Duration: 36 Months (3 Years) Eligibility: 12th Pass from Science with Minimum 60%

COURSE STRUCTURE OF CHEMISTRY (HONOURS) SEMESTER Ist													
	Cou	rse Details		External Assessment		Internal Assessment					Credit tributi	ion	Allotted Credits
Course Code	Course Type	Course Title	Total Marks	Major		Minor		Sessi **	onal **		Ŧ		Subject wise
				Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	L	1	r	Distribution
Theory Group													
3HBHL101H	Ability Enhancement	fgUnhHkk"kklajpuk	50	25	08	10	04	15	06	2	-	-	2
3CBCA201H	Ability Enhancement	Basic Information of Computer Technology - I	25	13 04 (		05	02	07	03	1	-	-	1
3SBCH104H	Core Course - 1	Chemistry –I (Physical Inorganic & Organic Chemistry)	100	50 17		20	08	30	12	4	-	-	4
3SBCH106H	Core Course- 2	POLYMER CHEMISTRY	100	50	17	20	08	30	12	4	-	-	4
	Generic Elective - 1	(Select From Below Given Specialized Subject)*	100	50	17	20	08	30	12	4	-	-	4
Practical Group				Term End Practical Exam		Lab Performance		Sessional					
3SBCH104H	Practical-I	Chemistry –I (Physical Inorganic & Organic Chemistry)	50	25	08	25	08	-	-	-	-	2	2
3SBCH106H	Practical-II	POLYMER CHEMISTRY	50	25	08	25	08	-	-	-	-	2	2
	Practical-III	(Select From Below Given Specialized Subject)*	50	25	25 08		08	-	-	-	-	2	2
3CBCA201H	H Practical-IV Basic Information 25		25	10	04	15	06	-	-	-	-	1	1
	Grand T	otal	550							15	-	07	22

Minimum Passing Marks are equivalent to Grade C

Major- Term End Theory Exam

Minor- Pre University Test

Sessional weightage – Attendance 50%, Three Class Tests/Assignments 50%

\* Generic Elective Specialization: Opted specialization by student in 1<sup>st</sup> Semester will remain same in IInd, IIIrd and IVthSemester (See the specialisation subject as mentioned below)\*

Generic Elective- 1									
Specialisation	<b>Course Code</b>	Subject							
Physics	3SBPH103H	Mechanics, Oscillations and Properties of Matter							
Maths	3SBMA105H	Algebra, Trigonometry & Geometry							

Duration: 36 Months (3 Years) Eligibility: 12th Pass from Science with Minimum 60%

COURSE STRUCTURE OF CHEMISTRY (HONOURS ) SEMESTER IInd													
	С	ourse Details		Externa	al Assessment	Internal Assessment				Credit Distribution			Allotted Credits
Course Code	Course Type	Course Title	Total	Major		Minor		Sessi **	ional **				Subject wise
			Mark s	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks		Т	Р	Distribution
Theory Group													
3HBEL201H	Ability Enhancement	English Language and Indian Culture	50	25	08	10	04	15	06	2	-	-	2
3MBFE101H	Ability Enhancement	Fundamental of Entrepreneurship	50	25	08	10	04	15	06	2	-	-	2
3SBCH204H	Core Course-3	Chemistry –II (Physical Inorganic & Organic Chemistry)1005017200830		12	4	-	-	4					
3SBCH206H	Core Course-4	APPLICATION OF COMPUTERS IN CHEMISTRY	100	50	50 17		08	30	12	4	-	-	4
	Generic Elective -2	(Select From Below Given Specialized Subject)*	100	50	17	20	08	30	12	4	-	-	4
Practical Group				Term	End Practical Lab Performance Sess		ional						
3SBCH204H	Practical-I	Chemistry –II (Physical Inorganic & Organic Chemistry)	50	25	08	25	08	-	-	-	-	2	2
3SBCH206H	Practical-II	APPLICATION OF COMPUTERS IN CHEMISTRY	50	25	08	25	08	-	-	-	-	2	2
	Practical-III (Select From Below Given Specialized Subject)* 50		50	25	08	25	08	-	-	-	-	2	2
Skill Courses	Skill Courses						I	Sessi	ional				
	Skill EnhancementSkill Enhancement Elective Course-I50		-	-	-	-	50	20	1	-	1	2	
	Grar	600							17	-	07	24	
Minimum F	Passing Marks are equiva	lent to Grade C						L- Lectures T- T	utorials P- Prac	tical			

iae C

Major- Term End Theory / Practical Exam

Minor- Pre University Test

Sessional weightage - Attendance 50%, Three Class Tests/Assignments 50%

Skill Elective I – Any other course being offered in this semester as per the list given at the end of course structure.

\* Generic Elective Specialization: Opted specialization by student in 1st Semester will remain same in IInd, IIIrd and IVthSemester (See the specialisation subject as mentioned below)\*

Generic Elective- 2									
Specialisation	<b>Course Code</b>	Subject							
Physics	3SBPH203H	Mathematical Background, Electrostatics of Matter							
Maths	3SBMA205H	Calculus, Differential Equations& Vector Calculus							

Duration: 36 Months (3 Years) Eligibility: 12th Pass from Science with Minimum 60%

#### COURSE STRUCTURE OF CHEMISTRY (HONOURS) SEMESTER IIIrd

	Con	urse Details		External	Assessment	Internal Assessment					Credit tributi	ion	Allotted Credits
Course Code	Course Type	Course Title	Total	Major		Minor		Sessional ***					Subject wise
Course Coue	Course Type	Course flue	Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks Min Mark	Min Marks	L	Т	Р	Distribution
Theory Group													
3HBHL302H	Ability Enhancement	हिन्दीभाषा संवेधना एवंसंचारसाधन		25	08	10	04	15	06	2	-	-	2
3CBCA502H	Ability Enhancement	ancement Basic Information of Computer Technology – II		13	04	05	02	07	03	1	-	-	1
3SBCH304H	4H Core Course-5 Chemistry –III (Physical, Inorganic & Organic Chemistry)		100	50	17	20	08	30	12	4	-	-	4
3SBCH306H	Core Course-6	ANALYTICAL METHODS IN CHEMISTRY10050172008		30	12	4	-	-	4				
Generic Elective -3 (Select Fro		(Select From Below Given Specialized Subject)*	100	50	17	20	08	30	12	4	-	-	4
	Pra	ctical Group		<b>Term End Practical Exam</b>		Lab Performance		Sessi	ional				
3SBCH304H	Practical-I	Chemistry –III (Physical, Inorganic & Organic Chemistry)	50	25	08	25	08	-	-	-	-	2	2
3SBCH306H	Practical-II	ANALYTICAL METHODS IN CHEMISTRY	50	25	08	25	08	-	-	1	I	2	2
	Practical-III	(Select From Below Given Specialized Subject)*	50	25	08	25	08	-	-	-	-	2	2
3CBCA502H	CBCA502H Practical-IV Basic Information of Computer Technology – II		25	10	04	15	06	-	-	-	-	1	1
Skill Courses	Skill Courses							Sessi	ional				
Skill Enhancement Skill Enhancement Elective Course-II		50	-	-	-	-	50	20	1	-	1	2	
	Grand Total									16	-	08	24

Minimum Passing Marks are equivalent to Grade C

Major- Term End Theory / Practical Exam Minor- Pre University Test

Sessional weightage - Attendance 50%, Three Class Tests/Assignments 50%

Skill Elective II- Any other course being offered in this semester as per the list given at the end of course structure.

	Generic Elective- 3*										
Specialisation	Course Code	Subject									
Physics	3SBPH303H	Kinetic Theory of Gases, Thermodynamics and Statistical Mechanics									
Maths	3SBMA305H	Calculus, Differential Equation and Mechanics									

Duration: 36 Months (3 Years) Eligibility: 12th Pass from Science with Minimum 60%

COURSE STRUCTURE OF CHEMISTRY (HONOURS) SEMESTER IVth													
	Cou	rse Details		External Assessment			Internal	Assessment		Credit Distribution			Allotted Credits
Course Code	Course Type	Course Title	Total	Ν	lajor	Mi	nor	Sessi **	onal **				Subject wise
			Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks	L	Т	Р	Distribution
Theory Group													
3HBEL402H	Ability Enhancement	English language and scientific temper	50	25	08	10	04	15	06	2	-	-	2
3HBHP401H	Ability Enhancement	Human Values & Ethics	50	25	08	10	04	15	06	2	-	-	2
3SBCH404H	Core Course - 7	Chemistry –IV (Physical Inorganic & Organic Chemistry)	100	50	17	20	08	30	12	4	-	-	4
3SBCH406H	Core Course- 8	INDUSTRIAL CHEMICAL & ENVIRONMENT	100	50	17	20	08	30	12	4	-	-	4
	Generic Elective -4	(Select From Below Given Specialized Subject)*	100	50	17	20	08	30	12	4	-	-	4
Practical Group				Term End I	Practical Exam	Lab Perf	ormance	Sessional					
3SBCH404H	CH404H Practical Chemistry –IV (Physical Inorganic & Organic 50 2 Chemistry)		25	08	25	08	-	-	-	-	2	2	
3SBCH406H	Practical	INDUSTRIAL CHEMICAL & ENVIRONMENT	50	25	08	25	08	-	-	-	-	2	2
Practical(Select From Below Given Specialized Subject)*50		25	08	25	08	-	-	-	-	2	2		
	Grand T	otal	550							16	-	06	22

Minimum Passing Marks are equivalent to Grade C

Major- Term End Theory Exam

Minor- Pre University Test

Sessional weightage – Attendance 50%, Three Class Tests/Assignments 50%

Generic Elective- 4*									
Specialisation	<b>Course Code</b>	Subject							
Physics	3SBPH403H	Group Waves, Acoustics and Optics							
Maths	3SBMA405H	Advanced Calculus, Partial Differential Equations, Complex Analysis and Abstract Algebra							

Duration: 36 Months (3 Years) Eligibility: 12th Pass from Science with Minimum 60%

		COURSE STR	UCTURE	E OF CHEN	AISTRY (H	IONOURS	) SEMEST	TER Vth					
	Cor	urse Details		External Assessment		Internal Assessment					Credit tributi	on	Allotted Credits
Course Code	Course Type	Course Title	Total	Major		Mi	inor Ses		onal **			n	Subject wise
			Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks		Т	r	Distribution
Theory Group	·	·											
3SBCH501H	Core Course-9	Coordination Chemistry	100	50	17	20	08	30	12	4	-	-	4
3SBCH502H	Core Course-10	Industrial Chemistry	100	50	17	20	08	30	12	4	-	-	4
3SBCH503H	Core Course-11	Organic Chemistry & Spectroscopy	100	50	17	20	08	30	30 12		-	-	4
*	Discipline Specific Elective-1	Elective table-I	100	50	17	20	08	30	12	4	-	-	4
**	Discipline Specific Elective -2	Elective table-II	100	50	17	20	08	30 12		4	-	-	4
Practical Group	)			Term End Practical Exam		Lab Performance		Sessional					
3SBCH501H	Practical-I	Core Course-9	50	25	08	25	08	-	-	-	-	2	2
3SBCH502H	Practical-II	Core Course-10	50	25	08	25	08	-	-	-	-	2	2
3SBCH503H	Practical-III	Core Course-11	50	25	08	25	08	-	-	-	-	2	2
3SBCH504H	Practical-IV	Select from Discipline Specific Elective-1	50	25	08	25	08			-	-	2	2
3SBCH505H	Practical-V	Select from Discipline Specific Elective-2	50	25	08	25	08	-	-	-	-	2	2
***	*** Skill Skill Enhancement Elective Course-II 50		50	25		15	10	1	-	1	2	**	2
	Grand '	Total	800										32

Minimum Passing Marks are equivalent to Grade C Major- Term End Theory Exam Minor- Pre University Test Sessional weightage – Attendance 50%, Three Class Tests/Assignments 50%

Duration: 36 Months (3 Years) Eligibility: 12th Pass from Science with Minimum 60%

COURSE STRUCTURE OF CHEMISTRY (HONOURS) SEMESTER VIth													
		Course Details		External	Assessment		Internal	Assessment		Credit Distribution			Allotted Credits
Course Code	Course Type	Course Title	Total	Major		Minor		Sessi **	ional **	_		_	Subject wise
			Marks	Max Marks	Min Marks	Max Marks	Min Marks	Max Marks	Min Marks		Т	Р	Distribution
Theory Group													
3SBCH601H	Core Course- 12	Nano-Chemistry	100	50	17	20	08	30 12		4	-	-	4
3SBCH602H	Core Course- 13	INORGANIC MATERIALS OFINDUSTRIAL IMPORTANCE	100	50	17	20	08	30 12		4	-	-	4
3SBCH603H	Core Course- 14	GREEN CHEMISTRY	100	50	17	20	08	30	12	4	-	-	4
***	Discipline Specific Elective	Elective table-III	100	50	17	20	08	30	12	4	-	-	4
***	Discipline Specific Elective//Pro ject/Dissertat ion	Elective table-IV / Group B DISSERTATION	150	150	40	-	-	-	-	-	-	6	6
Practical Group				Term En Ex	d Practical am	Lab Perf	ormance	Sessi	ional				
	Practical-I	Core Course-12	50	25	08	25	08	-	-	-	-	2	2
	Practical-II	Core Course-13	50	25	08	25	08	-	-	-	-	2	2
	Practical-III	Core Course-14	50	25	08	25	08	-	-	-	-	2	2
	Practical-IV	Discipline Specific Elective -3	50	25	08	25	08	-	-	-	-	2	2
	Gran	d Total	750										30

\* If Project/Dissertation not taken then DSE have same marks/credit as other DSE's.

Minimum Passing Marks are equivalent to Grade C

Major- Term End Theory Exam

Minor- Pre University Test

Sessional weightage – Attendance 50%, Three Class Tests/Assignments 50%

#### **DISCIPLINE SPECIFIC ELECTIVE**

**\*Note** - Students need to select any two from below mentioned four papers from Each Group Elective's forFifth and Sixth semester of **B.Sc. Chemistry (Honours ).** 

ELEC	CTIVES FOR	R SEMESTER 5 <sup>TH</sup>	ELECT	IVES FOR	SEMESTER 6 <sup>TH</sup>				
Course Code	Course Type	List of Electives	Course Code	Course Type	List of Electives				
	***GR0	DUP ELECTIVE -I	*** GROUP ELECTIVE -III						
3SBCH504H		<b>Bio-Chemistry</b>	3SBCH604H		Chemistry of Natural product				
3SBCH505H		Environmental Studies	3SBCH605H		Instrumental Methods of Chemical Analysis				
**	*** GROUP	ELECTIVE -II	****GROUP ELECTIVE -IV						
3SBCH506H		Basics of Analytical Chemistry	3SBCH606H		Fundamentals of Spectroscopy				
3SBCH507H Bio molecular Chemistry			3SBCH607H		Some Special aspects of Chemistry				

#### COURSE CODE- 3SBCH608H

## **Dissertation/Project**

# Guidelines

Non-Technical										
Elective No.		<b>Department/ Faculty Name</b>								
		Faculty of Information Technology								
Ι	SCIT 201	Data Entry Operation	2(1+0+1)							
II	SCIT 301	Multimedia	2(1+0+1)							
III	SCIT 501	Web Designing with HTML	2(1+0+1)							
IV	SCMIT 201	Web Development	2(1+0+1)							
V	SCMIT 301	2(1+0+1)								
		Faculty of Management								
Ι	SMGT 201	Briefing and Presentation Skills	2(1+0+1)							
II	SMGT 301	Resolving Conflicts and Negotiation Skills	2(1+0+1)							
III	SMGT 802	Entrepreneurship Development	2(1+0+1)							
		Faculty of Commerce								
Ι	SCOM 201	Tally ERP 9	2(1+0+1)							
II	SCOM 302	2(1+0+1)								
III	SCOM 803	Data Analyst	2(1+0+1)							
		Faculty of Humanities								
Ι	SHBA 301	Pursuing Happiness	2(1+0+1)							
II	SHBA302	Communication Skill and Personality Development	2(1+0+1)							
III	SHMA301	Tourism in M.P	2(1+0+1)							
		Faculty of Science								
Ι	SSBI 301	Mushroom Cultivation	2(1+0+1)							
II	SSPH 301	House Hold Wiring	2(1+0+1)							
III	SSPH 301	Basic Instrumentation	2(1+0+1)							
IV	SSPH 301	DTP Operator	2(1+0+1)							
V	SSCH 301	Graphic Designing	2(1+0+1)							
		Faculty of Education	·							
Ι	SCBE 403	Understanding of ICTC (Information Communication Technology)	2(1+0+1)							
II	SCPE 201	Yoga Education	2(1+0+1)							

## SKILL ENHANCEMENT ELECTIVE COURSES