## PRACTICAL FILE- COMPUTER SCIENCE (083)

## LIST OF PRACTICALS (2019-20) CLASS-XII

**Programming Language: Python** 

|           | Programming Language: Python  |
|-----------|---|
| S.<br>No. | NAME OF PRACTICAL   |
| 1         | Write a program in python to check a number whether it is prime or not.   |
| 2         | Write a program to check a number whether it is palindrome or not.  |
| 3         | Write a program to calculate compound interest.   |
| 4         | Write a program to display ASCII code of a character and vice versa.  |
| 5         | Write a program to input a character and to print whether a given character is an alphabet, digit or any other character.   |
| 6         | Write a program to calculate the factorial of an integer using recursion.   |
| 7         | Write a program to print fibonacci series using recursion.  |
| 8         | Write a program for binary search.  |
| 9         | Write a recursive pyhton program to test if a string is palindrome or not.  |
| 10        | Write a program to count the number of vowels present in a text file.   |
| 11        | Write a program to write those lines which have the character 'p' from one text file to another text file.  |
| 12        | Write a program to count number of words in a file.   |
| 13        | Write a python function $\sin(x,n)$ to calculate the value of $\sin(x)$ using its taylor series expansion up to n terms. $\sin(x) = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \cdots,$ |
| 14        | Write a program to generate random numbers between 1 to 6 and check whether a user won a lottery or not.  |
| 15        | Write a program to create a library in python and import it in a program.   |
| 16        | Write a program to plot a bar chart in python to display the result of a school for five consecutive years.   |
| 17        | Write a program in python to plot a graph for the function $y = x^2$  |
| 18        | Write a program in python to plot a pie chart on consumption of water in daily life.  |
| 19        | Write a program for linear search.  |
| 20        | Write a program for bubble sort.  |
| 21        | Write a menu based program to perform the operation on stack in python.   |
| 22        | Write a menu based program to perform the operation on queue in python.   |
| 23        | Write a menu based program for circular queue.  |
| 24        | Create a graphical calculator using tkinter library.  |
| 25        | Write a program to open a webpage using urllib library.   |
| 26        | Write a program to calculate EMI for a loan using numpy.  |
| 27        | Write a program to find the most common words in a file.  |
| 28        | Write a program to perform read and write operation with .csv file.   |
| 29        | Write a Django based web application and write the data to a csv file.  |
|           | SQL Queries :   |
| 30        | Queries using DISTINCT, BETWEEN, IN, LIKE, IS NULL, ORDER BY, GROUP BY, HAVING  |
| 31        | Queries for Aggregate functions- SUM(), AVG(), MIN(), MAX(), COUNT()  |
| 32        | Write a program to connect Python with MySQL using database connectivity and perform the following operations on data in database: Fetch, Update and delete the data                                |