## Department of Chemistry Nesamony Memorial Christian College, Marthandam **B. Sc. Chemistry** Programme Outcomes

	B.Sc., Chemistry
	06C
	UG - 3 Years
PO1	Disciplinary knowledge: Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an
	undergraduate Programme of study.
PO2	<b>Communication Skills:</b> Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media;
	confidently share one's views and express herself / himself; demonstrate the ability to listen carefully, read and write analytically, and present complex
	information in a clear and concise manner to different groups
PO3	Critical thinking: Capability to apply analytic thought to a body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis
	of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories
	by following scientific approach to knowledge development
PO4	Problem solving: Capacity to extrapolate from what one has learned and apply their competencies to solve different kinds of non-familiar problems,
	rather than replicate curriculum content knowledge; and apply one's learning to real life situations.
PO5	Analytical reasoning: Ability to evaluate there liability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze
	and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples, and addressing opposing
	viewpoints.
PO6	Research-related skills: A sense of inquiry and capability for asking relevant/appropriate questions, problem arising, synthesising and articulating;
	Ability to recognize cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, interpret and draw conclusions
	from data, establish hypotheses, predict cause-and-effect relationships; ability to plan, execute and report the results of an experiment or investigation.
<b>PO7</b>	<b>Cooperation/Teamwork:</b> Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a
	group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of a team.
PO8	Scientific reasoning: Ability to analyse, interpret and draw conclusions from quantitative/ qualitative data; and critically evaluate ideas, evidence and
	experiences from an open-minded and reasoned perspective.
PO9	Reflective thinking: Critical sensibility to lived experiences, with self-awareness and reflexivity of both self and society. Sources; and use appropriate
	software for analysis of data.
<b>PO10</b>	Information/digital literacy: Capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of
	PO3 PO4 PO5 PO6 PO7 PO8 PO9

	relevant information
PO11	Self-directed learning: Ability to work independently, identifies appropriate resources required for a project, and manages a project through to
	completion.
PO12	Multicultural competence: Possess knowledge of the value and belief of multiple cultures and a global perspective; and capability to effectively
	engage in a multicultural society and interact respectfully with diverse groups.
PO13	<b>Moral and ethical awareness/reasoning:</b> Ability to embrace moral/ethical values in conducting one's life, formulate a position/ argument about an ethical issue from multiple perspectives, and use ethical practices in all work. Capable of demonstrating the ability to identify ethical issues related to one's work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work.
PO14	<b>Leadership readiness/qualities:</b> Capability for mapping out the tasks of a team or an organization, and setting direction, formulating an inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision, and using management skills to guide people to the right destination, in a smooth and efficient way.
PO15	<b>Lifelong learning:</b> Ability to acquire knowledge and skills, including, learning how to learn', that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to changing trades and demands of work place through knowledge/skill development/reskilling.