

TILAK MAHARASHTRA VIDYAPEETH, PUNE

ACADEMIC YEAR 2023-24

Assignment 1

Subject: Python Programming Submission Date: 28th Oct 2023

- 1. Explain any Four of the following:
 - a) Features of Python
 - b) Modules in Python
 - c) Mutable & immutable
 - d) Explain break, continue and pass of Python
- 2. List out the main difference between lists and tuples?
- 3. Define the scope and lifetime of a variable in Python.
- 4. What are membership operators? Give examples for usage.
- 5. What are the features of list data structure?
- 6. What is a dictionary in Python?
- 7. What are the key features of Python?
- 8. What are the benefits of using Python?
- 9. What are Python namespaces?
- 10. What are decorators in Python
- 11. What are Dict and List comprehensions? With example.
- 12. What are the common built-in data types in Python?
- 13. What is slicing in Python?
- 14. What are Keywords in Python?
- 15. What are Literals in Python and explain about different Literals
- 16. How is memory managed in Python?
- 17. What are local variables and global variables in Python?

- 18. Explain Sets in python using example
- 19. What is the difference between Python Arrays and lists?
- 20. What is the difference between range & xrange?
- 21. How do you write comments in python?
- 22. What are docstrings in Python?
- 23. What is a dictionary in Python?
- 24. What does this mean: *args, **kwargs? And why would we use it?
- 25. What are negative indexes and why are they used?
- 26. Write a program in Python to execute the Bubble sort algorithm.
- 27. Write a program to produce Fibonacci series in Python.
- 28. Write a program in Python to check if a number is prime.
- 29. Write a program in Python to check if a sequence is a Palindrome.