

Percentage of Revision of B.Sc., Chemistry Syllabus under Regulation 2022

DEPARTMENT OF CHEMISTRY							
S. No	Course Code	Course Title	Change Details	% of Changes	Content Deleted	Content Updated	Reason for Change
							Subject Expert / Course Teacher / Alumini Opinion
1	22UCY101	Core paper- I Inorganic and Organic Chemistry	Unit 1	5%		Non-covalent bond - Vander waals attraction	Subject Expert
			Unit 2		-	-	
			Unit 3		Mechanism of \square -Elimination	Mechanism of Elimination reaction	
			Unit 4		-	-	
			Unit 5		-	Furan	
2	22UCY202	Core Paper - II Organic and Physical Chemistry	Unit 1	0%	-	-	-
			Unit 2				
			Unit 3				
			Unit 4				
			Unit 5				
3	22UCY203	Core Practical-I		0%	-	-	-
4.	22UCY304	Core - III : Inorganic and Physical Chemistry	Unit-III	3%		Physical significance of fugacity and activity coefficient. Standard states.	Course teacher
5	22UCY3N11	Non Major	Unit 1	3%	-	-	Subject

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Dr. INDUMATHY RAMASAMY M.Sc., Ph.D.,
Assistant Professor & Head
Department of Chemistry
Nallamuthu Gounder Mahalingam College (Autonomous)
Pollachi - 642 001

R. Muthukumar
Dr. R. MUTHUKUMARAN
M.A., M.Phil., B.Ed., Ph.D.,
PRINCIPAL
N.G.M. College, Pollachi - 642 001
Coimbatore District

		Elective - I : Introduction to Nanotechnology	Unit 2		1 Dimensional, 2 Dimensional & 3 Dimensional	Classification of Nanostructures	Expert
			Unit 3		Quantum confinement	-	
			Unit 4		-	-	
			Unit 5		-	-	
	22UCY3N12	Non Major Elective - I: Chemistry of Consumer Products	Unit 1	0%			
			Unit 2				
			Unit 3				
			Unit 4				
			Unit 5				
6	22UCY405	Core - IV : General Chemistry	Unit 1	-	-	-	Subject Expert
			Unit 2	-	-	-	
			Unit 3	3%	Asymmetric synthesis.	-	
			Unit 4	-	-	-	
			Unit 5	-	-	"Application of isotopes in chemistry, agriculture and medicine" modified as self study portion	
7	22UCY406	Core Practical II : Volumetric and Organic Qualitative	-	3%	-	Acetylation of Salicylic acid to acetyl salicylic acid.	Course teacher -

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Dr. INDUMATHY RAMASAMY M.Sc., Ph.D.,
Assistant Professor & Head
Department of Chemistry
Nallamuthu Gounder Mahalingam College (Autonomous)
Pollachi - 642 001.

Muthukumar
Dr. R. MUTHUKUMARAN,
M.A., M.Phil., B.Ed., Ph.D.,
PRINCIPAL
N.G.M. College, Pollachi - 642 001
Coimbatore District

		Analysis					
8	22UCY4N21	Non Major Elective - II : Textile Chemistry	Unit 1	0%	-	-	-
			Unit 2				
			Unit 3				
			Unit 4				
			Unit 5				
	22UCY4N22	Non Major Elective - II : Food Science and Technology	Unit 1	0%	-	-	-
			Unit 2				
			Unit 3				
			Unit 4				
			Unit 5				
9	22UCY507	Core - V : Coordination and Bioinorganic Chemistry	Unit-III	10%	Applications of coordination compounds: Applications of copper and silver complexes in qualitative analysis. Applications of Ca-EDTA and Ni-DMG complexes in quantitative analysis.	Color of transition metal complexes- visible spectrum of aqueous Ti (III) ion. Introduction to MOT – Sigma bonding only.	Subject Expert
			Unit-IV				

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Dr. INDUMATHY RAMASAMY M.Sc., Ph.D.,
Assistant Professor & Head
Department of Chemistry
N.G.M. College, Pollachi (Autonomous)
Coimbatore District

Muthukumar
Dr. R. MUTHUKUMARAN,
M.A., M.Phil., B.Ed., Ph.D.,
PRINCIPAL
N.G.M. College, Pollachi - 642 001
Coimbatore District

						Ca-EDTA and Ni-DMG complexes in quantitative analysis.	
			Unit-V			Introduction to Organometallic chemistry – Electron counting. 18 electron rule.	
10	22UCY508	Core- VI : Organic Chemistry-I	Unit 1 - 5	0%	-	-	-
11	22UCY509	Core VII : Electro Chemistry	Unit 1	5%	-	-	Subject Expert
			Unit 2		-	-	
			Unit 3		Chrono amperometry, chrono potentiometry.	-	
			Unit 4		-	-	
			Unit 5		-	Primary and Secondary Batteries, Lithium ion Battery	
12	22UCY510	Core - VIII : Dye Chemistry	Unit - 1	0%	-	-	-
			Unit - 2				
			Unit - 3				
			Unit - 4				
			Unit - 5				
13	22UCY5E11	Core Elective - I : Analytical Chemistry I	Unit-1	0%	-	-	-
			Unit-2				
			Unit-3				

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Dr. INDUMATHY RAMASAMY M.Sc.,Ph.D.,
Assistant Professor & Head
Department of Chemistry
Nallamuthu Gounder Mahalingam College (Autonomous)
Pollachi - 642 001.

Dr. R. MUTHURUMARAN,
M.A.,M.Phil.,B.Ed.,Ph.D.,
PRINCIPAL
N.G.M. College, Pollachi - 642 001
Coimbatore District

			Unit-5				
14	22UCY5E12	Core Elective - I : Pharmaceutical Chemistry	Unit 1	0%	-	-	-
			Unit 2				
			Unit 3				
			Unit 4				
			Unit 5				
15	22UCY5E13	Core Elective - I : Leather Chemistry	Unit 1	0%	-	-	-
			Unit 2				
			Unit 3				
			Unit 4				
			Unit 5				
16	22UCY5S12	Cyber Security - Ethical Hacking	SBE	0%	-	-	-
17	22UCY5AL1	Advanced Learner Course - I: Environmental Chemistry (Optional) Self Study	Unit 1	0%	-	-	-
			Unit 2				
			Unit 3				
			Unit 4				
			Unit 5				
18	22UCY611	Core - IX : Physical Methods and Chemical Structure	Unit 4	5%	Instrumentatio n - EI	-	Subject Expert
			Unit 5		-	Faraday Balance	
19	22UCY612	Core - X : Organic Chemistry - II	Unit - 2	5%	-	Optical activity of amino acids	Subject Expert
			Unit - 5		Mode of action	Mode of action of Sulpha drugs	

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Dr. INDUMATHY RAMASAMY M.Sc., Ph.D.,
Assistant Professor & Head
Department of Chemistry
Nallamuthu Gounder Mahalingam College (Autonomous)
Pollachi - 642 001,

Page 5 of 8

Muthukumar

Dr. R. MUTHUKUMARAN,
M.A., M.Phil., B.Ed., Ph.D.,
PRINCIPAL
N.G.M. College, Pollachi - 642 001
Coimbatore District

20	22UCY613	Core - XI : Chemical Kinetics and Quantum Mechanics	Unit 1 - 5	0%	-	-	-
21	22UCY614	Core - XII : Polymer Chemistry	Unit 1	0%	-	-	-
			Unit 2				
			Unit 3				
			Unit 4				
			Unit 5				
22	22UCY6E21	Core Elective - II : Analytical Paper II	Unit 1	0%	-	-	-
			Unit 2				
			Unit 3				
			Unit 4				
			Unit 5				
23	22UCY6E22	Core Elective - II : Pharmaceutical Chemistry II	Unit 1	0%	-	-	-
			Unit 2				
			Unit 3				
			Unit 4				
			Unit 5				
24	22UCY6AL2	Core Elective - II : Agricultural chemistry and Analytical techniques for agrochemicals	Unit-1	0%	-	-	-
			Unit-2				
			Unit-3				
			Unit-4				
			Unit-5				
25	22UCY615	Core Lab - III : Gravimetric Analysis and Physical Chemistry	-	5%	Potassium persulphate oxidation and Redox titrations with	Base catalysed hydrolysis	Course teacher

Indumathy

Dr. INDUMATHY RAMASAMY M.Sc., Ph.D.,
Assistant Professor & Head
Department of Chemistry
Nallamothu Gounder Mahalingam College (Autonomous)
Pollachi - 642 001.

Page 6 of 8

Muthu
Dr. R. MUTHUKUMARAN,
M.A., M.Phil., B.Ed., Ph.D.,
PRINCIPAL
N.G.M. College, Pollachi - 642 001
Coimbatore District

		Experiments			FeSO ₄ and KMnO ₄		
26	22UCY6AL2	Advanced Learner Course - II: Applications of Spectroscopy (Optional) Self Study	Unit-1	0%	-	-	-
			Unit-2				
			Unit-3				
			Unit-4				
			Unit-5				
27	22UCY6S21	Skill Based Elective - II : Green Chemistry	Unit-1	0%	-	-	-
			Unit-2				
			Unit-3				
			Unit-4				
			Unit -5				
28	22UCY6S22	Skill Based Elective - II : Cleanenergy	Unit-1	0%	-	-	-
			Unit-2				
			Unit-3				
			Unit-4				
			Unit -5				
29	22UPS3A3/ 22UBY3A/ 22UZY3A4	Allied Chemistry Paper - I Inorganic, organic and physical chemistry	Unit - 2	2%	Disadvantages of hard water	Disadvantages of hard water in boiler	Course teacher
30	22UPS4A4/ 22UBY4A4/ 22UZY4A5	Allied Chemistry Paper - II Inorganic, organic and physical chemistry	Unit - 1	2%	-	Role of gypsum	Course teacher
31	22UPS4A5/	Allied	-	0%	-	-	-

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Dr. INDUMATHY RAMASAMY M.Sc., Ph.D.,
Assistant Professor & Head
Department of Chemistry
Nallamuthu Gounder Mahalingam College (Autonomous)
Pollachi - 642 001.

Dr. R. MUTHUKUMARAN,
M.A., M.Phil., B.Ed., Ph.D.,
PRINCIPAL
N.G.M. College, Pollachi - 642 001
Coimbatore District


	22UBY4A6/ 22UZY4A6	Chemistry Practical					
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Dr. INDUMATHY RAMASAMY M.Sc., Ph.D.,
Assistant Professor & Head
Department of Chemistry
Nallamuthu Gounder Mahalingam College (Autonomous)
Pollachi - 642 001.


PRINCIPAL

Dr. R. MUTHUKUMARAN,
M.A., M.Phil., B.Ed., Ph.D.,
PRINCIPAL
N.G.M. College, Pollachi - 642 001
Coimbatore District



Dr. R. MUTHUKUMARAN,
M.A., M.Phil., B.Ed., Ph.D.,
PRINCIPAL
N.G.M. College, Pollachi - 642 001
Coimbatore District