### MES ASMABI COLLEGE P.VEMBALLUR

### Certificate course in 'PYTHON FOR BEGINNERS'

# Course outcome

## 1. Introduction to Programming Concepts and Python:

- 1. Students will understand the fundamentals of computer programming, including the roles of programming languages, compilers, and interpreters.
- 2. They will gain knowledge of Python as a programming language and its advantages.

# 2. Basic Python Syntax:

- 1. Students will learn about different data types and how to use variables to store and manipulate data.
- 2. They will understand expressions and type conversion in Python.
- 3. Students will be able to define functions, understand the concept of returning values, and use input and output statements effectively.

## 3. Data Structures:

- 1. Students will become familiar with essential data structures in Python, including strings, lists, tuples, and dictionaries.
- 2. They will learn how to manipulate and work with these data structures to solve problems.

## 4. Control Flow:

- 1. Students will understand the concept of loops in Python, including while and for loops.
- 2. They will be able to use branching statements like if-elif-else for decision making.
- 3. Students will learn how to handle errors in loops effectively.

### 5. Practical Session:

- 1. Students will apply the knowledge gained throughout the course to solve real-world problems through practical sessions.
- 2. They will develop the skills to write simple programs using Python, demonstrating their understanding of Python syntax, data structures, control flow, and functions.

Upon completion of the course, students will have a solid foundation in Python programming, enabling them to write and understand basic Python code, solve simple problems, and continue their learning journey in more advanced topics in Python programming.