16 MARKS QUESTION

UNIT 1 PYTHON BASICS

- 1. Python Data Types: Numeric types, Strings, Lists, Tuples, Sets, Dictionaries.
- 2. Operators in python.

UNIT 2 CONTROL STRUCTURES AND DATA PROCESSING

- 1. Conditional Execution: if, if else, elif statements.
- 2. Loops: for, while loops
- 3. Lists
- 4. Tuple
- 5. Dictionary
- 6. String
- 7. Set

UNIT 3 FUNCTIONS AND ADVANCED OPERATIONS

- 1. User Defined Function
- 2. Function prototype
- 3. Multi-parameter Functions: Variable-length arguments, *args and **kwargs
- 4. Functional Tools: map, reduce, filter, zip, enumerate
- 5. Iterators and Generators

UNIT 4 FILES HANDLING, MODULES, AND PACKAGES

- 1. File Handling: Reading and writing text files, working with file modes
- 2. Error
- 3. Package and Modules
- 4. Zip Files

UNIT 5 ADVANCED PYTHON MODULES

1. NumPy

- 2. Pandas
- 3. JSON Module
- 4. OS Module
- 5. Datetime Module

Program:-

- 1. Swpping Two Numbers.
- 2. Distance between two numbers.
- 3. Linear Search
- 4. Binary Search
- 5. Sorting Programs-Bubble ,Selection , Insertion , Merge sort.