Reg. No ……..

Name: ……..

V Semester Integrated M. Sc. Degree (Regular) Examinations, July 2022

(2019 Admission Onwards)

COMPUTER SCIENCE

5B19ICSC: Lab-7 : Machine Learning

Time: 3 Hours Max. Marks: 20

Answer any one of the marked (✔) questions.

PART – A

1. Prepare a dataset of customer having the features date, price, product_id, quantity_purchased, serial_no, user_id,user_type, user_class, purchase_week and visualise the data and Plot diagram for Price Trends for Particular User, Price Trends for Particular User Over Time.
2. Prepare a dataset of customer having the features date, price, product_id, quantity_purchased, serial_no, user_id,user_type, user_class, purchase_week and visualise the data and create box plot Quantity and Week value distribution having parameters of quantity_purchased','purchase_week.
3. Write a program to implement Raw Measures such as Values, count, Binarization, Rounding, Interactions, Binning, Fixed-width binning,Quantile based binning and Mathematical Transformations such as Log transform, Box–Cox transform.
4. Write a classification program for implementing SVM using MNIST dataset.
5. Write a program to Transforming Nominal Features, Transforming Ordinal Features and Encoding Categorical Features using one-hot Encoding Scheme.
6. Write a classification program for implementing Naïve Bayes algorithm using iris dataset.
7. Write a classification program for implementing logistic regression using wine dataset

PART –B

1. Write a classification program for implementing kNN.
2. Write a clustering program for implementing k Means Clustering using Wisconsin Breast Cancer Dataset.
3. Write a clustering program for implementing k-medoids Clustering using Wisconsin Breast Cancer Dataset.
4. Write a classification program for implementing decision tree using pima-indians-diabetes dataset.
5. Write a program to implement PCA.
6. Write a program to evaluate Classification Model using different Evaluation Metrics.

Mark Distribution

Component	Part A	Part B
Code Writing	**3**	**3**
Modification for Part A or Part B	**3**	
Output	**3**	**3**
Record	**2**	
Viva	**2**	
Total Marks	**20**	