



"बेटी बचाओ, बेटी पढ़ाओ"

JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR
Faculty of Education & Methodology

Department Name : **Science & Technology**
Program : **M.Sc. Maths**
Semester : **3rd**
Course/Subject Name : **Special function and Generalized function**
TeacherName & Designation : **Rishi Chaudhary, Assistant Professor**

Sr. No.	Course Outcome
1	Develop a solid understanding of generalized functions as distributions, including their properties and applications in solving differential equations.
2	Gain insight into how generalized functions can be used to model physical phenomena with singularities
3	Learn techniques for convolving generalized functions and differentiate distributions to solve complex problems in physics and engineering.
4	Study a variety of special functions, such as Bessel functions, Legendre functions, Hermite functions, and hypergeometric functions.
5	Understand the properties, recurrence relations, and applications of these special functions in solving differential equations and boundary value problems.
6	Explore the theory and applications of Fourier and Laplace transforms in the context of generalized functions.
7	Utilize these integral transforms to solve differential equations and analyze signals and systems.
8	Develop proficiency in using complex analysis methods to evaluate integrals and solve problems involving complex-valued functions.
9	Explore the application of special functions and distributions in quantum mechanics, electromagnetic theory, and other areas of physics.
10	Develop advanced problem-solving skills by applying generalized and special functions to tackle challenging mathematical and physical problems.