**DEPARTMENT OF COMPUTER SCIENCE**

**CHRIST (Deemed to be University)**

**BENGALURU 29**

**BCA551 TEST4**

**Date: 19 November 2020**

**Time: 9 to 11**

**Maximum Marks: 30**

**NUMPY:**

Write a Python program using Numpy and perform the following tasks:

1. Create a matrix A from 2D list containing elements from 11 to 19.
2. Demonstrate the mask concept on matrix A.
3. Find the determinant of the matrix
4. Perform Scalar multiplication on matrix A
5. Create one more matrix B (use any builtin function to generate values) of same dimension as matrix A and perform multiplication. Display both matrices, their dimension and the result.

**PANDAS:**

Write a Python program with Pandas and Numpy and perform the following with the given sample dataset employees.csv and display the resultant values with proper labels.

1. Find the missing values and give a report of it.

2. Fetch employee names based on join date

3. Fetch all the employees having Team = Finance and Salary >= 1,00,000

4. Fetch all the female employees of having Bonus more than 10%.

5. Perform basic statistical analysis on the given dataset using any five statistical functions.

***NOTE: If any attribute doesn’t exist add a new attribute to the data frame based upon the requirement.***

***It is mandatory to make a proper document with code, inference and Screenshots.***