School of Computer Science Engineering and Technology

Course-BTech	**Type - AI Core-1**
Course Code - CSET211	**Course Name - Statistical Machine Learning**
Year - Second	**Semester - ODD**
Date - 23/09/2024	**Batch - CSE 3rd Semester**

Lab Assignment - 7: Implementation of K-Nearest Neighbour (KNN) and Naive Bayes (NB) using in built function

CO- Mapping

Section	CO1	CO2	CO3
Section 1: Q1-Q7	√	√	
Section 2: Q1-Q7	√	√	√

Section 1: : K-Nearest Neighbor Model and Naïve Bayes on IRIS Dataset

Q1: Load the *IRIS dataset* and display the first few rows.
Q2: Split the dataset into training and testing sets.
Q3: Standardize the features for KNN using *Standard Scalar*.
Q4: Train a *K-Nearest Neighbor* model with K=3 on the training data.
Q5: Display the classification report.
Q6: Train a Gaussian Naive Bayes model on the training data.
Q7: Display the classification report.

Section 2: K-Nearest Neighbor Model and Naïve Bayes on Diabetes Dataset

Repeat the above steps from Q1 – Q7 for Diabetes dataset ***(diabetes.csv).***