



HINDU COLLEGE
University of Delhi

Course Outcomes – Program Outcomes (COPO) Mapping and Attainment

Program Outcomes (PO): B.Sc. (Hons.) Chemistry

PO1: Students acquire theoretical knowledge and understanding of the fundamental concepts, principles and processes in main branches of chemistry, namely, organic chemistry, inorganic chemistry, physical chemistry, analytical chemistry and biochemistry.

PO2: A much-valued learning outcome of this programme is the laboratory skills that students develop during the course. Quantitative techniques gained through hands on methods opens choice of joining the industrial laboratory work force early on.

PO3: Communication is a highly desirable attribute to possess. Opportunities to enhance students' ability to write methodical, logical and precise reports are inherent to the structure of the programme. Techniques that effectively communicate scientific chemical content to large audiences are acquired through oral and poster presentations and regular laboratory report writing.

PO4: Modern day scientific environment requires students to possess ability to think independently as well as be able to work productively in groups. This requires some degree of balancing. The chemistry honours programme course is designed to take care of this important aspect of student development through effective teaching learning process.

Course Outcomes (CO): B.Sc. (Hons.) Chemistry

Sem	Code	Course	CO	Statement
I	32171101	Atomic Structure & Chemical Bonding	CO1	Solve the conceptual questions using the knowledge gained by studying the quantum mechanical model of the atom, quantum numbers, electronic configuration, radial and angular distribution curves, shapes of s, p, and d orbitals, and periodicity in atomic radii, ionic radii, ionization energy and electron affinity of elements.
			CO2	Draw the plausible structures and geometries of molecules using Radius Ratio Rules, VSEPR theory

				and MO diagrams (homo- & hetero-nuclear diatomic molecules).
			CO3	Understand the concept of lattice energy using Born-Landé and Kapustinskii expression.
			CO4	Rationalize the conductivity of metals, semiconductors and insulators based on the Band theory
II	32171201	Basics and Hydrocarbons	CO1	Understand and explain the different nature and behaviour of organic compounds based on fundamental concepts learnt
			CO2	Formulate the mechanism of organic reactions by recalling and correlating the fundamental properties of the reactants involved.
			CO3	Learn and identify many organic reaction mechanisms including Free Radical Substitution, Electrophilic Addition and Electrophilic Aromatic Substitution.
			CO4	Understand the fundamental concepts of stereochemistry.
III	32171301	s- and p-Block Elements	CO1	Learn the fundamental principles of metallurgy and understand the importance of recovery of by-products during extraction.
			CO2	Understand the basic and practical applications in various fields of metals and alloy behaviour and their manufacturing processes.
			CO3	Apply the thermodynamic concepts like that of Gibbs energy and entropy to the principles of extraction of metals.
			CO4	Understand the periodicity in atomic and ionic radii, electronegativity, ionization energy, electron affinity of elements of the periodic table.
IV	32171401	Coordination Chemistry	CO1	Understand the terms, ligand, denticity of ligands, chelate, coordination number and use standard rules to name coordination compounds.
			CO2	Discuss the various types of isomerism possible in such compounds and understand the types of isomerism possible in a metal complex.

			CO3	Use Valence Bond Theory to predict the structure and magnetic behaviour of metal complexes and understand the terms inner and outer orbital complexes.
			CO4	Explain the meaning of the terms Δ_o , Δ_t , pairing energy, CFSE, high spin and low spin and how CFSE affects thermodynamic properties like lattice enthalpy and hydration enthalpy
V	32171501	Biomolecules	CO1	Understand the structure of biomolecules.
			CO2	They will demonstrate what determines reactivity and biological functions of biomolecules.
			CO3	Gain insight into concepts of heredity through the study of genetic code, replication, transcription and translation.
			CO4	Demonstrate understanding of metabolic pathways, their inter-relationship, regulation and energy production from biochemical processes.
VI	32171601	Organometallic Chemistry & Bio-inorganic Chemistry	CO1	Understand and explain the basic principles of qualitative inorganic analysis.
			CO2	Apply 18-electron rule to rationalize the stability of metal carbonyls and related species.
			CO3	Understand the nature of Zeise's salt and compare its synergic effect with that of carbonyls.
			CO4	Identify important structural features of the metal alkyls tetrameric methyl lithium and dimeric trialkyl aluminium and explain the concept of multicenter bonding in these compounds.

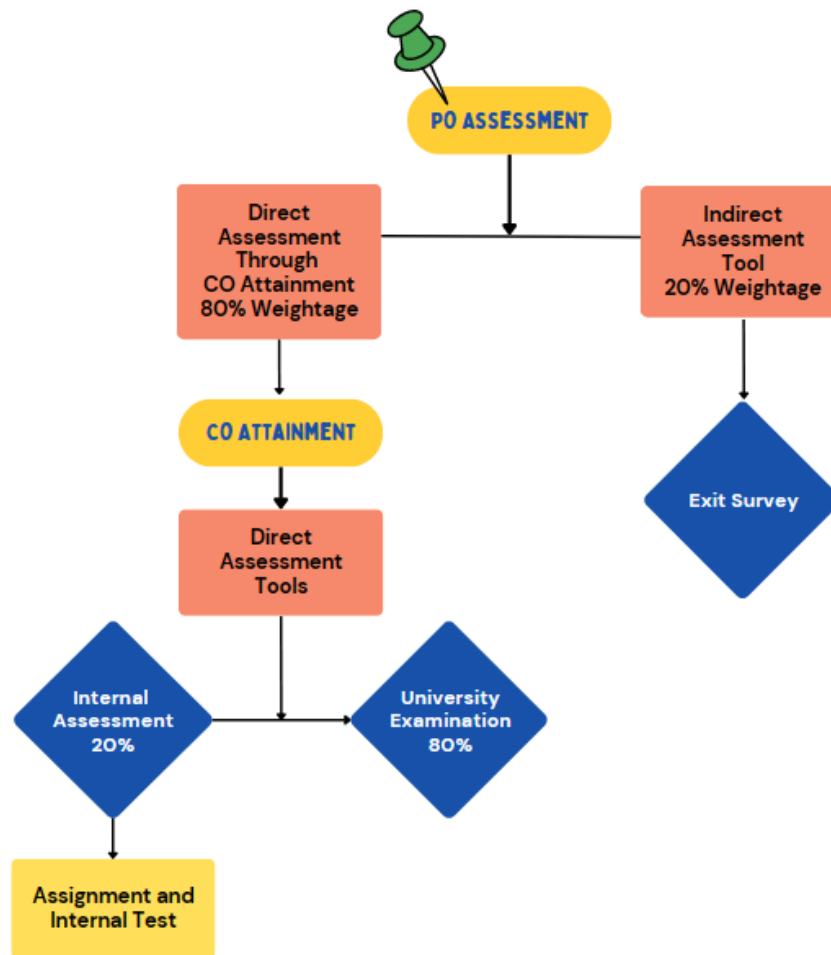
COPO Mapping: B.Sc. (Hons.) Chemistry

Sem	PO	PO1	PO2	PO3	PO4
I	CO				
	CO1	x			
	CO2	x			
	CO3		x		

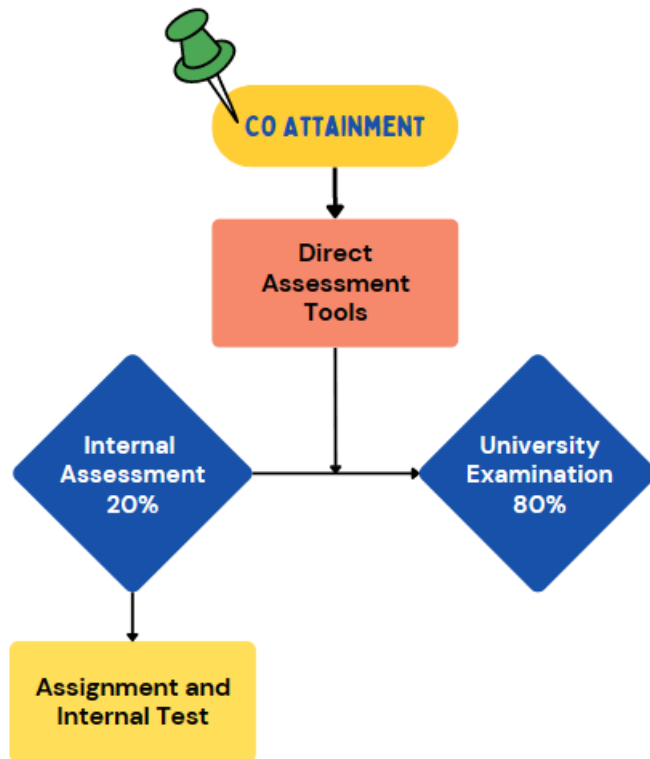
	C04		x		
II	C01	x			
	C02		x		
	C03		x		
	C04	x			
III	C01	x			
	C02	x		x	
	C03		x		
	C04	x		x	
IV	C01		x		
	C02				x
	C03			x	
	C04	x			
V	C01			x	
	C02		x		
	C03			x	
	C04				x
VI	C01		x		
	C02			x	
	C03		x		
	C04			x	x

Attainment of COs and POs in B.Sc. (Hons.) Chemistry

Assessment Tools:



CO Attainment Tools:



Internal Assessment Score:

- The internal assessment score is determined as per the following rubrics:

Range (% of attempts \geq 60%)	Level of Attainment	
≥ 80 %	3	High
>70 to <80 %	2	Medium
60-70 %	1	Low

University Examination Score:

- The University examination score is determined as per the following rubrics:

Range (% of attempts \geq 60%)	Level of Attainment	
≥ 80 %	3	High
>70 to <80 %	2	Medium
60-70 %	1	Low

Overall CO Attainment

- The overall CO attainment is calculated on a scale of 3 by considering 80 % of the level of attainment from University examination and 20% of the level of attainment from Internal assessment.

Program: B.Sc. (Hons.) Chemistry
Course Name: Atomic Structure & Chemical Bonding
Course Code: 32171101
Semester I

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10	University Exam. (Percentage = scale 10*9.5)
19026557001	PRATEEK KUMAR SHARMA	23	9	85.5
19026557002	HRISHNAM M V	18	8	76
19026557003	CHAITHRALAKSHMI V G	20	9	85.5
19026557004	ANAGHA RAG K	23	9	85.5
19026557005	ANUPAM KRISHNA V S	20	8	76
19026557006	GOWRINANDANA V S	24	9	85.5
19026557007	DHARAM SINGH MEENA	23	8	76
19026557008	SRAVAN SANGEETH S	19	8	76
19026557009	MUHAMMED NIHAL	18	8	76
19026557010	NIVED. R	20	9	85.5
19026557011	MOHAMMAD AMAAN	24	9	85.5
19026557012	HARSHIT KAIMWAL	22	9	85.5
19026557013	ABHISHEK MEENA	23	8	76
19026557014	ANAS	17	8	76
19026557015	MOHAMMED SALMAN.M.P	20	8	76
19026557016	RAMSAN VARETHANMUNG	20	8	76
19026557017	ASIF K	20	8	76
19026557018	AZMEERA MADHURIMA	19	9	85.5
19026557019	YOGITA KUMARI MEENA	17	8	76

19026557020	AMIT KUMAR MEENA	22	8	76
19026557021	DEEPSHIKHA	23	10	95
19026557022	IATEILANG LYNGDOH MAWLIEH	24	9	85.5
19026557023	SHIVANGI BASWAL	24	10	95
19026557024	SAVITA SINGH	22	9	85.5
19026557025	ANUKRITI SHARMA	22	9	85.5
19026557026	MALL AKANKSHA	24	9	85.5
19026557027	DEEPAK	22	8	76
19026557028	ROHIT CHUNBUK	20	7	66.5
19026557029	RAFA. K.P	22	9	85.5
19026557030	JYOTI BHONSLE	25	10	95
19026557031	PARAS DHAVANA	21	9	85.5
19026557032	MOHIT	21	8	76
19026557033	HIMANSHU YADAV	24	9	85.5
19026557034	RAVI KHATIK	21	8	76
19026557035	KOMAL KAVIA	24	9	85.5
19026557036	VIVEK RICHHARIYA	25	9	85.5
19026557037	SAHIL CHOUHAN	24	9	85.5
19026557038	MUSKAN JAIN	25	9	85.5
19026557039	SHORYA SHARMA	21	8	76
19026557040	HEMANT KUMAR PASWAN	22	8	76
19026557041	AMAN	20	6	57
19026557042	SRISHTI VAID	20	7	66.5
19026557043	SIMRAN VAID	21	8	76
19026557044	DHRUV	22	8	76
19026557045	AYUSHI SINGH	23	8	76
19026557046	MOHAMMED SHAHIM K.K	18	8	76
19026557047	PUSHPA DEVI	25	9	85.5
19026557048	P.F JERIN GIGI	16	8	76

19026557049	RAHUL KASHYAP	20	8	76
19026557050	RAHUL TAAK	24	9	85.5
19026557051	CHAITANYA KUMAR MEHTA	22	8	76
19026557052	MUKESH NIRMAL	23	9	85.5
19026557053	RASHI SALAMPURIYA	24	9	85.5
19026557054	AKIF NAIK	18	6	57
19026557055	AASHISH TOMAR	24	9	85.5
19026557056	DARPAN SISODIA	21	8	76
19026557057	RISHI KUMAR	25	9	85.5
19026557058	SUJIT DATTA	24	9	85.5
19026557059	BHARAT THAKUR	22	8	76
19026557060	JITENDRA BERA	24	9	85.5
19026557061	ABHINAW KUMAR	14	7	66.5
19026557062	IQRA MOHD	20	8	76
19026557063	SANKALP NIDAR	20	8	76
19026557064	BHUPENDRA MEENA	24	9	85.5
19026557065	SANTOSH KUMARI	23	9	85.5
19026557066	VAISHALI MARTOLIA	11	7	66.5
19026557067	AVINASH	22	8	76
19026557068	RAHUL	23	9	85.5
19026557069	SHIPRA GAUTAM	20	8	76
19026557070	RINKU DAHIYA	16	7	66.5
19026557071	MANOJ KUMAR	13	7	66.5
19026557072	NEHA VERMA	24	9	85.5
19026557073	RUCHI	24	9	85.5
19026557074	KAMAL YADAV	24	9	85.5
19026557075	SACHIN CHAHAR	18	8	76
19026557076	KANTA RANI	12	7	66.5
19026557077	KUNAL SAHU	22	8	76
19026557078	NEERAJ MUNDA	23	9	85.5

19026557079	ATUL KUMAR	24	9	85.5
19026557080	NEELESH LODHI	19	8	76
19026557081	PRIYANSHU THAPA	16	8	76
19026557082	SENZA BARNWAL	22	8	76
19026557083	RITIK PAL	25	9	85.5
19026557084	MANISH	21	9	85.5
19026557085	TEJAS BHANDARI	12	7	66.5
19026557086	JAYANTI	25	10	95
19026557087	RISHAB PANDEY	23	9	85.5
19026557088	YOGESH VERMA	24	9	85.5
19026557089	JATIN	23	9	85.5
19026557090	SAHIL	21	9	85.5
19026557091	SANDEEP KUMAR	20	9	85.5
19026557092	PRATEEK SINGH	22	7	66.5
19026557093	HARSH YADAV	18	9	85.5
19026557094	GAUTAM KUNDLAS	23	9	85.5
19026557095	RAHUL VERMA	21	8	76
19026557096	ABHISHEK KUMAR GUPTA	20	8	76
19026557097	NIKHIL	23	9	85.5
19026557098	RAMAN	18	7	66.5
19026557099	RAMKRESH LODHI	23	10	95
19026557100	PRIYA CHAUHAN	25	9	85.5
19026557101	ANKUR MALIK	11	7	66.5
19026557102	AASTHA SHARMA	13	7	66.5

Level of CO Attainment

Sem	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
I	No: of attempts \geq 60%	95	3	100	3	3
	Total Attempts	102		102		
	% of attempts \geq 60%	93.13		98.03		

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Attainment Metrix

Sem I	PO1	PO2	PO3	PO4
CO1	3			
CO2	3			
CO3		3		
CO4		3		

% of attempts \geq 60%	Level of Attainment	
\geq 80 %	3	High
$>$ 70 to $<$ 80 %	2	Medium
60-70 %	1	Low

Program: B.Sc. (Hons.) Chemistry
Course Name: Basics and Hydrocarbons
Course Code: 32171201
Semester II

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10	University Exam. (Percentage = scale 10*9.5)
19026557001	PRATEEK KUMAR SHARMA	25	10	95
19026557002	HRISHNAM M V	23	9	85.5
19026557003	CHAITHRALAKSHMI V G	23	8	76
19026557004	ANAGHA RAG K	24	9	85.5
19026557005	ANUPAM KRISHNA V S	24	8	76
19026557006	GOWRINANDANA V S	23	9	85.5
19026557007	DHARAM SINGH MEENA	25	8	76
19026557008	SRAVAN SANGEETH S	23	8	76
19026557009	MUHAMMED NIHAL	22	8	76
19026557010	NIVED. R	24	9	85.5
19026557011	MOHAMMAD AMAAN	22	9	85.5
19026557012	HARSHIT KAIMWAL	23	9	85.5
19026557013	ABHISHEK MEENA	24	9	85.5
19026557014	ANAS	22	8	76
19026557015	MOHAMMED SALMAN.M.P	23	8	76
19026557016	RAMSAN VARETHANMUNG	22	8	76
19026557017	ASIF K	23	9	85.5
19026557018	AZMEERA MADHURIMA	24	9	85.5

19026557019	YOGITA KUMARI MEENA	22	8	76
19026557020	AMIT KUMAR MEENA	21	8	76
19026557021	DEEPSHIKHA	24	10	95
19026557022	IATEILANG LYNGDOH MAWLIEH	24	9	85.5
19026557023	SHIVANGI BASWAL	24	10	95
19026557024	SAVITA SINGH	24	9	85.5
19026557025	ANUKRITI SHARMA	22	9	85.5
19026557026	MALL AKANKSHA	24	9	85.5
19026557027	DEEPAK	24	8	76
19026557028	ROHIT CHUNBUK	23	8	76
19026557029	RAFA. K.P	24	9	85.5
19026557030	JYOTI BHONSLE	24	10	95
19026557031	PARAS DHAVANA	21	9	85.5
19026557032	MOHIT	24	8	76
19026557033	HIMANSHU YADAV	25	9	85.5
19026557034	RAVI KHATIK	25	9	85.5
19026557035	KOMAL KAVIA	24	9	85.5
19026557036	VIVEK RICHHARIYA	25	9	85.5
19026557037	SAHIL CHOUHAN	24	9	85.5
19026557038	MUSKAN JAIN	25	9	85.5
19026557039	SHORYA SHARMA	23	8	76
19026557040	HEMANT KUMAR PASWAN	24	9	85.5
19026557041	AMAN	24	7	66.5
19026557042	SRISHTI VAID	21	7	66.5
19026557043	SIMRAN VAID	22	8	76
19026557044	DHRUV	22	8	76
19026557045	AYUSHI SINGH	24	9	85.5
19026557046	MOHAMMED SHAHIM K.K	23	8	76
19026557047	PUSHPA DEVI	24	9	85.5

19026557048	P.F JERIN GIGI	23	8	76
19026557049	RAHUL KASHYAP	23	8	76
19026557050	RAHUL TAAK	25	9	85.5
19026557051	CHAITANYA KUMAR MEHTA	24	8	76
19026557052	MUKESH NIRMAL	24	9	85.5
19026557053	RASHI SALAMPURIYA	24	9	85.5
19026557054	AKIF NAIK	24	7	66.5
19026557055	AASHISH TOMAR	25	9	85.5
19026557056	DARPAN SISODIA	24	8	76
19026557057	RISHI KUMAR	24	9	85.5
19026557058	SUJIT DATTA	24	9	85.5
19026557059	BHARAT THAKUR	23	8	76
19026557060	JITENDRA BERA	25	9	85.5
19026557061	ABHINAW KUMAR	24	8	76
19026557062	IQRA MOHD	24	8	76
19026557063	SANKALP NIDAR	21	8	76
19026557064	BHUPENDRA MEENA	24	9	85.5
19026557065	SANTOSH KUMARI	25	9	85.5
19026557066	VAISHALI MARTOLIA	20	7	66.5
19026557067	AVINASH	25	8	76
19026557068	RAHUL	23	9	85.5
19026557069	SHIPRA GAUTAM	23	8	76
19026557070	RINKU DAHIYA	21	7	66.5
19026557071	MANOJ KUMAR	23	7	66.5
19026557072	NEHA VERMA	24	9	85.5
19026557073	RUCHI	24	9	85.5
19026557074	KAMAL YADAV	25	9	85.5
19026557075	SACHIN CHAHAR	22	8	76
19026557076	KANTA RANI	21	7	66.5
19026557077	KUNAL SAHU	23	8	76

19026557078	NEERAJ MUNDA	25	9	85.5
19026557079	ATUL KUMAR	24	9	85.5
19026557080	NEELESH LODHI	24	8	76
19026557081	PRIYANSHU THAPA	22	8	76
19026557082	SENZA BARNWAL	24	8	76
19026557083	RITIK PAL	24	9	85.5
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19026557087	RISHAB PANDEY	25	9	85.5
19026557088	YOGESH VERMA	24	9	85.5
19026557089	JATIN	23	9	85.5
19026557090	SAHIL	21	9	85.5
19026557091	SANDEEP KUMAR	19	9	85.5
19026557092	PRATEEK SINGH	23	7	66.5
19026557093	HARSH YADAV	23	9	85.5
19026557094	GAUTAM KUNDLAS	23	9	85.5
19026557095	RAHUL VERMA	23	8	76
19026557096	ABHISHEK KUMAR GUPTA	23	8	76
19026557097	NIKHIL	24	9	85.5
19026557098	RAMAN	20	7	66.5
19026557099	RAMKRESH LODHI	24	10	95
19026557100	PRIYA CHAUHAN	24	9	85.5
19026557101	ANKUR MALIK	22	8	76
19026557102	AASTHA SHARMA	21	8	76

Level of CO Attainment

Sem	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
II	No: of attempts \geq 60%	102	3	102	3	3
	Total Attempts	102		102		
	% of attempts \geq 60%	100		100		

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Attainment Metrix

Sem II	PO1	PO2	PO3	PO4
CO1	3			
CO2		3		
CO3		3		
CO4	3			

% of attempts \geq 60%	Level of Attainment	
\geq 80 %	3	High
$>$ 70 to $<$ 80 %	2	Medium
60-70 %	1	Low

Program: B.Sc. (Hons.) Chemistry
Course Name: s- and p-Block Elements
Course Code: 32171301
Semester III

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10	University Exam. (Percentage = scale 10*9.5)
19026557001	PRATEEK KUMAR SHARMA	25	10	95
19026557002	HRISHNAM M V	25	9	85.5
19026557003	CHAITHRALAKSHMI V G	24	9	85.5
19026557004	ANAGHA RAG K	25	9	85.5
19026557005	ANUPAM KRISHNA V S	25	8	76
19026557006	GOWRINANDANA V S	25	10	95
19026557007	DHARAM SINGH MEENA	25	10	95
19026557008	SRAVAN SANGEETH S	25	9	85.5
19026557009	MUHAMMED NIHAL	25	9	85.5
19026557010	NIVED. R	25	10	95
19026557011	MOHAMMAD AMAAN	24	10	95
19026557012	HARSHIT KAIMWAL	25	8	76
19026557013	ABHISHEK MEENA	25	9	85.5
19026557014	ANAS	25	8	76
19026557015	MOHAMMED SALMAN.M.P	25	8	76
19026557016	RAMSAN VARETHANMUNG	20	8	76
19026557017	ASIF K	25	9	85.5
19026557018	AZMEERA MADHURIMA	25	9	85.5

19026557019	YOGITA KUMARI MEENA	25	8	76
19026557020	AMIT KUMAR MEENA	25	8	76
19026557021	DEEPSHIKHA	24	10	95
19026557022	IATEILANG LYNGDOH MAWLIEH	25	9	85.5
19026557023	SHIVANGI BASWAL	21	10	95
19026557024	SAVITA SINGH	25	9	85.5
19026557025	ANUKRITI SHARMA	25	9	85.5
19026557026	MALL AKANKSHA	24	9	85.5
19026557027	DEEPAK	25	8	76
19026557028	ROHIT CHUNBUK	21	8	76
19026557029	RAFA. K.P	25	9	85.5
19026557030	JYOTI BHONSLE	24	9	85.5
19026557031	PARAS DHAVANA	25	9	85.5
19026557032	MOHIT	25	8	76
19026557033	HIMANSHU YADAV	25	9	85.5
19026557034	RAVI KHATIK	24	9	85.5
19026557035	KOMAL KAVIA	25	9	85.5
19026557036	VIVEK RICHHARIYA	25	9	85.5
19026557037	SAHIL CHOUHAN	25	9	85.5
19026557038	MUSKAN JAIN	24	9	85.5
19026557039	SHORYA SHARMA	25	8	76
19026557040	HEMANT KUMAR PASWAN	25	9	85.5
19026557041	AMAN	25	8	76
19026557042	SRISHTI VAID	24	7	66.5
19026557043	SIMRAN VAID	25	8	76
19026557044	DHRUV	25	8	76
19026557045	AYUSHI SINGH	25	9	85.5
19026557046	MOHAMMED SHAHIM K.K	25	8	76
19026557047	PUSHPA DEVI	21	9	85.5

19026557048	P.F JERIN GIGI	25	8	76
19026557049	RAHUL KASHYAP	25	8	76
19026557050	RAHUL TAAK	25	9	85.5
19026557051	CHAITANYA KUMAR MEHTA	25	8	76
19026557052	MUKESH NIRMAL	25	9	85.5
19026557053	RASHI SALAMPURIYA	25	9	85.5
19026557054	AKIF NAIK	24	7	66.5
19026557055	AASHISH TOMAR	25	9	85.5
19026557056	DARPAN SISODIA	25	8	76
19026557057	RISHI KUMAR	25	9	85.5
19026557058	SUJIT DATTA	25	9	85.5
19026557059	BHARAT THAKUR	22	8	76
19026557060	JITENDRA BERA	24	9	85.5
19026557061	ABHINAW KUMAR	25	8	76
19026557062	IQRA MOHD	25	8	76
19026557063	SANKALP NIDAR	25	8	76
19026557064	BHUPENDRA MEENA	24	9	85.5
19026557065	SANTOSH KUMARI	25	9	85.5
19026557066	VAISHALI MARTOLIA	25	7	66.5
19026557067	AVINASH	25	8	76
19026557068	RAHUL	25	9	85.5
19026557069	SHIPRA GAUTAM	25	8	76
19026557070	RINKU DAHIYA	25	7	66.5
19026557071	MANOJ KUMAR	25	7	66.5
19026557072	NEHA VERMA	23	9	85.5
19026557073	RUCHI	25	9	85.5
19026557074	KAMAL YADAV	24	9	85.5
19026557075	SACHIN CHAHAR	25	8	76
19026557076	KANTA RANI	23	7	66.5
19026557077	KUNAL SAHU	25	8	76

19026557078	NEERAJ MUNDA	23	9	85.5
19026557079	ATUL KUMAR	24	9	85.5
19026557080	NEELESH LODHI	24	8	76
19026557081	PRIYANSHU THAPA	25	8	76
19026557082	SENZA BARNWAL	25	8	76
19026557083	RITIK PAL	25	9	85.5
19026557084	MANISH	25	9	85.5
19026557085	TEJAS BHANDARI	25	7	66.5
19026557086	JAYANTI	25	10	95
19026557087	RISHAB PANDEY	25	9	85.5
19026557088	YOGESH VERMA	25	9	85.5
19026557089	JATIN	25	9	85.5
19026557090	SAHIL	22	9	85.5
19026557091	SANDEEP KUMAR	25	9	85.5
19026557092	PRATEEK SINGH	21	7	66.5
19026557093	HARSH YADAV	25	9	85.5
19026557094	GAUTAM KUNDLAS	25	9	85.5
19026557095	RAHUL VERMA	25	8	76
19026557096	ABHISHEK KUMAR GUPTA	25	8	76
19026557097	NIKHIL	25	9	85.5
19026557098	RAMAN	25	7	66.5
19026557099	RAMKRESH LODHI	25	10	95
19026557100	PRIYA CHAUHAN	25	9	85.5
19026557101	ANKUR MALIK	25	9	85.5
19026557102	AASTHA SHARMA	24	9	85.5

Level of CO Attainment

Sem	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
III	No: of attempts $\geq 60\%$	102	3	102	3	3
	Total Attempts	102		102		
	% of attempts $\geq 60\%$	100		100		

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Attainment Metrix

Sem III	PO1	PO2	PO3	PO4
CO1	3			
CO2	3		3	
CO3		3		
CO4	3			

% of attempts $\geq 60\%$	Level of Attainment	
$\geq 80\%$	3	High
>70 to $<80\%$	2	Medium
60-70 %	1	Low

Program: B.Sc. (Hons.) Chemistry
Course Name: Coordination Chemistry
Course Code: 32171401
Semester IV

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10	University Exam. (Percentage = scale 10*9.5)
19026557001	PRATEEK KUMAR SHARMA	23	10	95
19026557002	HARIKRISHNAN M V	23	10	95
19026557003	CHAITHRALAKSHMI V G	24	10	95
19026557004	ANAGHA RAG K	24	10	95
19026557005	ANUPAM KRISHNA V S	23	9	85.5
19026557006	GOWRINANDANA V S	23	10	95
19026557007	DHARAM SINGH MEENA	25	10	95
19026557008	SRAVAN SANGEETH S	22	9	85.5
19026557009	MUHAMMED NIHAL	24	10	95
19026557010	NIVED. R	25	10	95
19026557011	MOHAMMAD AMAAN	25	10	95
19026557012	HARSHIT KAIMWAL	24	10	95
19026557013	ABHISHEK MEENA	24	9	85.5
19026557014	ANAS	25	10	95
19026557015	MOHAMMED SALMAN.M.P	24	10	95
19026557016	RAMSAN VARETHANMUNG	23	9	85.5
19026557017	ASIF K	25	10	95

19026557018	AZMEERA MADHURIMA	24	9	85.5
19026557019	YOGITA KUMARI MEENA	23	9	85.5
19026557020	AMIT KUMAR MEENA	22	9	85.5
19026557021	DEEPSHIKHA	25	10	95
19026557022	IATEILANG LYNGDOH MAWLIEH	25	10	95
19026557023	SHIVANGI BASWAL	24	10	95
19026557024	SAVITA SINGH	25	10	95
19026557025	ANUKRITI SHARMA	25	9	85.5
19026557026	MALL AKANKSHA	25	9	85.5
19026557027	DEEPAK	23	9	85.5
19026557028	ROHIT CHUNBUK	23	9	85.5
19026557029	RAFA. K.P	23	9	85.5
19026557030	JYOTI BHONSLE	25	10	95
19026557031	PARAS DHAVANA	22	9	85.5
19026557032	MOHIT	24	8	76
19026557033	HIMANSHU YADAV	23	9	85.5
19026557034	RAVI KHATIK	24	9	85.5
19026557035	KOMAL KAVIA	24	9	85.5
19026557036	VIVEK RICHHARIYA	24	9	85.5
19026557037	SAHIL CHOUHAN	23	9	85.5
19026557038	MUSKAN JAIN	24	9	85.5
19026557039	SHORYA SHARMA	22	8	76
19026557040	HEMANT KUMAR PASWAN	25	9	85.5
19026557041	AMAN	24	8	76
19026557042	SRISHTI VAID	22	7	66.5
19026557043	SIMRAN VAID	22	8	76
19026557044	DHRUV	22	8	76
19026557045	AYUSHI SINGH	25	9	85.5
19026557046	MOHAMMED SHAHIM K.K	23	8	76

19026557047	PUSHPA DEVI	25	9	85.5
19026557048	P.F JERIN GIGI	24	8	76
19026557049	RAHUL KASHYAP	24	8	76
19026557050	RAHUL TAAK	24	9	85.5
19026557051	CHAITANYA KUMAR MEHTA	24	8	76
19026557052	MUKESH NIRMAL	25	9	85.5
19026557053	RASHI SALAMPURIYA	24	9	85.5
19026557054	AKIF NAIK	25	10	95
19026557055	AASHISH TOMAR	25	9	85.5
19026557056	DARPAN SISODIA	24	8	76
19026557057	RISHI KUMAR	25	9	85.5
19026557058	SUJIT DATTA	24	9	85.5
19026557060	JITENDRA BERA	25	8	76
19026557061	ABHINAW KUMAR	23	9	85.5
19026557062	IQRA MOHD	25	8	76
19026557063	SANKALP NIDAR	22	8	76
19026557064	BHUPENDRA MEENA	25	8	76
19026557065	SANTOSH KUMARI	25	9	85.5
19026557066	VAISHALI MARTOLIA	22	9	85.5
19026557067	AVINASH	25	10	95
19026557068	RAHUL	25	8	76
19026557070	RINKU DAHIYA	24	9	85.5
19026557071	MANOJ KUMAR	22	8	76
19026557072	NEHA VERMA	25	7	66.5
19026557073	RUCHI	25	7	66.5
19026557074	KAMAL YADAV	25	9	85.5
19026557075	SACHIN CHAHAR	22	9	85.5
19026557076	KANTA RANI	23	9	85.5
19026557077	KUNAL SAHU	25	8	76
19026557078	NEERAJ MUNDA	25	7	66.5

19026557079	ATUL KUMAR	24	8	76
19026557080	NEELESH LODHI	25	9	85.5
19026557081	PRIYANSHU THAPA	23	9	85.5
19026557082	SENZA BARNWAL	23	8	76
19026557083	RITIK PAL	25	9	85.5
19026557084	MANISH	23	9	85.5
19026557085	TEJAS BHANDARI	22	9	85.5
19026557086	JAYANTI	25	10	95
19026557087	RISHAB PANDEY	25	7	66.5
19026557088	YOGESH VERMA	25	10	95
19026557089	JATIN	24	9	85.5
19026557090	SAHIL	23	9	85.5
19026557091	SANDEEP KUMAR	24	9	85.5
19026557092	PRATEEK SINGH	25	9	85.5
19026557093	HARSH YADAV	22	9	85.5
19026557094	GAUTAM KUNDLAS	22	7	66.5
19026557095	RAHUL VERMA	23	9	85.5
19026557096	ABHISHEK KUMAR GUPTA	25	9	85.5
19026557097	NIKHIL	23	8	76
19026557098	RAMAN	22	8	76
19026557099	RAMKRESH LODHI	25	9	85.5
19026557100	PRIYA CHAUHAN	23	10	95
19026557101	ANKUR MALIK	22	9	85.5
19026557102	AASTHA SHARMA	22	9	85.5

Level of CO Attainment

Sem	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
IV	No: of attempts \geq 60%	100	3	100	3	3
	Total Attempts	100		100		
	% of attempts \geq 60%	100		100		

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Attainment Metrix

Sem IV	PO1	PO2	PO3	PO4
CO1		3		
CO2				3
CO3			3	
CO4	3			

% of attempts \geq 60%	Level of Attainment	
\geq 80 %	3	High
$>$ 70 to $<$ 80 %	2	Medium
60-70 %	1	Low

Program: B.Sc. (Hons.) Chemistry
Course Name: Biomolecules
Course Code: 32171501
Semester V

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10	University Exam. (Percentage = scale 10*9.5)
19026557001	PRATEEK KUMAR SHARMA	23	9	85.5
19026557002	HARIKRISHNAN M V	24	9	85.5
19026557003	CHAITHRALAKSHMI V G	24	8	76
19026557004	ANAGHA RAG K	24	9	85.5
19026557005	ANUPAM KRISHNA V S	23	9	85.5
19026557006	GOWRINANDANA V S	24	10	95
19026557007	DHARAM SINGH MEENA	25	10	95
19026557008	SRAVAN SANGEETH S	22	9	85.5
19026557009	MUHAMMED NIHAL	24	9	85.5
19026557010	NIVED. R	25	9	85.5
19026557011	MOHAMMAD AMAAN	25	9	85.5
19026557012	HARSHIT KAIMWAL	24	9	85.5
19026557013	ABHISHEK MEENA	24	9	85.5
19026557014	ANAS	25	9	85.5
19026557015	MOHAMMED SALMAN.M.P	24	8	76
19026557016	RAMSAN VARETHANMUNG	23	9	85.5
19026557017	ASIF K	23	8	76
19026557018	AZMEERA MADHURIMA	24	9	85.5
19026557019	YOGITA KUMARI MEENA	23	9	85.5
19026557020	AMIT KUMAR MEENA	22	9	85.5

19026557021	DEEPSHIKHA	25	10	95
19026557022	IATEILANG LYNGDOH MAWLIEH	25	10	95
19026557023	SHIVANGI BASWAL	24	10	95
19026557024	SAVITA SINGH	25	10	95
19026557025	ANUKRITI SHARMA	25	9	85.5
19026557026	MALL AKANKSHA	25	9	85.5
19026557027	DEEPAK	23	9	85.5
19026557028	ROHIT CHUNBUK	23	9	85.5
19026557029	RAFA. K.P	23	9	85.5
19026557030	JYOTI BHONSLE	25	10	95
19026557031	PARAS DHAVANA	22	9	85.5
19026557032	MOHIT	24	8	76
19026557033	HIMANSHU YADAV	23	9	85.5
19026557034	RAVI KHATIK	24	9	85.5
19026557035	KOMAL KAVIA	24	9	85.5
19026557036	VIVEK RICHHARIYA	24	9	85.5
19026557037	SAHIL CHOUHAN	23	9	85.5
19026557038	MUSKAN JAIN	24	9	85.5
19026557039	SHORYA SHARMA	22	8	76
19026557040	HEMANT KUMAR PASWAN	25	9	85.5
19026557041	AMAN	24	8	76
19026557042	SRISHTI VAID	22	7	66.5
19026557043	SIMRAN VAID	22	8	76
19026557044	DHRUV	22	8	76
19026557045	AYUSHI SINGH	25	9	85.5
19026557046	MOHAMMED SHAHIM K.K	23	8	76
19026557047	PUSHPA DEVI	25	9	85.5
19026557048	P.F JERIN GIGI	24	8	76
19026557049	RAHUL KASHYAP	24	8	76

19026557050	RAHUL TAAK	24	9	85.5
19026557051	CHAITANYA KUMAR MEHTA	24	8	76
19026557052	MUKESH NIRMAL	25	9	85.5
19026557053	RASHI SALAMPURIYA	24	9	85.5
19026557054	AKIF NAIK	25	10	95
19026557055	AASHISH TOMAR	25	9	85.5
19026557056	DARPAN SISODIA	24	8	76
19026557057	RISHI KUMAR	25	9	85.5
19026557058	SUJIT DATTA	24	9	85.5
19026557060	JITENDRA BERA	25	8	76
19026557061	ABHINAW KUMAR	23	9	85.5
19026557062	IQRA MOHD	25	8	76
19026557063	SANKALP NIDAR	22	8	76
19026557064	BHUPENDRA MEENA	25	8	76
19026557065	SANTOSH KUMARI	25	9	85.5
19026557066	VAISHALI MARTOLIA	22	9	85.5
19026557067	AVINASH	25	10	95
19026557068	RAHUL	25	8	76
19026557070	RINKU DAHIYA	24	9	85.5
19026557071	MANOJ KUMAR	22	8	76
19026557072	NEHA VERMA	25	7	66.5
19026557073	RUCHI	25	7	66.5
19026557074	KAMAL YADAV	25	9	85.5
19026557075	SACHIN CHAHAR	22	9	85.5
19026557076	KANTA RANI	23	9	85.5
19026557077	KUNAL SAHU	25	8	76
19026557078	NEERAJ MUNDA	25	7	66.5
19026557079	ATUL KUMAR	24	8	76
19026557080	NEELESH LODHI	25	9	85.5
19026557081	PRIYANSHU THAPA	23	9	85.5

19026557082	SENZA BARNWAL	23	8	76
19026557083	RITIK PAL	25	9	85.5
19026557084	MANISH	23	9	85.5
19026557085	TEJAS BHANDARI	22	9	85.5
19026557086	JAYANTI	25	10	95
19026557087	RISHAB PANDEY	25	7	66.5
19026557088	YOGESH VERMA	25	10	95
19026557089	JATIN	24	9	85.5
19026557090	SAHIL	23	9	85.5
19026557091	SANDEEP KUMAR	24	9	85.5
19026557092	PRATEEK SINGH	25	9	85.5
19026557093	HARSH YADAV	22	9	85.5
19026557094	GAUTAM KUNDLAS	22	7	66.5
19026557095	RAHUL VERMA	23	9	85.5
19026557096	ABHISHEK KUMAR GUPTA	24	9	85.5
19026557097	NIKHIL	23	8	76
19026557098	RAMAN	22	8	76
19026557099	RAMKRESH LODHI	25	10	95
19026557100	PRIYA CHAUHAN	23	9	85.5
19026557101	ANKUR MALIK	21	7	66.5
19026557102	AASTHA SHARMA	23	9	85.5

Level of CO Attainment

Sem	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
V	No: of attempts $\geq 60\%$	100	3	100	3	3
	Total Attempts	100		100		
	% of attempts $\geq 60\%$	100		100		

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Attainment Metrix

Sem V	PO1	PO2	PO3	PO4
CO1	3			
CO2			3	
CO3		3	3	
CO4				3

% of attempts $\geq 60\%$	Level of Attainment	
$\geq 80\%$	3	High
>70 to $<80\%$	2	Medium
60-70 %	1	Low

Program: B.Sc. (Hons.) Chemistry
Course Name: Organometallic Chemistry & Bio-inorganic Chemistry
Course Code: 32171601
Semester VI

Attainment (Direct Assessment)

Roll No.	Name	Internal Assessment Out of 25	University Exam. Out of Scale 10	University Exam. (Percentage = scale 10*9.5)
19026557001	PRATEEK KUMAR SHARMA	25	9	85.5
19026557002	HARIKRISHNAN M V	23	9	85.5
19026557003	CHAITHRALAKSHMI V G	25	8	76
19026557004	ANAGHA RAG K	24	9	85.5
19026557005	ANUPAM KRISHNA V S	23	9	85.5
19026557006	GOWRINANDANA V S	23	8	76
19026557007	DHARAM SINGH MEENA	24	8	76
19026557008	SRAVAN SANGEETH S	22	9	85.5
19026557009	MUHAMMED NIHAL	24	9	85.5
19026557010	NIVED. R	25	9	85.5
19026557011	MOHAMMAD AMAAN	24	9	85.5
19026557012	HARSHIT KAIMWAL	24	9	85.5
19026557013	ABHISHEK MEENA	24	9	85.5
19026557014	ANAS	25	9	85.5
19026557015	MOHAMMED SALMAN.M.P	24	8	76
19026557016	RAMSAN VARETHANMUNG	23	9	85.5
19026557017	ASIF K	23	8	76
19026557018	AZMEERA MADHURIMA	24	9	85.5
19026557019	YOGITA KUMARI MEENA	23	9	85.5

19026557020	AMIT KUMAR MEENA	22	9	85.5
19026557021	DEEPSHIKHA	25	9	85.5
19026557022	IATEILANG LYNGDOH MAWLIEH	24	9	85.5
19026557023	SHIVANGI BASWAL	24	9	85.5
19026557024	SAVITA SINGH	25	9	85.5
19026557025	ANUKRITI SHARMA	25	9	85.5
19026557026	MALL AKANKSHA	25	9	85.5
19026557027	DEEPAK	23	9	85.5
19026557028	ROHIT CHUNBUK	23	9	85.5
19026557029	RAFA. K.P	23	9	85.5
19026557030	JYOTI BHONSLE	25	9	85.5
19026557031	PARAS DHAVANA	22	9	85.5
19026557032	MOHIT	24	8	76
19026557033	HIMANSHU YADAV	23	9	85.5
19026557034	RAVI KHATIK	24	9	85.5
19026557035	KOMAL KAVIA	24	9	85.5
19026557036	VIVEK RICHHARIYA	24	9	85.5
19026557037	SAHIL CHOUHAN	23	9	85.5
19026557038	MUSKAN JAIN	24	9	85.5
19026557039	SHORYA SHARMA	22	8	76
19026557040	HEMANT KUMAR PASWAN	25	9	85.5
19026557041	AMAN	24	8	76
19026557042	SRISHTI VAID	22	7	66.5
19026557043	SIMRAN VAID	22	8	76
19026557044	DHRUV	22	8	76
19026557045	AYUSHI SINGH	25	9	85.5
19026557046	MOHAMMED SHAHIM K.K	23	8	76
19026557047	PUSHPA DEVI	25	9	85.5
19026557048	P.F JERIN GIGI	24	8	76

19026557049	RAHUL KASHYAP	24	8	76
19026557050	RAHUL TAAK	24	9	85.5
19026557051	CHAITANYA KUMAR MEHTA	24	8	76
19026557052	MUKESH NIRMAL	25	9	85.5
19026557053	RASHI SALAMPURIYA	24	9	85.5
19026557054	AKIF NAIK	25	9	85.5
19026557055	AASHISH TOMAR	25	9	85.5
19026557056	DARPAN SISODIA	24	8	76
19026557057	RISHI KUMAR	25	9	85.5
19026557058	SUJIT DATTA	24	9	85.5
19026557060	JITENDRA BERA	25	8	76
19026557061	ABHINAW KUMAR	23	9	85.5
19026557062	IQRA MOHD	25	8	76
19026557063	SANKALP NIDAR	22	8	76
19026557064	BHUPENDRA MEENA	25	8	76
19026557065	SANTOSH KUMARI	25	9	85.5
19026557066	VAISHALI MARTOLIA	22	9	85.5
19026557067	AVINASH	23	8	76
19026557068	RAHUL	25	8	76
19026557070	RINKU DAHIYA	24	9	85.5
19026557071	MANOJ KUMAR	22	8	76
19026557072	NEHA VERMA	25	7	66.5
19026557073	RUCHI	25	7	66.5
19026557074	KAMAL YADAV	25	9	85.5
19026557075	SACHIN CHAHAR	22	9	85.5
19026557076	KANTA RANI	23	9	85.5
19026557077	KUNAL SAHU	25	8	76
19026557078	NEERAJ MUNDA	25	7	66.5
19026557079	ATUL KUMAR	24	8	76
19026557080	NEELESH LODHI	25	9	85.5

19026557081	PRIYANSHU THAPA	23	9	85.5
19026557082	SENZA BARNWAL	23	8	76
19026557083	RITIK PAL	25	9	85.5
19026557084	MANISH	23	9	85.5
19026557085	TEJAS BHANDARI	22	9	85.5
19026557086	JAYANTI	25	10	95
19026557087	RISHAB PANDEY	25	7	66.5
19026557088	YOGESH VERMA	25	8	76
19026557089	JATIN	24	9	85.5
19026557090	SAHIL	23	9	85.5
19026557091	SANDEEP KUMAR	24	9	85.5
19026557092	PRATEEK SINGH	25	9	85.5
19026557093	HARSH YADAV	22	9	85.5
19026557094	GAUTAM KUNDLAS	22	7	66.5
19026557095	RAHUL VERMA	23	9	85.5
19026557096	ABHISHEK KUMAR GUPTA	25	9	85.5
19026557097	NIKHIL	23	8	76
19026557098	RAMAN	22	8	76
19026557099	RAMKRESH LODHI	25	8	76
19026557100	PRIYA CHAUHAN	23	9	85.5
19026557101	ANKUR MALIK	22	7	66.5
19026557102	AASTHA SHARMA	22	9	85.5

Level of CO Attainment

Sem	Attempts	Internal Assessment	Level of Attainment	University Examination	Level of Attainment	*Overall CO Attainment
VI	No: of attempts \geq 60%	100	3	100	3	3
	Total Attempts	100		100		
	% of attempts \geq 60%	100		100		

*Overall Attainment = (20% of Internal Assessment Attainment + 80% of University Examination Attainment)

Course Level COPO Attainment Metrix

Sem VI	PO1	PO2	PO3	PO4
CO1		3		
CO2			3	
CO3		3		
CO4			3	3

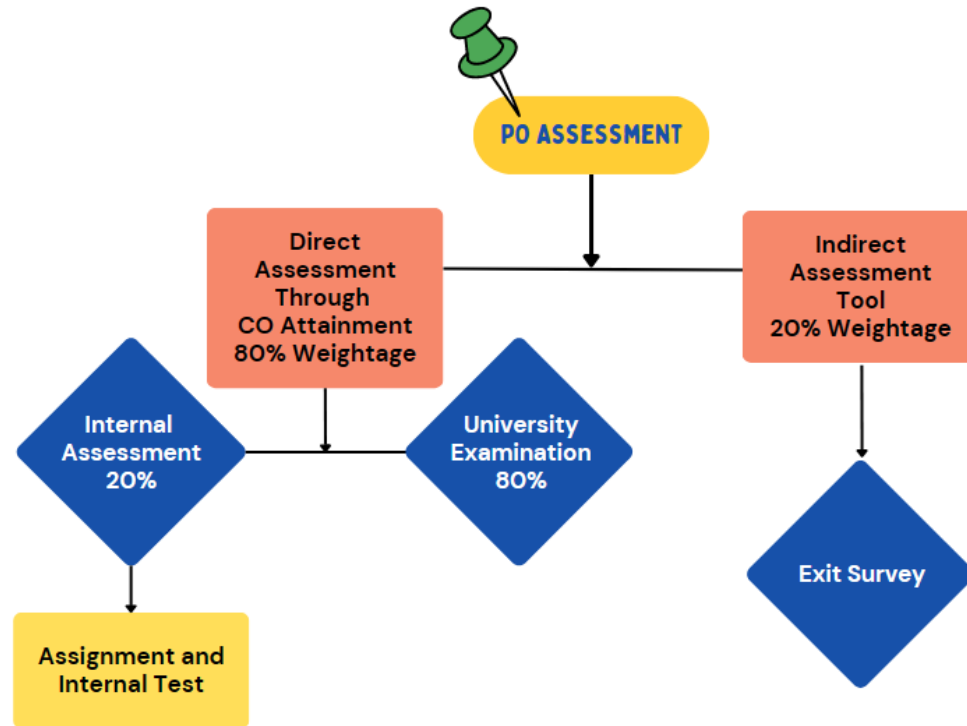
% of attempts \geq 60%	Level of Attainment	
\geq 80 %	3	High
$>$ 70 to $<$ 80 %	2	Medium
60-70 %	1	Low

Program level CO-PO matrix of one course from each semester:

Sem	Code	POs				
		Course	PO1	PO2	PO3	PO4
I	32171101	Atomic Structure & Chemical Bonding	3	3		
II	32171201	Basics and Hydrocarbons	3	3		
III	32171301	s- and p-Block Elements	3	3	3	
IV	32171401	Coordination Chemistry	3	3	3	3
V	32171501	Biomolecules		3	3	3
VI	32171601	Organometallic Chemistry & Bio-inorganic Chemistry		3	3	3
Overall			3	3	3	3

% of attempts $\geq 60\%$	Level of Attainment	
$\geq 80\%$	3	High
>70 to $<80\%$	2	Medium
60-70 %	1	Low

PO Assessment Tools:



	Assessment Methods	Weightage 1	Weightage 2	Remarks
DIRECT ASSESSMENT	University Examination	80%	80%	Assessment through Cos attainment
	Assignments	20%		
	Internal Examination			
INDIRECT ASSESSMENT	Exit Survey	100%	20%	Direct evaluation to POs

Indirect PO Assessment (Through Exit Survey)

S. No.	Question	Score					POs	No: of Attempts ≥60% of Excellent Score	Total No. of Attempts
		Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)			
1	Syllabus is need based and suitable to the course.	30	36	28	6	-	PO1	94	100
2	The curriculum provides options for continuous assessment through quiz and exams	23	33	39	5	-	PO3	95	100
3	Curriculum developed and implementation have relevance to the local and national care needs	17	29	47	7	-	PO4	93	100
4	The curriculum contains sufficient elective papers	18	40	39	3	-	PO3	97	100
5	The curriculum facilitates adequate self-learning.	13	40	41	6	-	PO1	94	100
6	The curriculum provides the ability to express thoughts and ideas effectively in writing and orally.	16	42	38	4	-	PO2	96	100
7	The curriculum provides experiential learning through student seminar, group discussion, projects, field visits.	12	41	42	5	-	PO4	95	100

Indirect PO Assessment (Attainment Through Survey)

	PO1	PO2	PO3	PO4
No: of Attempts ≥60% of Excellent Score	94	96	96	94
Total No. of Attempts	100	100	100	100
% of attempts ≥ 60%	94	96	96	94
Attainment	3	3	3	3

PO Attainment Level:

	PO1	PO2	PO3	PO4
*PO Attainment	3	3	3	3
Direct Attainment	3	3	3	3
Indirect Attainment	3	3	3	3

*PO Attainment = (80% of Direct Attainment + 20% of Indirect Attainment)

% of attempts >= 60%	Level of Attainment	
>=80 %	3	High
>70 to <80 %	2	Medium
60-70 %	1	Low