

PART-A

(10 x 2 = 20 M)

(Compulsory Question)

Answer the following.

1. a) Can a Python function return multiple values? If yes, how it works?
- b) What is the difference between compiled and interpreted languages?
- c) What are the different string formats available in Python?
- d) What are mutable and immutable types?
- e) List out the main differences between lists and tuples.
- f) What is a dictionary in Python?
- g) What are the uses of File object?
- h) How to make a Python class member variable hidden from outside the class?
- i) List the categories of machine learning with a brief explanation.
- j) Name the packages used for analysing the data in python.

PART-B

(5 x 10 = 50 M)

(Answer One FULL Question from each Unit; All questions carry EQUAL marks)

UNIT-I

2. a) How to declare and call functions in Python programs? Illustrate with an example script.
- b) List and explain few most commonly used built-in types in python.

(OR)

3. Write a program to display the fibonacci sequences up to nth term where n is provided by the user.

UNIT-II

4. Write a function which receives a variable number of strings as arguments. Find unique characters in each string.

(OR)

5. "Strings are immutable". Justify with the help of an example.

UNIT-III

6. Explain the following list methods with an example. a) append() b) extend() c) insert() d) index() e) sort()

(OR)

7. Write Pythonic code to create a function called most frequent that takes a string and prints the letters in decreasing order of frequency. Use dictionaries.

UNIT-IV

8. Discuss the following methods associated with the file object
i) read() ii) readline() iii) readlines() iv) tell() v) seek() vi) write()

(OR)

9. Program to demonstrate the Overriding of the Base Class method in the Derived Class.

UNIT-V

10. Discuss about any two packages required for analysing data in python.

(OR)