

**Department of Computer Engineering**  
**Jamia Millia Islamia, New Delhi-110025**

**B.Tech 4<sup>th</sup> Year (Semester -8) 2023**  
**Subject: Machine Learning Techniques**  
**Paper Code: CEN-809**

**Assignment**

<b>Q1</b>	<i>Explain Machine Learning development life cycle (MLDLC).</i>												
<b>Q2</b>	<i>Find a multiple regression model for the following data using Matrices formulation:</i> <table><tr><td><i>x1</i></td><td>4</td><td>7</td><td>2</td></tr><tr><td><i>x2</i></td><td>5</td><td>2</td><td>6</td></tr><tr><td><i>Y(output)</i></td><td>6</td><td>11</td><td>4</td></tr></table>	<i>x1</i>	4	7	2	<i>x2</i>	5	2	6	<i>Y(output)</i>	6	11	4
<i>x1</i>	4	7	2										
<i>x2</i>	5	2	6										
<i>Y(output)</i>	6	11	4										
<b>Q3</b>	What is Curse of Dimensionality?												
<b>Q4</b>	Explain the Logistic regression using perceptron logic.												
<b>Q5</b>	Explain: <div>(a) Vanishing/Exploding Gradient Problem</div> <div>(b) Early stopping</div> <div>(c) How to improve the performance of an ANN</div>												

**NOTE:1. Assignment should be handwritten**  
**2. LAST DATE of Assignment on or before 10**  
**MAY-2023**