



**Sindh Madressatul Islam University**  
**Faculty of Information Technology**  
**Course Code: MAT-100**  
**Calculus and Analytical Geometry**  
**Project # 01**  
**Total Marks: 15**  
**Submission Deadline: 09-12-2025**

**Instruction:** All the students are advised to submit hard copy as well as soft copy (MS Word format) of the project within due date and after due date the project is not acceptable. Copy Paste from internet or from any of your class fellow is not allowed and if found then both the students will be given zero marks.

**Q. No. 01:** Write down the application of Functions, Absolute Value function, Limit of a function, Derivative in computer science, Physics and in Engineering or in daily life. (3-5 Pages).

**Q. No. 02:** Make a piece wise defined function with its graph for your electricity bill upto 700 units, as the cost of electricity is dependent upon number of units in different interval.

**Q. No. 03:** Write down only four pages in your own words very precisely by studying the history of Mathematics, on the topics below.

**The Role of Newton and Leibniz in the Development of Calculus**

**Note:**

*This project is followed by viva as well so try to get understand each and every thing and make your own project. If it is plagiarized or copy paste, then zero marks will be given.*