



"बेटी बचाओ, बेटी पढ़ाओ"

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

Department Name : **Science & Technology**  
Program : **B. Sc B.Ed.**  
Semester : **Ist**  
Course/Subject Name : **Differential Calculus and Analytical Geometry**  
Teacher Name & Designation : **Rishi Chaudhary, Assistant Professor**

<b>Sr.No.</b>	<b>Course Outcome</b>
<b>1</b>	Demonstrate a clear understanding of fundamental concepts in differential calculus, such as limits, continuity, derivatives, and related rates.
<b>2</b>	Grasp the essential concepts of analytical geometry, including the Cartesian coordinate system, equations of lines and curves, and transformations.
<b>3</b>	Apply differentiation techniques to find derivatives of algebraic, trigonometric, exponential, and logarithmic functions.
<b>4</b>	Utilize differentiation to solve real-world problems involving rates of change and optimization.
<b>5</b>	Analyze and graph functions, equations, and inequalities in two and three dimensions.
<b>6</b>	Solve problems related to lines, circles, conics, and other geometric objects using algebraic and geometric methods.
<b>7</b>	Determine the continuity of functions and identify points of discontinuity.
<b>8</b>	Gain familiarity with the concept of integration and its connection to finding areas under curves.
<b>9</b>	Apply derivatives to analyze motion, including velocity and acceleration.
<b>10</b>	Solve practical problems involving optimization, related rates, and curve sketching.