St. Mira's College for Girls, Pune [Autonomous- affiliated to the Savitribai Phule University] Learning Outcomes based Curriculum Framework (LOCF) For Undergraduate Programme Name of Programme: B.Sc Computer Science w.e.f. 2023

Aims of Bachelor's Degree Programme in Computer Science

- To equip students with core competencies by strengthening their problem solving and programming skills using computer Science.
- To develop computational and analytical skills using Mathematics and Statistical tools among the students and train them to design and synthesize emerging trends through Electronics for real world problems.
- To inculcate high professionalism among the students by providing technical soft skills and ethics for their professional growth through practicals and projects.
- To develop communication skills and team work through multidisciplinary approach with emphasis on co- curricular and extracurricular activities.
- To integrate elements of the Indian knowledge system with traditional academic subjects and broadens student's perspective towards the field of computer science.

Program Specific Outcomes:

I) Academic Competence :

PSOA1: Develop an ability to engage in learning through theory and practical sessions in the context of technological change.

- **PSOA2:** Identify, formulate and analyze real world problems and design computer based systems using appropriate techniques, resources and modern IT tools.
- **PSOA3:** Apply the knowledge of Computer Science, Mathematics, Statistics and Fundamentals of Electronics to solve technology based problems.

PSOA4: Gain interdisciplinary knowledge through various open elective courses from other disciplines and Indian knowledge system.

II) Personal, Behavioural and Skill based Competence :

PSOS1: Demonstrate project management skills using various Computer Science methodologies.

PSOS2: Develop creativity, innovative and data analytical skills through critical and analytical thinking.

PSOS3: Understand computing activities by effective communication through writing reports, design documentation and make presentations.

III) Ethical, Moral and Social competence and Sensibilities

- **PSOE1:** Develop an awareness and identify solutions for the optimum usage of economic and environmental resources to attain sustainability.
- PSOE2: Apply ethical principles committing to societal and professional ethics and responsibilities of Computer science practice.