KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed to be University)

(Established Under Section 3 of UGC Act, 1956)

Coimbatore - 641 021, India

FACULTY OF ARTS, SCIENCE AND HUMANITIES (FASH)

Department of CS,CA & IT

I M.Sc CS **I SEMESTER** **BATCH : 2018 - 2020**

18CSP111 **PYTHON PROGRAMMING – PRACTICAL** **4H – 2C**

Instruction Hours / week: L: 0 T: 0 P: 4 **Marks:** Int : **40** Ext : **60** Total: **100**

COURSE OBJECTIVES

- To learn how to design and program Python applications.
- To define the structure and components of a Python program.
- To learn how to write loops and decision statements in Python.
- Solve problems requiring the writing of well-documented programs in the Python language, including use of the logical constructs of that language;
- Demonstrate significant experience with the Python program development environment.

COURSE OUTCOME

After the course, students should be able to:

- Adequately use standard programming constructs: repetition, selection, functions, composition, modules, aggregated data (arrays, lists, etc.)
- Master an understanding of loops and decision statements and functions.
- Master an understanding of Python especially the object-oriented concepts.
- Master an understanding of the built-in objects ,List, tuple, set of Python

PROGRAM LIST

1. Write a Python program to compute the GCD of two numbers.
2. Write a Python program to Find the square root of a number (Newton's method)
3. Write a Python program to find the sum of odd and even from a set of numbers?
4. Write a Python program to generate prime numbers between 1 and 50?
5. Write a Python program to reverse the given number and check it is palindrome or not?
6. Write a python program for matrix Multiplication.
7. Write a Python program
    - to Compare two strings
    - Find the length of the string
8. Write a Python program to generate Linear search OR Binary search
9. Write a Python program to generate Selection sort OR Insertion sort
10. Write a Python programs that take command line arguments (word count)
11. Write a Python program to Find the most frequent words in a text read from a file
12. Write a Python program to generate Simulate elliptical orbits in Pygame
13. Write a Python program to generate Simulate bouncing ball in Pygame