

Rayat Shikshan Sanstha's  
**Annasaheb Awate Arts, Commerce & Hutatma Babu Genu Science College, Manchar**  
DEPARTMENT OF CHEMISTRY

**Program Outcomes (POs) and PROGRAMME SPECIFIC OUTCOME (PSOs)**

**A) Program Outcomes (POs)**

For every stream, broad expectations listed by the university as well as Institution. The goal of creating an academic program assessment plan is to facilitate continuous program level improvement. A program assessment plan should be developed collaboratively among faculty who teach the program. A program level outcome assessment plan provide faculty with a clear understanding of how their program is assessed.

Program Outcomes (POs) is a systematic method for collecting, analyzing, and using information to answer questions about projects, policies and programs particularly about their effectiveness and efficiency. In both the public and private sectors, stakeholders often want to know whether the programs they are funding, implementing, voting for, receiving or objecting to are producing the intended effect. While program evaluation first focuses around this definition, important considerations often include how much the program costs per participant, how the program could be improved, whether the program is worthwhile, whether there are better alternatives, if there are unintended outcomes, and whether the program goals are appropriate and useful. Evaluators help to answer these questions, but the best way to answer the questions is for the evaluation to be a joint project between evaluators and stakeholders.

**UNDER-GRADUATE (UG) SECTION**

**PO1:** Conduct research relevant to a scientific issue, evaluate different sources of information including secondary data, understanding that a source may lack detail or show bias.

**PO2:** Appreciate the role of science in society; and its personal, social and global importance; and how society influences scientific research.

**PO-3:** To understand and analyze the data (qualitatively/quantitatively) to identify patterns and relationships, identify anomalous observations, draw and justify conclusions.

**PO-4:** To recognize questions that are appropriate for scientific investigation, positive stable hypotheses, and evaluate and compare strategies for investigating hypotheses.

**PO-5:** Students should appreciate the role of science in society; and its personal, social and global importance.

**PO-6:** Understanding environmental concerns by the students at the undergraduate level.

**PO-7:** Understanding the relationship of man with the environment and help them change his attitude for more positive, proactive, eco-friendly and sustainable lifestyles.

**PO-8:** Getting information about climate change, Global warming, Acid rain, Greenhouse effect,

Ozone, layer depletion.

**PO9:** Cultivating attitudes to safe guard the environment built particularly with field experience.

**PO-10:** Realization of the impact of human actions on the immediate environment and the linkage with the larger issues.

### **POST-GRADUATE (PG) SECTION**

After successful completion of two years degree program in Chemistry a student should be able to

**PO-1:** Determine molecular Structure by using UV, IR, H<sup>1</sup> NMR, C<sup>13</sup> NMR, Mass, ESR, Raman, Electronic, Microwave, XRD, Mossbauer, etc. Spectroscopic Techniques.

**PO-2:** Study of Medicinal Chemistry of different drugs substances and their adverse effect on Human being and their Synthesis.

**PO-3:** Develop research-oriented skills.

**PO-4:** Solve the reaction mechanism and assign the final product of different Organic Compounds.

**PO-5:** To Determine the aromaticity and Stability of different organic compounds.

**PO-6:** Synthesis of Natural Products by using their proper route and their disconnection.

**PO-7:** Study of symmetrical and asymmetrical synthesis of organic compounds and its Stereochemistry. Practical handing.

**PO-8:** To make good industrialist.

## **B) PROGRAMME SPECIFIC OUTCOME (PSOs)**

Programme Specific Outcomes (PSOs) are narrow statements that describe what the students are expected to know and would be able to do upon the graduation. Program outcomes represent broad statements that incorporate many areas of inter-related knowledge and skills developed over the duration of the program through a wide range of courses and experiences. They represent the big picture, describe broad aspects of behaviour, and encompass multiple learning experiences.

### **UNDER GRADUATE (UG) SECTION**

**PSO1:** This paper presents the basic principles of chemistry

**PSO2:** Students should have a working knowledge of the main area of chemistry organic, Inorganic, physical, analytical, textiles and dye chemistry

**PSO3:** To understand the important concepts of chemistry

**PSO4:** Students should be able to perform and understand chemical reactions.

**PSO5:** To have an understanding of the professional responsibility and ethical values.

**PSO6:** To communicate effectively.

**PSO7:** Identify the study of the compositions structure, properties and reaction matter.

**PSO8:** To understand work in a chemical related field.

### **POST-GRADUATE (PG) SECTION**

**PSO1:** Know the structure and bonding in molecules/ ions and predict the Structure of molecule /ions.

**PSO2:** Understand the various type of aliphatic, aromatic, nucleophilic substitution reaction.

**PSO3:** Understand and apply principles of organic chemistry for understanding the scientific phenomenon in reaction mechanisms.

**PSO4:** Learn the familiar name reactions and their reaction mechanisms.