

Department of Chemistry

Certificate Course on 'Green Chemistry' Academic Year 2023-24

Syllabus Outcomes:

- Define and explain the 12 principles of green chemistry.
- Identify and analyze chemical processes and products based on their adherence to green chemistry principles.
- Evaluate the environmental impact of conventional chemical processes and compare them with green alternatives.
- Apply life cycle assessment techniques to analyze the overall environmental footprint of chemical products.

Sr.No	Торіс	Description	No of Lectures
1.	Introduction to Green Chemistry	Overview of Green Chemistry ,Principles of Green Chemistry, Goals of Green Chemistry, Sustainability in chemical processes, Life Cycle Assessment (LCA)	08
2.	Green Solvents and Reaction Conditions	Green solvents ,Substitution of hazardous solvents, Designing green reaction conditions, Energy-efficient techniques	08
3.	Green Synthesis and Catalysis	Green synthesis methods, Role of catalysis in Green Chemistry	04
4.	Renewable Resources and Green Materials	Renewable feedstock's, Biomimicry in Green Chemistry Green materials, Sustainable packaging and design	06
5.	Environmental Impact and Regulations	Environmental impact assessment Regulatory frameworks	04



Department of Chemistry Academic Year 2023-24 Certificate course: 'Green Chemistry'

Schedule of the course

Sr.No	Торіс	Description	Name of the teacher
1.	Introduction to Green Chemistry	Overview of Green Chemistry ,Principles of Green Chemistry, Goals of Green Chemistry, Sustainability in chemical processes, Life Cycle Assessment (LCA)	Prof.D.V.Taskar
2.	Green Solvents and Reaction Conditions	Green solvents ,Substitution of hazardous solvents, Designing green reaction conditions, Energy-efficient techniques	Prof.P.B.Wadhavane
3.	Green Synthesis and Catalysis	Green synthesis methods, Role of catalysis in Green Chemistry	Prof .B.R.Kushare
4.	Renewable Resources and Green Materials	Renewable feedstocks, Biomimicry in Green Chemistry Green materials, Sustainable packaging and design	Prof.J.R.Kapadi
5.	Environmental Impact and Regulations	Environmental impact assessment Regulatory frameworks	Prof .V.G.Shinde

Course Coordinator

HoD

Principal