET SAINI	4	5	5	15	10	5	5	5	5	5
114	1900820100116	RAHAT ALI	3	3	5	14	9	5	5	5	5	5
115	1900820100117	RAHUL DABRAL	3	5	5	15	9	4	4	4	5	5
116	1900820100118	RAJUL BHATNAGAR	4	4	5	14	10	5	5	5	5	5
117	1900820100119	RAMEEZ AL NAVED	4	4	4	14	10	5	5	5	5	5
118	1900820100120	RISAB KUMAR	4	4	5	14	9	5	5	5	5	5
119	1900820100121	RISHABH PAL	4	4	5	15	9	3	3	3	3	4
120	1900820100122	RISHI TYAGI	4	4	5	15	8	5	5	5	5	5
121	1900820100123	RISHITA VARSHNEY	4	4	5	15	9	5	5	5	5	5

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*Dr. Manish Saini
HOD (ASH)
M.I.T. Motadabba*

122	1900820100125	RITIK SAINI	5	4	4	14	10	5	5	5	5	5
123	1900820100124	RITIK KUMAR	3	5	5	14	10	5	5	5	5	5
124	1900820100126	RITISH KUMAR SINGH	4	4	4	15	9	5	5	5	5	5
125	1900820100127	ROHIL SAIFI	3	4	4	15	8	5	5	5	5	5
126	1900820100128	ROHIT KUMAR	3	3	5	14	10	5	5	5	5	5
127	1900820100129	RUDRA SARASWAT	4	4	5	14	10	5	5	5	5	5
128	1900820100130	SAMRIDDHI BHARDWAJ	5	4	4	15	9	5	5	5	5	5
129	1900820100131	SARIM HUSSAIN	4	4	5	15	9	5	5	5	5	5
130	1900820100132	SATYAM KUMAR	4	4	5	14	10	5	5	5	5	5
131	1900820100133	SHAHNAWAZ KHAN	4	4	5	15	10	4	4	4	3	3
132	1900820100134	SHAILI RAJPUT	3	3	5	14	10	5	5	5	5	5
133	1900820100135	SHAURYA CHAUHAN	4	5	5	14	9	5	5	5	5	5
134	1900820100136	SHIKHAR SHARMA	3	5	5	14	10	5	5	5	5	5
135	1900820100137	SHIVAM KUMAR MAURYA	4	5	5	14	10	5	5	5	5	5
136	1900820100138	SHIVANI	4	5	5	15	10	5	5	5	5	5
137	1900820100139	SHIVANK CHAUDHARY	4	4	4	14	9	5	5	5	5	5
138	1900820100140	SHIVKANT TYAGI	3	3	5	15	8	5	5	5	5	5
139	1900820100141	SHOBHIT SAINI	4	4	5	14	9	5	5	5	5	5
140	1900820100150	SHRISHTI TYAGI	4	4	5	15	10	5	5	5	5	5
141	1900820100142	SHRUTI GUPTA	4	4	5	14	10	5	5	5	5	5
142	1900820100144	SHUBHAM CHAUHAN	4	4	5	15	10	5	5	5	5	5
143	1900820100145	SHUBHAM SHARMA	3	3	5	14	9	5	5	5	5	5
144	1900820100143	SHUBHAM	3	3	5	14	9	5	5	5	5	5
145	1900820100146	SHUBHNEET CHOUDHARY	4	4	5	15	10	5	5	5	5	5
146	1900820100147	SIDDHANT KAUSHIK	4	4	5	14	10	5	5	5	5	5
147	1900820100148	SIMRAN ARORA	5	4	5	15	10	5	5	5	5	5
148	1900820100149	SNEHA SIKKA	3	5	5	14	9	5	5	5	5	5
149	1900820100151	SUDHANSU DEVTRAN	3	3	5	14	9	5	5	5	5	5
150	1900820100153	TABISH ABSAR	4	4	5	14	8	3	4	4	3	3

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 Dr. Manish Saxena
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Course Name Chemistry Practical
 Course Code KAS102
 Batch 2019 2023
 Semester 1
 Session 2019 2020
 L:T:P 0.0.3

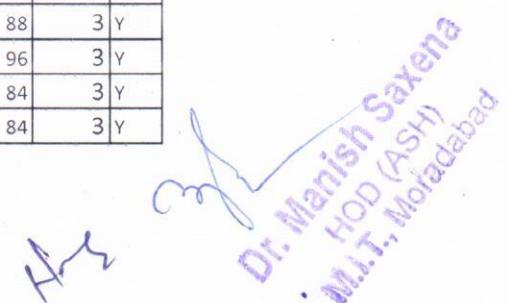
CO Attainment using Semester End Examination (SEE)

S.No.	Univ. Roll No.	Name	Max Marks	SEE			
				25	>=80%	Level (3,2,1)	Y/N
1	1900820100001	AAKASH KASHYAP	24	96	3	Y	
2	1900820100005	ABDUL BASIT	23	92	3	Y	
3	1900820100002	ABDUL HANNAN	22	88	3	Y	
4	1900820100003	ABDUL KAIF	22	88	3	Y	
5	1900820100004	ABDUL MUTTALIB	22	88	3	Y	
6	1900820100006	ABHIRAJ VARSHNEY	22	88	3	Y	
7	1900820100007	ABHISHEK KUMAR	23	92	3	Y	
8	1900820100009	ABHISHEK KUMAR YADAV	23	92	3	Y	
9	1900820100006	ABHISHEK RANA	21	84	3	Y	
10	1900820100010	ABHISHEK YADAV	21	84	3	Y	
11	1900820100011	ADITYA AGARWWAL	24	96	3	Y	
12	1900820100012	AKASH GUPTA	23	92	3	Y	
13	1900820100013	AKASH NAVEEN	22	88	3	Y	
14	1900820100014	AKSHITA SARIN	22	88	3	Y	
15	1900820100015	ALVIRA FAHEEM	21	84	3	Y	
16	1900820100017	AMAN KUMAR	22	88	3	Y	
17	1900820100018	AMAN KUMAR MAURYA	21	84	3	Y	
18	1900820100016	AMAN SAINI	22	88	3	Y	
19	1900820100019	ANANT TIWARI	23	92	3	Y	
20	1900820100020	ANCHAL SINGH	22	88	3	Y	
21	1900820100021	ANIL	23	92	3	Y	
22	1900820100022	ANMOL SRIVASTAVA	21	84	3	Y	
23	1900820100023	ANTRA MAHESHWARI	21	84	3	Y	
24	1900820100024	ANU SHARMA	21	84	3	Y	
25	1900820100025	ANUBHAV BHARDWAJ	22	88	3	Y	
26	1900820100027	ARVIND MAURYA	22	88	3	Y	
27	1900820100028	ARYABH PRAJAPATI	23	92	3	Y	
28	1900820100030	ASHUTOSH SHARMA	24	96	3	Y	
29	1900820100031	AYUSH GUPTA	24	96	3	Y	
30	1900820100032	BHOOPENDRA SINGH GOLA	23	92	3	Y	
31	1900820100033	DEEKSHA GUPTA	25	100	3	Y	
32	1900820100034	DEVANSH BHATNAGAR	24	96	3	Y	
33	1900820100035	DEVANSH NATH TIWARI	23	92	3	Y	
34	1900820100036	DEVENDRA SINGH	23	92	3	Y	
35	1900820100037	DHAIRYA HANS	25	100	3	Y	


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36	1900820100038	DHRUV RASTOGI	24	96	3 Y
37	1900820100039	DIPENDRA	22	88	3 Y
38	1900820100040	DIVYANG BHATNAGAR	22	88	3 Y
39	1900820100041	DIVYANSH SHARMA	21	84	3 Y
40	1900820100042	DIVYANSHU GAHLOT	22	88	3 Y
41	1900820100043	FAIZ AYYUB	22	88	3 Y
42	1900820100044	FARAZ AKBAR	21	84	3 Y
43	1900820100045	GARIMA AGARWAL	24	96	3 Y
44	1900820100046	GARVIT RAJPUT	22	88	3 Y
45	1900820100047	GEETANJALI CHAUHAN	23	92	3 Y
46	1900820100048	HAMMAD ALI	21	84	3 Y
47	1900820100049	HARSH CHOUDHARY	22	88	3 Y
48	1900820100050	HARSH RUHELA	24	96	3 Y
49	1900820100051	HARSHIT SAXENA	22	88	3 Y
50	1900820100052	HARSHIT SHARMA	24	96	3 Y
51	1900820100053	HIMANSHU	21	84	3 Y
52	1900820100055	ISHA CHAUDHARY	24	96	3 Y
53	1900820100054	IQRA NAAZ	21	84	3 Y
54	1900820100056	JATIN	24	96	3 Y
55	1900820100057	JAY PRAKASH	21	84	3 Y
56	1900820100058	KASHISH SAXENA	22	88	3 Y
57	1900820100059	KESHAV KUMAR MISHRA	23	92	3 Y
58	1900820100060	KHAYATI SHANKHWAR	23	92	3 Y
59	1900820100061	KISHAN KUMAR	23	92	3 Y
60	1900820100062	KRATIKA	24	96	3 Y
61	1900820100063	KUNAL VERMA	21	84	3 Y
62	1900820100064	LAKSHYA DUGGAL	24	96	3 Y
63	1900820100065	LAKSHYA PRATAP SINGH	23	92	3 Y
64	1900820100066	MAAZ KHAN	22	88	3 Y
65	1900820100067	MADHAV	23	92	3 Y
66	1900820100068	MANAN MAHROTRA	23	92	3 Y
67	1900820100069	MANSI VARSHNEY	23	92	3 Y
68	1900820100070	MANU VERMA	24	96	3 Y
69	1900820100071	MAYANK PRATAP SINGH	23	92	3 Y
70	1900820100072	MITALI SINGH	23	92	3 Y
71	1900820100074	MOHAMMAD ANAS ANSARI	21	84	3 Y
72	1900820100076	MOHAMMAD FAISAL	22	88	3 Y
73	1900820100077	MOHAMMAD FAZAL	23	92	3 Y
74	1900820100080	MOHAMMED HAMMAD ZAID	23	92	3 Y
75	1900820100073	MOHAMMAD RAZI	21	84	3 Y
76	1900820100078	MOHAMMAD SHAVEZ SIDDIQUI	21	84	3 Y
77	1900820100079	MOHAMMAD UV AIS	23	92	3 Y
78	1900820100081	MOHAN KRISHNA GUPTA	24	96	3 Y
79	1900820100082	MOHD. ADIL	21	84	3 Y
80	1900820100086	MOHD. ARMAN UL HAQ	22	88	3 Y
81	1900820100083	MOHD. ATIF	22	88	3 Y
82	1900820100075	MOHD. BILAL	24	96	3 Y
83	1900820100087	MOHD. HARIS	21	84	3 Y
84	1900820100084	MOHD. MOHSIN	21	84	3 Y


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85	1900820100085	MOHD. SAHDEEN	23	92	3 Y
86	1900820100088	MOHD. SHUAIB	21	84	3 Y
87	1900820100089	MOHD. ZAID ULLAH KHAN	24	96	3 Y
88	1900820100090	MUSKAN SINGH		0	1 N
89	1900820100091	NAVJEET SINGH MALHOTRA	22	88	3 Y
90	1900820100092	NAWAZ ARIF	24	96	3 Y
91	1900820100093	NEERAJ KUMAR	23	92	3 Y
92	1900820100094	NIDHI	22	88	3 Y
93	1900820100095	NIKITA CHAUDHARY	23	92	3 Y
94	1900820100096	NIKUNJ RASTOGI	22	88	3 Y
95	1900820100097	NIPURN SINHA	24	96	3 Y
96	1900820100098	NISHANT GUPTA	21	84	3 Y
97	1900820100099	PALAK TRIPATHI	24	96	3 Y
98	1900820100100	PANKAJ KUMAR PAL	24	96	3 Y
99	1900820100101	PANKAJ KUMAR SINGH	23	92	3 Y
100	1900820100102	PRACHI	22	88	3 Y
101	1900820100103	PRAKHAR ARORA	24	96	3 Y
102	1900820100104	PRAKRITI GAHLOT	21	84	3 Y
103	1900820100105	PRANAV GAHLOT	21	84	3 Y
104	1900820100106	PRANJAL RATHORE	24	96	3 Y
105	1900820100107	PRATEEK KUMAR SHARMA	23	92	3 Y
106	1900820100108	PRERIT AGARWAL	23	92	3 Y
107	1900820100109	PRIYA VISHNOI	22	88	3 Y
108	1900820100110	PRIYANSHI VARSHNEY	22	88	3 Y
109	1900820100112	PRIYANSHU SAXENA	25	100	3 Y
110	1900820100111	PRIYANSHU TYAGI	22	88	3 Y
111	1900820100113	PULKIT SHARMA	23	92	3 Y
112	1900820100115	PUNEET BHARDWAJ	22	88	3 Y
113	1900820100114	PUNEET SAINI	24	96	3 Y
114	1900820100116	RAHAT ALI	21	84	3 Y
115	1900820100117	RAHUL DABRAL	22	88	3 Y
116	1900820100118	RAJUL BHATNAGAR	23	92	3 Y
117	1900820100119	RAMEEZ AL NAVED	22	88	3 Y
118	1900820100120	RISAB KUMAR	23	92	3 Y
119	1900820100121	RISHABH PAL	23	92	3 Y
120	1900820100122	RISHI TYAGI		0	1 N
121	1900820100123	RISHITA VARSHNEY	24	96	3 Y
122	1900820100125	RITIK SAINI	23	92	3 Y
123	1900820100124	RITIK KUMAR	24	96	3 Y
124	1900820100126	RITISH KUMAR SINGH	22	88	3 Y
125	1900820100127	ROHIL SAIFI	21	84	3 Y
126	1900820100128	ROHIT KUMAR	21	84	3 Y
127	1900820100129	RUDRA SARASWAT	23	92	3 Y
128	1900820100130	SAMRIDDHI BHARDWAJ	23	92	3 Y
129	1900820100131	SARIM HUSSAIN	23	92	3 Y
130	1900820100132	SATYAM KUMAR	23	92	3 Y
131	1900820100133	SHAHNAWAZ KHAN	22	88	3 Y
132	1900820100134	SHAILI RAJPUT	23	92	3 Y
133	1900820100135	SHAURYA CHAUHAN	24	96	3 Y
134	1900820100136	SHIKHAR SHARMA	24	96	3 Y

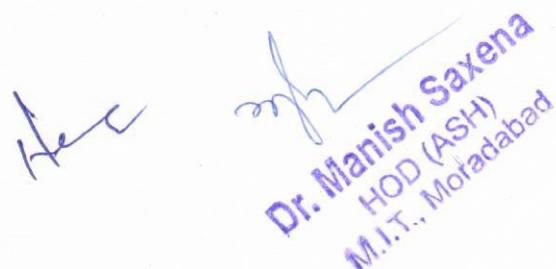


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135	1900820100137	SHIVAM KUMAR MAURYA	25	100	3	Y
136	1900820100138	SHIVANI	24	96	3	Y
137	1900820100139	SHIVANK CHAUDHARY	24	96	3	Y
138	1900820100140	SHIVKANT TYAGI	21	84	3	Y
139	1900820100141	SHOBHIT SAINI	24	96	3	Y
140	1900820100150	SHRISHTI TYAGI	23	92	3	Y
141	1900820100142	SHRUTI GUPTA	23	92	3	Y
142	1900820100144	SHUBHAM CHAUHAN	23	92	3	Y
143	1900820100145	SHUBHAM SHARMA	21	84	3	Y
144	1900820100143	SHUBHAM	24	96	3	Y
145	1900820100146	SHUBHNEET CHOUDHARY	24	96	3	Y
146	1900820100147	SIDDHANT KAUSHIK	24	96	3	Y
147	1900820100148	SIMRAN ARORA	25	100	3	Y
148	1900820100149	SNEHA SIKKA	24	96	3	Y
149	1900820100151	SUDHANSU DEVTRAN	21	84	3	Y
150	1900820100153	TABISH ABSAR	21	84	3	Y

No. of students scoring	3	148
	2	0
	1	2
Average	2.97	

Course Code	CO	CO Attained (% of students getting \geq 80% marks)	CO Attained (On Scale of 3)
KAS102	CO1	98.67	2.96
	CO2	98.67	2.96
	CO3	98.67	2.96
	CO4	98.67	2.96
	CO5	98.67	2.96



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Course Name Chemistry Practical
 Course Code KAS102
 Batch 2019 2023
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 L:T:P 0.0.3

CO Attainment and Analysis

CO Attainment using Continuous Internal Examination (CIE)

Course Code	CO	CO Attained (% of students getting $\geq 80\%$ marks)	CO Attained (On Scale of 3)
KAS102	CO1	94	2.82
	CO2	94	2.82
	CO3	97.33	2.92
	CO4	98	2.94
	CO5	96	2.88

CO Attainment using Semester End Examination (SEE)

Course Code	CO	CO Attained (% of students getting $\geq 80\%$ marks)	CO Attained (On Scale of 3)
KAS102	CO1	98.67	2.96
	CO2	98.67	2.96
	CO3	98.67	2.96
	CO4	98.67	2.96
	CO5	98.67	2.96

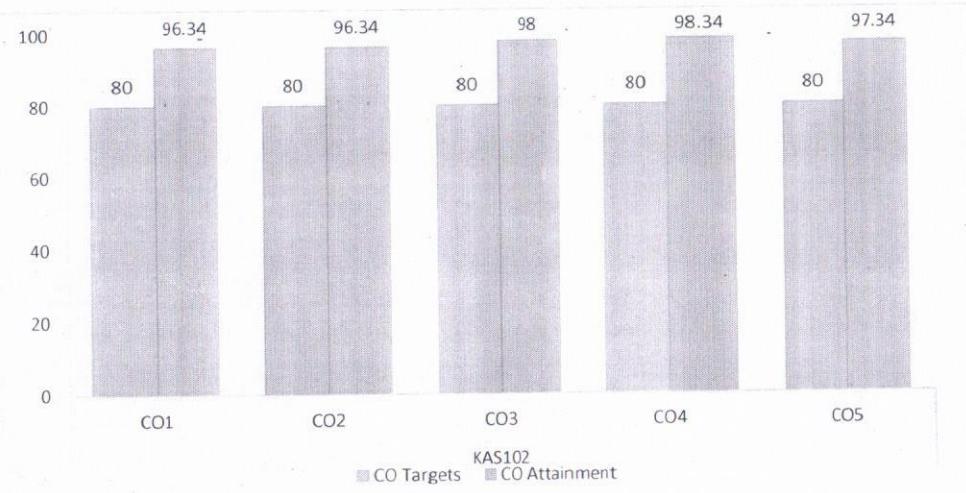
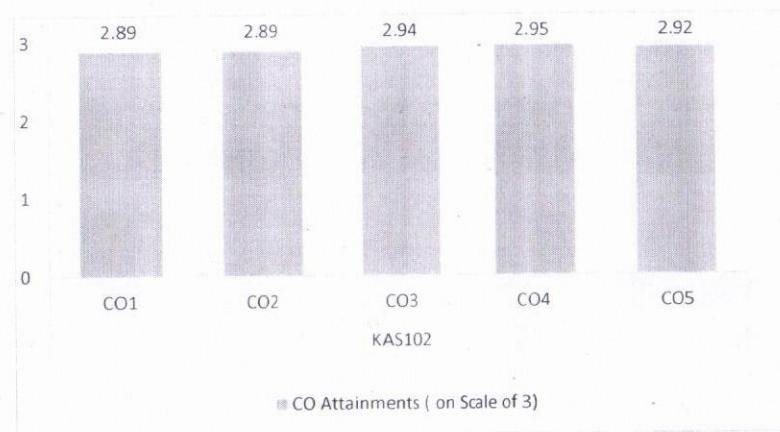
CO Attainment (CO)

Course Code	CO	CO Attained Using CIE (CO_CIE)	CO Attained using SEE (CO_SEE)	CO Attainment (CO = 0.5*CO_CIE + 0.5*CO_SEE)	CO Attainment (On Scale of 3)
KAS102	CO1	94	98.67	96.34	2.89
	CO2	94	98.67	96.34	2.89
	CO3	97.33	98.67	98	2.94
	CO4	98	98.67	98.34	2.95
	CO5	96	98.67	97.34	2.92

Course Code	CO	CO Targets	CO Attainment	Y/N
KAS102	CO1	80	96.34	Y
	CO2	80	96.34	Y
	CO3	80	98	Y
	CO4	80	98.34	Y
	CO5	80	97.34	Y


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HOD (ASH)
M.I.T., Mofadabad

Course Name : Chemistry Practical
 Course Code : KAS102
 Batch : 2019 2023
 Semester : 1
 Session : 2019 2020
 L:T:P : 0.0.3

CO Attainment Gap

Course Code	CO	CO Targets	CO Attainment	CO Attainment Gap (Target - Attainment)
KAS102	CO1	80	96.34	-16.34
	CO2	80	96.34	-16.34
	CO3	80	98	-18.00
	CO4	80	98.34	-18.34
	CO5	80	97.34	-17.34

If Gap > 0 : Target not attained
 If Gap ≤ 0 : Target attained

Closure of Quality Loop

Course Code	CO	CO Targets	CO Attainment Gap	Action proposed to bridge the gap where targets are not achieved	Modification of targets where Achieved
KAS102	CO1	80	-16.34		Target is increased to 82%
	CO2	80	-16.34		Target is increased to 82%
	CO3	80	-18.00		Target is increased to 82%
	CO4	80	-18.34		Target is increased to 82%
	CO5	80	-17.34		Target is increased to 82%


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