

- (d) All of the mentioned
- 1-d. Which of the following is not a valid namespace? (CO2) 1
- (a) Global namespace
 - (b) Public namespace
 - (c) Built-in namespace
 - (d) Local namespace
- 1 Under which pillar of OOPS do base class and derived class relationships come? (CO3) 1
- (a) Polymorphism
 - (b) Inheritance
 - (c) Encapsulation
 - (d) Abstraction
- 1 Identify the feature using which, one object can interact with another object. (CO3) 1
- (a) Messaging Passing
 - (b) Messaging Reading
 - (c) Data Binding
 - (d) Data Transfer
- 1-g. Choose the correct option with respect to Python. (CO4) 1
- (a) Both tuples and lists are mutable.
 - (b) Both tuples and lists are immutable.
 - (c) Tuples are immutable while lists are mutable.
 - (d) Tuples are mutable while lists are immutable.
- 1-h. _____ is a type of error produced in Python programs. (CO4) 1
- (a) compile time error
 - (b) run time error
 - (c) both A & B
 - (d) none of these
- 1-i. Pandas is an open-source _____ Library? (CO5) 1
- (a) Ruby
 - (b) Javascript
 - (c) Java
 - (d) Python

1-j.	Which graph should be used if we want to show distribution of elements? (CO5)	1
	(a) pie	
	(b) basemap	
	(c) bar	
	(d) histogram	

2. Attempt all parts:-

2.a.	Describe type conversion in Python. (CO1)	2
2.b.	Define decorators. (CO2)	2
2.c.	How does inheritance in Python take place? Explain with an example. (CO3)	2
2.d.	What is the difference between write and append mode? (CO4)	2
2.e.	Why is NumPy Faster than Lists? (CO5)	2

SECTION B 30

3. Answer any five of the following:-

3-a.	Define following string functions in Python: 1. len() 2. upper () 3. strip (). (CO1)	6
3-b.	Explain different logical operators in python. (CO1)	6
3-c.	Illustrate how function can be passed as parameter in python with example. (CO2)	6
3-d.	Describe the use of iter() and next() method. (CO2)	6
3.e.	Briefly explain the concept of data hiding in python with example. (CO3)	6
3.f.	How to handle exceptions with try-except-finally? (CO4)	6
3.g.	Explain different ways to create DataFrame in Pandas. (CO5)	6

SECTION C 50

4. Answer any one of the following:-

4-a.	Differentiate between Traditional programming cycle & Python programming cycle. (CO1)	10
4-b.	Write a program in Python to count the sum of digits of given number. (CO1)	10

5. Answer any one of the following:-

5-a.	Differentiate between generator function & normal function in Python. (CO2)	10
5-b.	Write a function in Python to check whether a given integer is negative or positive. (CO2)	10

6. Answer any one of the following:-

6-a.	Differentiate between Call by value & Call by reference with example. (CO3)	10
6-b.	How method overloading can be achieved in Python. (CO3)	10

7. Answer any one of the following:-

- 7-a. Explain an exception? Explain an unreachable catch block error. (CO4) 10
- 7-b. Write a Python program to sum all the items in a list. (CO4) 10

8. Answer any one of the following:-

- 8-a. How does NumPy differ from Pandas. (CO5) 10
- 8-b. Explain what is tkinter used for in Python. (CO5) 10