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 - 21/10/2024 Batch - CSE 3rd Semester

<u>Lab Assignment - 9: Implementation of Random Forest and</u> Decision Trees

CO- Mapping

| Section | CO1 | CO2 | CO3 |
|------------------|----------|----------|----------|
| Section 1: Q1-Q5 | √ | V | |
| Section 2: Q1-Q5 | √ | √ | V |

Section 1: Random Forest and Decision Trees 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 using *Standard Scalar*.

Q4: Train a random forest and decision tree classifier on the iris dataset.

Q5: Display the classification report.

Section 2: Random Forest and Decision Trees on Diabetes Dataset

Repeat the above steps from Q1 – Q5 for Diabetes dataset (diabetes.csv).