

# B. Sc Chemistry

## B. Sc Chemistry - Scheme of papers (CBCS) - 2021 – 22

Year / Semester	Part	Subject	Title of the Paper	Hrs / Week	Credits	Exam hours	Max Marks		
							CIA	Sem	Total
I Year / I Semester	I	Tamil	Tamil – I	5	3	3	50	50	100
	II	English	English – I	5	3	3	50	50	100
	II		Communicative English		1				
	III	Core	Organic Chemistry – I	3	3	3	50	50	100
	III	Core	Analytical Chemistry - I	4	4	3	50	50	100
	III	Core Practical	Volumetric Analysis	3	3				
	III	Allied	Allied Mathematics - I	6	4	3	50	50	100
	IV		FC	2	1				
	IV		Religion & Ethics – I	2	1	3	50	50	100
I Year / II Semester	I	Tamil	Tamil – II	5	3	3	50	50	100
	II	English	English – II	5	3	3	50	50	100
	II		Communicative English		1				
	III	Core	Inorganic Chemistry - I	3	3	3	50	50	100
	III	Core	Physical Chemistry - I	4	4	3	50	50	100
	III	Core Practical	Volumetric Analysis	3	3	3	50	50	100
	III	Allied	Allied mathematics - II	6	4	3	50	50	100
	IV		FC	2	1	3	50	50	100
	IV		Religion & Ethics – II	2	1	3	50	50	100
II Year / III Semester	I	Tamil	Tamil – III	5	3	3	50	50	100
	II	English	General English – III	5	3	3	50	50	100
	III	Core	Organic Chemistry - II	3	3	3	50	50	100
	III	Core	Inorganic Chemistry – II	4	4	3	50	50	100
	III	Core Practical	Qualitative Inorganic Analysis	3	3				
	III	Allied	Allied Physics – I	6	4	3	50	50	100
	IV		FC	2	1				
	IV		Human Rights	2	1	3	50	50	100
	V		DEEDS						
	V		SHELTERS						
			Certificate course – I		2*				
II Year / IV Semester	I	Tamil	Tamil – IV	5	3	3	50	50	100
	II	English	English – IV	5	3	3	50	50	100
	III	Core	Organic Chemistry - III	3	3	3	50	50	100
	III	Core	Physical Chemistry - II	4	4	3	50	50	100

	III	Core Practical	Qualitative Analysis	3	3	4.5	50	50	100
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Year / Semester	Part	Subject	Title of the Paper	Hrs / Week	Credits	Exam hours	Max Marks		
							CIA	Sem	Total
II Year / IV Semester	III	Allied	Allied Physics – II	6	4	3	50	50	100
	IV		FC	2	1		50	50	100
	IV		Environmental Studies	2	1	3	50	50	100
	V		DEEDS		2				
	V		SHELTERS		2				
III Year / V Semester	III	Core	Organic Chemistry – IV	4	4	3	50	50	100
	III	Core	Inorganic Chemistry – III	4	4	3	50	50	100
	III	Core	Physical Chemistry – III	4	4	3	50	50	100
	III	Core	Analytical Chemistry –II	4	4	3	50	50	100
	III	Main Elective	Elective – I	3	2	3	50	50	100
	III	Main Elective	Elective – II	3	2	3	50	50	100
		SSP	Chemistry for Competitive Exam – I		1*				
	III	Core Practical	Gravimetric & Organic Analysis	3	3		50	50	100
	III	Core Practical	Physical Chemistry Practicals	3	3		50	50	100
		NME	Chemistry of Drugs and Disease	2	1		50	50	100
			Certificate Course - II		2*				
III Year / VI Semester	III	Core	Organic Chemistry – V	4	4	3	50	50	100
	III	Core	Inorganic Chemistry – IV	4	4	3	50	50	100
	III	Core	Physical Chemistry – IV	4	4	3	50	50	100
	III	Subject Skill (SS-I)	Paper – I	5	4	3	50	50	100
	III	Subject Skill (SS-II)	Paper – II	5	4	3	50	50	100
	IV	NME	Chemistry in Everyday Life	2	1	3	50	50	100
	III	SSP	Chemistry for Competitive Exam – II		1*				
	III	Core Practical	Gravimetric & Organic Analysis	3	3	6	50	50	100
	III	Core Practical	Physical Chemistry Practicals	3	3	3	50	50	100
			Internship/Industrial Visit/ Case study/Project*		2*				
		Total	180	148 +2* +2*					

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**\* Extra credits**

**Note:**

SSP/Project/Certificate course – optional

**Abbreviations**

FC	Foundation Course
Comm. Eng	Communicative English
ET	Ethics
RE	Religion
DEEDS	Dept. of extension and educational services.
HR	Human Rights
SSP	Self study paper
NME	Non-major Elective

**List of Electives**

**Elective - I** **3 Hours**

1. Pharmaceutical Chemistry
2. Forensic Chemistry
3. Bio-Inorganic Chemistry

**Elective - II** **3 Hours**

1. Applied Chemistry
2. Protein Chemistry
3. Cheminformatics

**Subject Skill Papers** **5 Hours**

1. Polymer Chemistry
2. Industrial and Environmental Chemistry
3. Green Chemistry
4. Materials Chemistry
5. Water Chemistry and Inorganic Materials of Industrial Importance
6. Chemistry of Drug Design

**Certificate Courses** **2 Hours**

1. Organic Farming
2. Industrial Safety