Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri(West),Mumbai 400058-India

(An Autonomous Institute Affiliated to University of Mumbai)

Mid Semester Examination

Max. Marks: 30	Duration: 1 Hr
Class: SYMCA	Semester: III
Course Code: MC513	Date: 12/10/23
Course: Data Visualization and Analytics	Time: 3:30 to 4:30

Instructions:
(1) All Questions are Compulsory.
(2) Draw neat diagrams.
(3) Assume suitable data if necessary.

No	Question	Max. Marks	CO	BL
Q1	Explain different type's python libraries used for data visualization with its applications?	10	4	3
Q2	What is correlation? Which are the different graphs used to find the correlation? Explain with example. **OR** The mean weight of a morning breakfast cereal pack is 0.295 kg with a standard deviation of 0.025 kg. The random variable weight of the pack follows a normal distribution. a)What is the probability that the pack weighs less than 0.280 kg? b)What is the probability that the pack weighs more than 0.350 kg? c)What is the probability that the pack weighs between 0.260 kg to 0.340 kg? Describe what libraries would be used to plot normal distribution with the help of an example.	10	3	3
Q3	What is box plot? Explain the five point summary contents of it. Also write a python code to draw a box plot of a particular variable.	10	2	3