

**PROGRAMME SPECIFIC
OUTCOMES (PSOs)**

**PROGRAMME SPECIFIC
OUTCOMES (PSOs) OF
BACHELOR OF SCIENCE (B.SC.)
PROGRAMMES**

PSOs for B.Sc. programme stated by Physics Department

Programme Specific Outcomes (PSOs) are specific learning outcomes that are unique to a particular program of study. For B.Sc. (Physics), some of the PSOs that students should be able to demonstrate by the end of the program include:

- PSO-1** Apply mathematical concepts and tools to analyze physical phenomena, including the laws of motion, energy, and electromagnetism.
- PSO-2** Apply experimental methods and techniques to design, conduct, and analyze experiments in physics, using various instruments and apparatus.
- PSO-3** Apply principles of classical mechanics, quantum mechanics, thermodynamics, and statistical physics to analyze and solve problems in various fields of physics.
- PSO-4** Demonstrate a strong foundation in theoretical physics, including an understanding of key concepts, principles, and theories.
- PSO-5** Apply principles of optics, electromagnetism, and electronics to design, analyze and troubleshoot various devices and systems, such as lasers, optical fibers, and electronic circuits.
- PSO-6** Demonstrate proficiency in the use of computational methods, software, and tools to simulate, analyze and visualize physical phenomena and data.
- PSO-7** Communicate scientific ideas and information effectively, both orally and in writing, using appropriate scientific terminology and conventions.
- PSO-8** Work effectively in a team, demonstrating interpersonal skills such as collaboration, leadership, and conflict resolution.
- PSO-9** Demonstrate ethical and professional behavior, including integrity, responsibility, and respect for diversity.
- PSO-10** Pursue lifelong learning and professional development, keeping abreast of new developments in physics, and adapting to changing contexts and challenges.

These PSOs are designed to ensure that B.Sc. (Physics) graduates are well-prepared for careers in scientific research, teaching, industry, and other related fields. By achieving these PSOs, students are expected to be competent, confident, and capable of making meaningful contributions to the field of physics.

PSOs for B.Sc. programme stated by Chemistry Department

Programme Specific Outcomes (PSOs) are specific learning outcomes that are unique to a particular program of study. For B.Sc. (Chemistry), some of the PSOs that students should be able to demonstrate by the end of the program include:

- PSO-1** Apply fundamental concepts of chemistry, including atomic structure, chemical bonding, thermodynamics, and kinetics, to analyze and solve problems in various fields of chemistry.
- PSO-2** Demonstrate proficiency in laboratory techniques, instrumentation, and safety procedures, and use them to conduct experiments, analyze data, and interpret results.
- PSO-3** Apply principles of organic, inorganic, and physical chemistry to design, synthesize, and characterize various compounds, including drugs, polymers, and materials.
- PSO-4** Analyze and interpret chemical data, using statistical and computational methods, to draw conclusions and make predictions about chemical phenomena.
- PSO-5** Apply knowledge of environmental chemistry, including principles of pollution, degradation, and remediation, to identify and solve environmental problems.
- PSO-6** Communicate scientific ideas and information effectively, both orally and in writing, using appropriate scientific terminology and conventions.
- PSO-7** Work effectively in a team, demonstrating interpersonal skills such as collaboration, leadership, and conflict resolution.
- PSO-8** Demonstrate ethical and professional behavior, including integrity, responsibility, and respect for diversity.
- PSO-9** Pursue lifelong learning and professional development, keeping abreast of new developments in chemistry, and adapting to changing contexts and challenges.

These PSOs are designed to ensure that B.Sc. (Chemistry) graduates are well-prepared for careers in scientific research, teaching, industry, and other related fields. By achieving these PSOs, students are expected to be competent, confident, and capable of making meaningful contributions to the field of chemistry.

PSOs for B.Sc. programme stated by Mathematics Department

Programme Specific Outcomes (PSOs) are specific learning outcomes that are unique to a particular program of study. For B.Sc. (Mathematics), some of the PSOs that students should be able to demonstrate by the end of the program include:

- PSO-1** Apply fundamental concepts of mathematics, including algebra, calculus, and geometry, to analyze and solve problems in various fields of mathematics.
- PSO-2** Demonstrate proficiency in mathematical reasoning, logic, and proof, and use them to develop and evaluate mathematical arguments.

- PSO-3** Apply mathematical models and methods to solve problems in various fields, such as physics, engineering, economics, and finance.
- PSO-4** Analyze and interpret mathematical data, using statistical and computational methods, to draw conclusions and make predictions about mathematical phenomena.
- PSO-5** Apply knowledge of discrete mathematics, including graph theory, combinatorics, and optimization, to solve problems in various fields.
- PSO-6** Communicate mathematical ideas and information effectively, both orally and in writing, using appropriate mathematical terminology and conventions.
- PSO-7** Work effectively in a team, demonstrating interpersonal skills such as collaboration, leadership, and conflict resolution.
- PSO-8** Demonstrate ethical and professional behavior, including integrity, responsibility, and respect for diversity.
- PSO-9** Pursue lifelong learning and professional development, keeping abreast of new developments in mathematics, and adapting to changing contexts and challenges.

These PSOs are designed to ensure that B.Sc. (Mathematics) graduates are well-prepared for careers in scientific research, teaching, industry, and other related fields. By achieving these PSOs, students are expected to be competent, confident, and capable of making meaningful contributions to the field of mathematics.

PSOs for B.Sc. programme stated by Electronics Department

Programme Specific Outcomes (PSOs) are specific learning outcomes that are unique to a particular program of study. For B.Sc. (Electronics), some of the PSOs that students should be able to demonstrate by the end of the program include:

- PSO-1** Apply fundamental concepts of electronics, including semiconductor physics, circuit theory, and signal processing, to analyze and solve problems in various fields of electronics.
- PSO-2** Demonstrate proficiency in designing and implementing electronic circuits, systems, and devices using simulation tools and software.
- PSO-3** Apply principles of analog and digital electronics to design and analyze electronic circuits and systems for various applications, such as communication, control, and instrumentation.
- PSO-4** Analyze and interpret electronic data, using statistical and computational methods, to draw conclusions and make predictions about electronic phenomena.

- PSO-5** Apply knowledge of electronic materials, devices, and manufacturing processes to design and develop electronic products, systems, and devices.
- PSO-6** Communicate electronic ideas and information effectively, both orally and in writing, using appropriate electronic terminology and conventions.
- PSO-7** Work effectively in a team, demonstrating interpersonal skills such as collaboration, leadership, and conflict resolution.
- PSO-8** Demonstrate ethical and professional behavior, including integrity, responsibility, and respect for diversity.
- PSO-9** Pursue lifelong learning and professional development, keeping abreast of new developments in electronics, and adapting to changing contexts and challenges.

These PSOs are designed to ensure that B.Sc. (Electronics) graduates are well-prepared for careers in electronic engineering, research and development, manufacturing, and other related fields. By achieving these PSOs, students are expected to be competent, confident, and capable of making meaningful contributions to the field of electronics.

PSOs for B.Sc. programme stated by Computer Science Department

Programme Specific Outcomes (PSOs) are specific learning outcomes that are unique to a particular program of study. For B.Sc. (Computer Science), some of the PSOs that students should be able to demonstrate by the end of the program include:

- PSO-1** Apply fundamental concepts of computer science, including programming, algorithms, and data structures, to analyze and solve problems in various fields of computer science.
- PSO-2** Demonstrate proficiency in designing, implementing, and testing computer programs using appropriate programming languages, tools, and software development methodologies.
- PSO-3** Apply principles of computer organization, operating systems, and computer networks to design and analyze computer systems and networks for various applications.
- PSO-4** Analyze and interpret computer data, using statistical and computational methods, to draw conclusions and make predictions about computer systems and applications.
- PSO-5** Apply knowledge of databases, data mining, and information retrieval to design and develop database systems and applications.

PSO-6 Communicate computer ideas and information effectively, both orally and in writing, using appropriate computer terminology and conventions.

PSO-7 Work effectively in a team, demonstrating interpersonal skills such as collaboration, leadership, and conflict resolution.

PSO-8 Demonstrate ethical and professional behavior, including integrity, responsibility, and respect for diversity.

PSO-9 Pursue lifelong learning and professional development, keeping abreast of new developments in computer science, and adapting to changing contexts and challenges.

These PSOs are designed to ensure that B.Sc. (Computer Science) graduates are well-prepared for careers in software engineering, system analysis, database administration, and other related fields. By achieving these PSOs, students are expected to be competent, confident, and capable of making meaningful contributions to the field of computer science.

PSOs for B.Sc. programme stated by Botany Department

Programme Specific Outcomes (PSOs) are specific learning outcomes that are unique to a particular program of study. For B.Sc. (Botany), some of the PSOs that students should be able to demonstrate by the end of the program include:

PSO-1 Understand the basic principles of plant biology, including morphology, anatomy, physiology, and taxonomy.

PSO-2 Demonstrate an understanding of the diversity of plant life, including the identification and classification of plants.

PSO-3 Demonstrate an understanding of the ecological relationships between plants and their environment.

PSO-4 Analyze and interpret plant data using statistical and computational methods to draw conclusions and make predictions about plant growth and development.

PSO-5 Demonstrate proficiency in the use of scientific tools, techniques, and equipment to conduct laboratory and field-based experiments related to plant biology.

PSO-6 Communicate botanical ideas and information effectively, both orally and in writing, using appropriate terminology and conventions.

PSO-7 Work effectively in a team, demonstrating interpersonal skills such as collaboration, leadership, and conflict resolution.

PSO-8 Demonstrate ethical and professional behavior, including integrity, responsibility, and respect for diversity.

PSO-9 Pursue lifelong learning and professional development, keeping abreast of new developments in the field of botany, and adapting to changing contexts and challenges.

These PSOs are designed to ensure that B.Sc. (Botany) graduates are well-prepared for careers in plant research, agriculture, forestry, and other related fields. By achieving these PSOs, students are expected to be competent, confident, and capable of making meaningful contributions to the field of botany.

PSOs for B.Sc. programme stated by Zoology Department

Programme Specific Outcomes (PSOs) are specific learning outcomes that are unique to a particular program of study. For B.Sc. (Zoology), some of the PSOs that students should be able to demonstrate by the end of the program include:

PSO-1 Understand the basic principles of animal biology, including morphology, anatomy, physiology, and taxonomy.

PSO-2 Demonstrate an understanding of the diversity of animal life, including the identification and classification of animals.

PSO-3 Demonstrate an understanding of the ecological relationships between animals and their environment.

PSO-4 Analyze and interpret animal data using statistical and computational methods to draw conclusions and make predictions about animal growth and development.

PSO-5 Demonstrate proficiency in the use of scientific tools, techniques, and equipment to conduct laboratory and field-based experiments related to animal biology.

PSO-6 Communicate zoological ideas and information effectively, both orally and in writing, using appropriate terminology and conventions.

PSO-7 Work effectively in a team, demonstrating interpersonal skills such as collaboration, leadership, and conflict resolution.

PSO-8 Demonstrate ethical and professional behavior, including integrity, responsibility, and respect for diversity.

PSO-9 Pursue lifelong learning and professional development, keeping abreast of new developments in the field of zoology, and adapting to changing contexts and challenges.

These PSOs are designed to ensure that B.Sc. (Zoology) graduates are well-prepared for careers in animal research, veterinary science, conservation, and other related fields. By achieving these PSOs, students are expected to be competent, confident, and capable of making meaningful contributions to the field of zoology.

**PROGRAMME SPECIFIC
OUTCOMES (PSOs) OF
LANGUAGES FOR B.SC./B.COM.
PROGRAMMES**

PSOs for B.Sc./B.Com. programme stated by English Department

Programme Specific Outcomes (PSOs) for B.Sc./B.Com. in English language include:

- PSO-1** Develop advanced proficiency in the English language, including written and spoken communication skills, reading comprehension, and critical analysis.
- PSO-2** Demonstrate a comprehensive understanding of English language and literature, including literary genres, historical periods, and literary movements.
- PSO-3** Analyze and interpret complex literary texts, including poetry, drama, and fiction, using appropriate literary and critical theories.
- PSO-4** Demonstrate proficiency in research methodologies, including the use of library resources, online databases, and primary sources.
- PSO-5** Demonstrate effective writing skills in a variety of genres, including academic essays, research papers, and creative writing.
- PSO-6** Develop effective presentation skills, including the ability to communicate complex ideas and arguments through oral presentations, debates, and discussions.
- PSO-7** Demonstrate knowledge and understanding of the cultural and social contexts in which English language and literature are produced and consumed.
- PSO-8** Demonstrate proficiency in the use of technology, including word processing, multimedia presentations, and digital media.
- PSO-9** Work effectively in a team, demonstrating interpersonal skills such as collaboration, leadership, and conflict resolution.
- PSO-10** Demonstrate ethical and professional behavior, including integrity, responsibility, and respect for diversity.

These PSOs are designed to ensure that B.Sc./B.Com. graduates in English language are well-prepared for careers in diverse fields such as journalism, publishing, teaching, research, public relations, and creative writing. By achieving these PSOs, students are expected to be competent, confident, and capable of making meaningful contributions to the field of English language and literature.

PSOs for B.Sc./B.Com. programme stated by Hindi Department

बी.एससी./बी.कॉम. (हिंदी भाषा) के लिए कार्यक्रम विशिष्ट परिणाम (पीएसओ) हैं। छात्रों को पाठ्यक्रम के अंत तक दिखाने के लिए कुछ पीएसओ शामिल हैं, जिनमें निम्नलिखित शामिल हैं:

- पीएसओ-1** हिंदी भाषा के इतिहास, संस्कृति और साहित्य के बारे में विस्तृत ज्ञान होना।
- पीएसओ-2** हिंदी भाषा के विभिन्न वर्गों, जैसे कि व्याकरण, लेखन और भाषा विज्ञान में सटीकता से काम करना।
- पीएसओ-3** अनुवाद और भाषा अध्ययन के लिए उपयुक्त सॉफ्टवेयर और उपकरणों का उपयोग करना।
- पीएसओ-4** भाषा और संस्कृति के माध्यम से भारतीय समाज और संस्कृति को समझना।
- पीएसओ-5** हिंदी भाषा में लेखन कौशल और भाषा उपयोग के लिए संचार कौशल विकसित करना।
- पीएसओ-6** विभिन्न संस्थाओं और क्षेत्रों में हिंदी भाषा का उपयोग करने में सक्षम होना।
- पीएसओ-7** व्यक्तिगत उन्नयन और सामाजिक सेवा के लिए हिंदी भाषा का उपयोग करना।
- पीएसओ-8** हिंदी भाषा के माध्यम से विश्व के विभिन्न भाषाओं और संस्कृतियों को समझना।

PSOs for B.Sc./B.Com. programme stated by Marathi Department

बी.एससी./बी.कॉम. मराठी भाषेचे कार्यक्रम अंतर्गत विद्यार्थ्यांनी काही प्रोग्राम स्पेसिफिक आउटकम (PSOs) दर्शविण्याचे अपेक्षित आहे. त्यांचे संयोजन खास उद्दिष्ट शिक्षण उत्कृष्टतेच्या परिणामांच्या ज्ञानासह विद्यार्थ्यांना संपन्न करण्याचे आहे. खास रूपात, बी.एससी. / बी.कॉम. मराठी भाषेच्या कार्यक्रमांतील काही PSOs ही आहेत:

- पीएसओ-1** मराठी भाषेचे इतिहास, संस्कृती, व्याकरण, वाङ्मय आणि संचाराचे संपूर्ण ज्ञान विद्यार्थ्यांना देणे.

पीएसओ-2 मराठी भाषेच्या शास्त्रीय संस्कृतीसाठी अपेक्षित विद्यार्थ्यांना मराठी साहित्य, छंद, अलंकार आणि तंत्रज्ञान यांचे संग्रह आणि व्याख्या अर्ज करण्यास क्षमतेची प्राप्ती करावी.

पीएसओ-3 मराठी भाषेचे संचार आणि बोलीच्या क्षेत्रात अपेक्षित ज्ञान अर्ज करण्यास क्षमतेची प्राप्ती करावी.

पीएसओ-4 मराठी भाषेतील गणित, विज्ञान, सामाजिक विज्ञान आणि संगणक अभियांत्रिकी या विषयांच्या संबंधीत शब्दांचा उपयोग करून समजून घ्यावे.

पीएसओ-5 मराठी भाषेचा अभिवादन, बोली, लेखन, विवेचन, तुलना, अनुवाद, टिप्पणी, संपादन आणि समाचार पद्धतींचा समजून घ्यावे.

**PROGRAMME SPECIFIC
OUTCOMES (PSOs) OF
BACHELOR OF COMMERCE
(B.COM.) PROGRAMMES**

पीएसओ-6 मराठी भाषेची साहित्यिक विरासत आणि संस्कृती समजून घ्यावे आणि त्याचा उपयोग संबंधीत विषयांच्या समजून घ्यावे.

पीएसओ-7 मराठी भाषेच्या इतिहास, व्याकरण, सामान्य विज्ञान, चित्रकला आणि संस्कृती या विषयांचा समजून घ्यावे.

PSOs for B.Com. programme stated by Commerce Department

The Programme Specific Outcomes (PSOs) for Commerce can vary depending on the specific focus and specialization of the program. However, some common PSOs for B.Com. programs can include:

- PSO-1** Develop an understanding of the principles and practices of accounting, finance, and business management.
- PSO-2** Acquire knowledge of the legal, economic, and social frameworks within which businesses operate.
- PSO-3** Develop analytical and problem-solving skills for making informed business decisions.
- PSO-4** Develop communication and interpersonal skills to effectively collaborate with diverse teams and stakeholders.
- PSO-5** Demonstrate proficiency in using technology for business analysis, decision making, and communication.
- PSO-6** Develop entrepreneurial and innovative thinking for identifying and pursuing business opportunities.
- PSO-7** Acquire knowledge of global business practices and cross-cultural communication.
- PSO-8** Develop ethical and socially responsible perspectives for making business decisions.
- PSO-9** Develop leadership and management skills for effectively managing people, projects, and resources.
- PSO-10** Demonstrate proficiency in written and oral communication for business purposes.