

JSS College For Women (Autonomous)

Program: B.Sc

Combination: Microbiology, Chemistry

At the end of the program the student should be able to:

PSO1. Knowledge and understanding of concepts of microbiology and its application in pharma, food, agriculture, beverages, nutraceuticals industries.

PSO2. Understand the distribution, morphology and physiology of microorganisms and demonstrate the skills in aseptic handling of microbes including isolation, identification and maintenance

PSO3. Competent to apply the knowledge gained for conserving the environment and resolving the environmental related issues.

PSO4. Learning and practicing professional skills in handling microbes and contaminants in laboratories and production sectors.

PSO5. Exploring the microbial world and analyzing the specific benefits and challenges.

PSO6. Applying the knowledge acquired to undertake studies and identify specific remedial measures for the challenges in health, agriculture, and food sectors.

PSO7. Thorough knowledge and application of good laboratory and good manufacturing practices in microbial quality control.

PSO8. Understanding biochemical and physiological aspects of microbes and developing broader perspective to identify innovative solutions for present and future challenges posed by microbes.

PSO9. Understanding and application of microbial principles in forensic and working knowledge about clinical microbiology.

PSO10. Demonstrate the ability to identify ethical issues related to recombinant DNA technology, GMOs, intellectual property rights, biosafety and biohazards.

PSO11. Demonstrate the ability to identify key questions in microbiological research, optimize research methods, and analyze outcomes by adopting scientific methods, thereby improving the employability.

PSO12. Enhance and demonstrate analytical skills and apply basic computational and statistical techniques in the field of microbiology.

PSO13: To create enthusiasm among students for chemistry and its application in various fields of life.

PSO14: To provide students with broad and balanced knowledge and understanding of key concepts in chemistry

PSO15: To develop in students a range of practical skills so that they can understand and assess risks and work safely measures to be followed in the laboratory.

PSO16: To develop in students the ability to apply standard methodology to the solution of problems in chemistry

PSO17: To provide students with knowledge and skill towards employment or higher education in Analytical chemistry or multi-disciplinary areas involving chemistry.

PSO18: To provide students with the ability to plan and carryout experiments independently and assess the significance of outcomes and to cater to the demands of chemical Industries of well-trained graduates

PSO19: To develop in students the ability to adapt and apply methodology to the solution of unfamiliar types of problems.

PSO20: To instill critical awareness of advances at the forefront of chemical sciences, to prepare students effectively for professional employment or research degrees in chemical sciences and to develop an independent and responsible work ethics.