



**Teaching & Examination Scheme for**

**2-Year M.Sc. (Chemistry)  
(Academic Session: 2026-28)**

**SCHOOL OF APPLIED SCIENCES**



**GYAN VIHAR SCHOOL OF APPLIED SCIENCES**  
**Teaching and Examination Scheme for**  
**2-year M.Sc. Chemistry**  
**EFFECTIVE FROM ACADEMIC SESSION 2026-28**

Year: I

Semester: I AUTUMN/PAVAS

S. No.	Course Code	Course Name	Course Type	Credits	Contact Hrs/Wk.			Exam Hrs.	Weightage (in%)	
					L	T/S	P		CIE	ESE
<b>A</b>	<b>University Core</b>									
1	SODECA-IX	Social Outreach, Discipline & Extra Curriculum Activities-IX	AECC	2	0	0	0		100	
<b>B</b>	<b>Program Core</b>									
1	CH9001	Quantum Mechanics, Symmetry & Group Theory	DCC	3	3	0	0	3	40	60
2	CH9002	Thermodynamics & Surface Chemistry	DCC	3	3	0	0	3	40	60
3	CH9003	Analytical Techniques in Chemistry	DCC	3	3	0	0	3	40	60
4	CH9004	Advanced Organic Chemistry-I	DCC	3	3	0	0	3	40	60
5	CH9005	Coordination Chemistry	DCC	3	3	0	0	3	40	60
6	CH9006	Advanced Laboratory-I	SEC	3	0	0	6	3	60	40
<b>C</b>	<b>Program Electives</b>									
<b>D</b>	<b>University Elective</b>									
		Opt from the list of University Electives								
		<b>TOTAL</b>		<b>20</b>						

**NOTE: The University Electives are apart from minimum credits required for award of degree.**

L= Lecture  
S= Seminar

T=Tutorial  
P= Practical

CIE=Continuous Internal Evaluation  
ESE= End Semester Examination

**Convener, BoS Applied Sciences**



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**Teaching and Examination Scheme for**  
**2-year M.Sc. Chemistry**  
**EFFECTIVE FROM ACADEMIC SESSION 2026-28**

Year: I

Semester: II SPRING/BASANT

S. No.	Course Code	Course Name	Course Type	Credits	Contact Hrs/Wk.			Exam Hrs.	Weightage (in%)	
					L	T/S	P		CIE	ESE
<b>A</b>	<b>University Core</b>									
1	SODECA-X	Social Outreach, Discipline & Extra Curriculum Activities-X	AECC	2	0	0	0	0	100	
<b>B</b>	<b>Program Core</b>									
1	CHX001	Organometallic Chemistry	DCC	3	3	0	0	3	40	60
2	CHX002	Kinetics and Photochemistry	DCC	3	3	0	0	3	40	60
3	CHX003	Adv. Organic Chemistry-II	DCC	3	3	0	0	3	40	60
4	CHX004	Electroanalytical Chemistry	DCC	3	3	0	0	3	40	60
5	CHX005	Enantiomeric Separation	DCC	3	3	0	0	3	40	60
6	CHX006	Advanced Laboratory-II	SEC	3	0	0	6	3	60	40
7	CHX007	Seminar	SEM	1	0	1	0	1	100	
8	CHX008	Summer Internship	DPR	1	0	0	0	1	100	
<b>C</b>	<b>Program Electives</b>									
<b>D</b>		<b>University/Open Elective</b>								
		Opt from the list of University Electives								
		<b>Total</b>		<b>22</b>						

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**Teaching and Examination Scheme for**  
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**EFFECTIVE FROM ACADEMIC SESSION 2026-28**

Year: II

Semester: III Autumn/PAVAS

S. No	Course Code	Course Name	Course Type	Credits	Contact Hrs/Wk.			Exam Hrs.	Weightage (in%)	
					L	T/S	P		CIE	ESE
<b>A</b>		<b>University Core</b>								
1	SODECA -XI	Social Outreach, Discipline & Extra Curriculum Activities-XI	AECC	2	0	0	0	0	100	
<b>B</b>		<b>Program Core</b>								
1	CHY001	Heterocyclic Chemistry	DCC	3	3	0	0	3	40	60
2	CHY002	Molecular Spectroscopy	DCC	3	3	0	0	3	40	60
3	CHY003	Advanced Analytical Chemistry I	DCC	3	3	0	0	3	40	60
4	CHY004	Practical-III	SEC	3	0	0	6	3	60	40
5	CHY005	Minor Project	RCC	3	0	0	0	1	100	
6	CHY006	Research Methodology & IPR	GEC	4	3	1	0	3	40	60
<b>C</b>		<b>Program elective (Any two)</b>								
1		Elective I	DSE	3	3	0	0	3	40	60
2		Elective –II	DSE	3	3	0	0	3	40	60
3	CHY007	MOOC (through SWAYAM/NPTEL etc) <i>Under Credit Transfer Scheme</i>		3	3					
<b>D</b>		<b>University/Open Elective</b>								
		Opt from the list of University Electives								
		<b>Total</b>		<b>27</b>						

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## Elective papers

1.	<b>Advanced Analytical Chemistry II</b>	CHY008
2.	<b>Inorganic Biochemistry and Reaction Mechanism</b>	CHY009
3.	<b>Solid-State Chemistry and its Applications</b>	CHY010
4.	<b>Advanced Organic Chemistry- I</b>	CHY011
5.	<b>Advanced Organic Chemistry II</b>	CHY012
6.	<b>Advanced Physical Chemistry – I</b>	CHY013
7.	<b>Advanced Physical Chemistry – II</b>	CHY014
8.	<b>Asymmetric Synthesis</b>	CHY015
9.	<b>Synthetic Methodologies of Nanomaterials</b>	CHY016
10.	<b>Polymer Chemistry</b>	CHY017
11.	<b>Green and sustainable chemistry</b>	CHY018
12.	<b>Natural product chemistry</b>	CHY019
13.	<b>Industrial chemistry</b>	CHY020
14.	<b>Bioorganic chemistry</b>	CHY021
15.	<b>Chemical science with artificial intelligence &amp; machine learning</b>	CHY022



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EFFECTIVE FROM ACADEMIC SESSION 2025-27**

**Year: II**

**SemesterIV: Spring/BASANT**

S. No.	Course Code	Course Name	Credits	Contact Hrs/Wk.			Exam Hrs.	Weightage (in%)	
				L	T/S	P		CIE	ESE
<b>A</b>	<b>University core</b>								
<b>B</b>	<b>Program Core</b>								
<b>1</b>	CHZ001	Dissertation/ Industrial training	20	0	0	0	1		100
<b>C</b>	<b>Program Elective</b>								
<b>D</b>	<b>University/Open elective</b>								
		Opt from the list of University Electives							
		<b>Total</b>	<b>20</b>						

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**Total Credits: 89**

**Convener, BoS Applied Sciences**