Special Assignment in lieu of Semester End Practical Examination 2021
B.Sc. (Hons.) Computer Science Semester-VI
Paper Code: **32347608**
Paper Name: **Introduction to Data Sciences**
SET-2

Max. Marks [25]

1. Use the *"attitude"* built-in dataset to plot beautiful graphs and find meaningful insight about the dataset. You may draft questions yourself and summarize the results.

    You will be marked for **[10]**

    a. Creativity

    b. Presentation

    c. Originality

    d. Summarization of results

2. Download the file *Set2.csv* and write the correct code for each of the following: **[15]**

    I.   Read the contents of the file

    II.   Load the dataset in data frame and count of the number of records

    III.   View the data in a tabular format

    IV.   Use the read.table() function to load this data into a new data frame object

    V.   Observe the number of records loaded in Environment tab in R Studio. Are they equal to the number of records in the dataset? Why?

    VI.   Plot the calamities in the year 2013, 2014, or 2015 state wise

    VII.   Create a subset of all the columns that contain the word DATE

    VIII.   Identify the cases in 2015 where the cause of calamity was either human or natural and the affected area spanned to more than 500 acres

    IX.   Sort the rows in ascending order

    X.   Create a new Day_of_year column that represents the day of the year that calamity started

    XI.   Create a new column 'Decades' that represents the decade in which each calamity occurred.

    XII.   Group the results by Decades

    XIII.   Create a scatterplot of the same

    XIV.   Identify the fields where t-test could be performed.

    XV.   Name the base and third party packages used to solve the above instructions. (label each package used and bifurcate as base and others)