LOCF for the programme M.Sc. in Mathematics with Applications in Computer Science (MSC(MACS)), School of Sciences, IGNOU

Expected Programme Learning Outcomes (PLOs) in terms of :	**Knowledge:** The graduates should: • demonstrate advanced knowledge about various concepts of mathematics with depth specially in the fields of applications in Computer Science; • have a coherent understanding of the established methods and techniques of research and enquiry applicable to various areas of mathematics; • have an awareness and knowledge of the emerging developments and issues in mathematics; • have the procedural knowledge required for performing and accomplishing professional tasks associated with core and applied mathematics.
	Skills: The graduates should: • be equipped with mathematical knowledge and techniques necessary for use in many application areas of mathematics with special references to computer sciences; • be exposed to the applications of mathematics in the area of computer sciences; • be provided an opportunity to undertake hands-on work in some Industry/Organizations/R&D establishment/Institution; • learn and apply soft skills related to 'C' language and 'Scilab'.
	Application of Knowledge & Skills: The graduates should: • Calibrate learnt concepts and skills to undertake the project work; • Apply knowledge and skills to the real life situations; • Be able to explain the relevance and usefulness of mathematics from an application point of view; • Be equipped with the core mathematical knowledge and training necessary for use in many application areas; • Be exposed to real-life problems and promote the use of mathematics in industry and applied sciences.
	Generic Learning Outcomes: The graduates should: • Demonstrate a thorough broad understanding of core areas of higher Mathematics; • Be aware of applications of Mathematics in Computer Science; • have hands on programming practice in the important application areas of Mathematics to computer science; • have opportunities for continuing education in corporate and educational areas.
	Constitutional, Humanistic, Ethical, and Moral Values: The graduates should be able to demonstrate the willingness to: • Develop an inclusive approach towards colleagues; • Practice team work and mutual respect towards learners and colleagues; • Follow ethical practices in conducting research and project work; • Imbibe values of good citizenry, equality, and justice.
	Employability & Entrepreneurship skills: The graduates should be able to:

	• Possess the knowledge and skills to apply the mathematical techniques/tools/concepts in industry, research institutions/teaching; • Identify and create suitable self employment opportunities in the area of various applications in Computer Sciences; • Provide consultancy for the applications of mathematics in various fields of computer science; • Provide lifelong learning knowledge and skills for the continuous professional development of functionaries working in the sphere of mathematics; • Independently undertake research and development in the area of mathematics; • to develop human resources in emerging disciplines such as Mathematical Biology, Computational Mathematics, etc.