



!! न हि ज्ञानेन सदृशं पवित्रमिह विद्यते !!

Shriram Shikshan Sanstha's

Shriram Mahila Vidnyan Mahavidyalaya, Paniv

Tals.: Malshiras, Dist.: Solapur, 413113

(Affiliated to S. N. D. T. Women's University, Mumbai)

Department of Chemistry

Postgraduate Program Outcomes (POs)

- 1. Disciplinary Knowledge:** Demonstrate comprehensive knowledge and understanding of one or more disciplines that form a part of a programme of study.
- 2. Critical Thinking:** Apply analytic thought to a body of knowledge, analyses 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.
- 3. Analytical Reasoning:** Demonstrate the ability to evaluate the reliability and relevance of evidence, identify logical flaws and holes in the arguments of others, analyses and synthesize data from a variety of sources, draw valid conclusions and support them with evidence and examples, and addressing opposing viewpoints.
- 4. Problem Solving:** Demonstrate 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.
- 5. Research-related Skills:** Demonstrate a sense of inquiry and capability for asking relevant/appropriate questions, problematizing, synthesising and articulating, demonstrate the 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, plan, execute and report the results of an experiment or investigation.
- 6. Scientific Reasoning using Quantitative/Qualitative Data:** Demonstrate the ability to understand cause-and-effect relationships, define problems, apply scientific principles, analyse, interpret and draw conclusions from quantitative/qualitative data, and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective.
- 7. Communication Skills:** Ability to share 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.
- 8. Collaboration/Cooperation/Team work:** Demonstrate 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.

- 9. Information/Digital Literacy:** Demonstrate capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources and to use appropriate software for analysis of data.
- 10. Self-Directed Learning:** Demonstrate ability to work independently, identify appropriate resources required for a project, and manage a project through to completion.
- 11. Moral and Ethical Awareness/Reasoning:** Demonstrate the 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. Demonstrate 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, appreciate environmental and sustainability issues, and adopt objective, unbiased and truthful actions in all aspects of work.
- 12. Lifelong learners:** Capable of self-paced and self-directed learning aimed at personal development and for improving knowledge/skill development and reskilling in all areas of respective subjects.