

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF SCIENCE (M.Sc) in COMPUTER APPLICATIONS
EXAMINATION : MAY- 2024
SEMESTER - III
Sub.: Python Programming (MSC-306-22)

Date :31/05/2024

Total Marks:60

Time: 2.00 pm To 4.30 pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

Q.1. Answer the following in 2-3 lines. (Any 5) (10)

1. What is the difference between intermediate mode and script mode?
2. What is docstring?
3. What are membership operators on python?
4. What is the use of pass statement on python?
5. What is negative indexing?
6. Comment – “Python is dynamically typed language”.
7. What is set in python?

Q.2. Answer the following in short. (Any 4) (20)

1. Give the features of python.
2. Explain string slicing in python with example.
3. Explain what is range () function and how it is used in lists?
4. Write short note on exception handling in python.
5. Write four methods that are used in Python Lists.
6. Write the basic steps to connect python with SQL.

Q. 3. Answer the following in detail. (Any 3) (30)

1. Explain the purpose of loop structure in a programming language. Describe the syntax and semantics of any two loop structures provided by Python.
2. What is Dictionary? Explain Python dictionaries in detail discussing its operations and methods.
3. What is file in python? How to open a new file in Python? Which method is used to read the contents of a file which is already created
4. Explain with example module and package in python
5. Write a Python program to create a calculator class. Include methods for basic arithmetic operations.