

THIRUVALLUVAR UNIVERSITY
BACHELOR OF SCIENCE
B.Sc. CHEMISTRY DEGREE COURSE
 (With effect from 2020 - 2021)

The Course of Study and the Scheme of Examinations

S. No.	Part	Study Components		Ins. Hrs / week	Credit	Title of the Paper	Maximum Marks		
		Course Title					CIA	Uni. Exam	Total
SEMESTER I									
1.	I	Language	Paper-1	6	4	Tamil/Other Languages	25	75	100
2.	II	English (CE)	Paper-1	6	4	Communicative English I	25	75	100
3.	III	Core Theory	Paper-1	6	4	General Chemistry - I	25	75	100
	III	Core Practical	Practical-1	3	0	Volumetric Analysis	0	0	0
4.	III	Allied -1	Paper-1	4	3	(Choose any 1 out of 5) 1. Physics I 2. Botany I 3. Zoology I 4. Biochemistry I 5. Mathematics I*	25	75	100
	III	Allied- 1	Practical-1	3	0		0	0	0
5.	III	PE	Paper 1	6	3	Professional English I	25	75	100
6.	IV	Environmental Studies		2	2	Environmental studies	25	75	100
		Sem. Total		36	20		150	450	600
SEMESTER II									
7.	I	Language	Paper-2	6	4	Tamil/Other Languages	25	75	100
8.	II	English (CE)	Paper-2	6	4	Communicative English II	25	75	100
9.	III	Core Theory	Paper-2	5	4	General Chemistry - II	25	75	100
10.	III	Core Practical	Practical-1	3	2	Volumetric Analysis	25	75	100
11.	III	Allied-1	Paper-2	4	3	(Choose any 1 out of 5) 1. Physics II 2. Botany II 3. Zoology II 4. Biochemistry II 5. Mathematics II*	25	75	100
12.	III	Allied Practical - 1	Practical-1	2	2		25	75	100
13.	III	PE	Paper 1	6	3	Professional English II	25	75	100
14.	IV	Value Education		2	2		25	75	100
15.	IV	Soft Skill		2	1		25	75	100
		Sem. Total		36	25		225	675	900

S.NO.	Part	Study Components		Ins. hrs /week	Credit	Title of the Paper	Maximum Marks		
		Course Title					CIA	Uni. Exam	Total
SEMESTER III									
16.	I	Language	Paper-3	6	4	Tamil / Other Languages	25	75	100
17.	II	English	Paper-3	6	4	English	25	75	100
18.	III	Core Theory	Paper-3	4	4	General Chemistry - III	25	75	100
	III	Core Practical	Practical-2	3	0	Inorganic Qualitative Analysis & Preparations	0	0	0
19.	III	ALLIED-2	Paper-3	4	3	Any one from 1. Physics -I 2. Botany -I 3. Zoology -I 4. Biochemistry - I 5. Mathematics - I*	25	75	100
	III	Allied Practical	Practical-2	3	0	Allied practical-II	0	0	0
20.	IV	Skill Based Subject	Paper-1	2	2	Water Treatment and Analysis	25	75	100
21.	IV	Non-Major Elective	Paper-1	2	2	Medicinal Chemistry	25	75	100
				30	19		150	450	600
SEMESTER IV									
22.	I	Language	Paper-4	6	4	Tamil/Other Languages	25	75	100
23.	II	English	Paper-4	6	4	English	25	75	100
24.	III	Core Theory	Paper-4	4	4	General Chemistry - IV	25	75	100
25.	III	Core Practical	Practical-2	3	3	Inorganic Qualitative Analysis & Preparations	25	75	100
26.	III	Allied-2	Paper-4	4	3	Any one from 1. Physics -II 2. Botany -II 3. Zoology -II 4. Biochemistry - II 5. Mathematics - II*	25	75	100
27.	III	Allied Practical	Practical-2	3	2	Allied practical-II	25	75	100
28.	IV	Skill Based Subject	Paper-2	2	2	Food Chemistry	25	75	100
29.	IV	Non-Major Elective	Paper-2	2	2	Chemistry in Every Day Life	25	75	100
				30	24		200	600	800

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S.NO.	Part	Study Components		Ins. hrs /week	Credit	Title of the Paper	Maximum Marks		
		Course Title					CIA	Uni. Exam	Total
SEMESTER V									
30.	III	Core Theory	Paper-5	6	5	Inorganic Chemistry - I	25	75	100
	III	Core Practical	Practical-3	3	0	Gravimetric Estimation	0	0	0
31.	III	Core Theory	Paper-6	6	5	Organic Chemistry - I	25	75	100
	III	Core Practical	Practical-4	3	0	Organic Analysis and Preparations	0	0	0
32.	III	Core Theory	Paper-7	6	4	Physical Chemistry - I	25	75	100
33.	III	Internal Elective	Paper-1	3	3	Any one from A. Analytical chemistry - I B. Basis of computer programming in C and its applications in Chemistry c. Organic Synthesis	25	75	100
34.	IV	Skill Based Subject	Paper-3	3	2	Applied Chemistry	25	75	100
				30	19		150	450	600
SEMESTER VI									
35.	III	Core Theory	Paper-8	6	4	Inorganic Chemistry - II	25	75	100
36.	III	Core Theory	Paper-9	6	4	Organic Chemistry - II	25	75	100
37.	III	Core Theory	Paper-10	6	4	Physical Chemistry - II	25	75	100
38.		Compulsory Project		0	5		25	75	100
39.	III	Core Practical-3	Practica I-3	0	2	Gravimetric Estimation	25	75	100
40.	III	Core Practical-4	Practica I-4	0	2	Organic Analysis and Preparations	25	75	100
41.	III	Core Practical-5	Practica I-5	3	3	Physical Chemistry Experiments	25	75	100
42.	III	Internal Elective	Paper-2	3	3	Any one from A. Analytical Chemistry-II B. Textile Chemistry C. Nano Chemistry	25	75	100

43.	III	Internal Elective	Paper-3	3	3	Any one from A. Pharmaceutical Chemistry B. Polymer Chemistry C. Green Chemistry	25	75	100
44.	III	Skill based Subject	Paper-4	3	2	Agriculture and Leather Chemistry	25	75	100
45.	IV	Extension Activities		0	1		100	0	100
		TOTAL		30	33		350	750	1100

Part	Subject	Papers	Credit	Total Credits	Marks	Total Marks
Part I	Languages	4	4	16	100	400
Part II	Communicative English & English	4	4	16	100	400
Part III	Allied (Odd Semester)	2	3	6	100	200
	Allied (Even Semester)	2	5	10	100	200
	Allied Practical	2	2		100	200
	Electives	3	3	9	100	300
	Core	10	(3-5)	42	100	1000
	Core practical	5	(2-3)	12	100	500
	Professional English	2	3	6	100	200
	Compulsory Project (Group/Individual Project)	1	5	5	100	100
Part IV	Environmental Science	1	2	2	100	100
	Soft skill	1	1	1	100	100
	Value Education	1	2	2	100	100
	Lang. & Others /NME	2	2	4	100	200
	Skill Based	4	2	8	100	400
Part V	Extension Activities	1	1	1	100	100
	Total	43		140		4500

* Allied Mathematics:

	Ins. Hrs/Week	Credit	CIA	University	Total Marks
Paper-1	7	4	25	75	100
Paper-2	7	6	25	75	100

if Mathematics is one of the Allied Subjects total no. of papers will be 41.



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