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**B.E / B.Tech. LABORATORY EXAMINATIONS, OCTOBER / NOVEMBER 2018**

**Third Semester**

**Computer Science and Engineering**

**CS8383 - Object Oriented Programming Laboratory**

**(Common to IT, EIE & ICE)**

**(Regulations - 2017)**

Time : 3 Hours Max. Marks 100

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| **Aim and Procedure** | **Program** | **Output & Results** | **Viva-Voce** | **Record** | **Total** |
| **20** | **40** | **20** | **10** | **10** | **100** |

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| 1 | a)Write a Python program for the following:  (i)create a numpy array from list  (ii)create special arrays.  b)Write a program to read data from a text file and explore various commands for doing descriptive analytics on this file. |
| 2 | a)Write a Python program for the following:  (i)create identity array of any order  (ii)create numpy array using random numbers.  b) Write a program to read data from the given excel file and explore various commands for doing descriptive analytics on this file. |
| 3 | a)Write a program to create arrays of various dimensions using numpy.  b) Write a program to perform univariate analysis on a csv file. |
| 4 | a) Write a program to create an array and perform indexing and slicing operations on it.  b) Write a program to perform bivariate analysis using the linear regression modeling on a csv file. |
| 5 | a) Write a program to create an array using arange and linspace commands in numpy.  b) Write a program to perform bivariate analysis using the logistic regression modeling on a csv file. |
| 6 | a) Write a program to create an array using reshape and ravel commands in numpy.  b) Write a program to perform multiple regression analysis on a csv file. |
| 7 | a) Write a program to create two arrays and perform transpose and broadcasting operations on it.  b)Write a program to draw a box plot for UCI Data set. |
| 8 | 1. Write a program to create an array and perform sorting and aggregation operations on it   b) Write a program to draw a box plot as sub plot for UCI Data set. |
| 9 | a) Write a program to create an array and perform Math Operations on it.  b) Write a program to draw a heat map for UCI Data set. |
| 10 | a) Write a program to create two arrays and perform multiplication using this two arrays.  b) Write a program to draw a histograms for UCI Data set. |
| 11 | a) Write a program to create two arrays and perform concatenation using this two arrays.  b) Write a program to draw a correlation plot for UCI Data set. |
| 12 | a) Write a program to create two arrays and perform array arithmetic using universal functions.  b) Write a program to visualize the frequency distribution of Glucose variable for UCI Data set. |
| 13 | a)Write a program to create a series in pandas.  b) Write a program to draw a normal curve for age variable on UCI Data set. |
| 14 | a)Write a program to ceate a dataframe in pandas.  b) Write a program to draw a density curve and use different color functions for UCI Data set. |
| 15 | a)Write a program to create a dataframe using list object.  b) Write a program to draw a scatterplot to visualize the relationship between age and trestbps variable on UCI Data set. |
| 16 | a) Write a program to create a dataframe using series object.  b)Write a program to draw a three dimensional plotting for UCI Data set. |
| 17 | a) Write a program to create a dataframe from numpy array.  b) Write a program to draw the coastlines map and countries map using basemap. |
| 18 | a) Write a program to create a dataframe using dictionary object.  b) Write a program to draw the continents map and color filled continents using basemap. |
| 19 | a) Write a program to create an array and copy the array.  b)Write a program to draw abasic map using basemap. |
| 20 | a) Write a program to create an array and display the array attributes.  b) Write a program to draw a heat map using correlation plot for UCI Data set. |