22616

24225

3 Hours / 70 Marks Seat No.

Instructions – (1) All Questions are *Compulsory.*

(2) Answer each next main Question on a new page.

(3) Illustrate your answer with neat sketches wherever necessary.

(4) Figures to the right indicate full marks.

(5) Assume suitable data, if necessary.

(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. **Attempt any FIVE of the following:** 10

   a) Why Python is called as interpreted and platform independent language?

   b) State the use of 'else' in for loop.

   c) Enlist any four built in function of dictionary.

   d) Define with syntax 'return' statement in Python.

   e) State the used of comments in Python and enlist its types.

   f) State the use of inheritance.

   g) State any two difference between write and writelines methods.

Marks

2. **Attempt any THREE of the following:** **12**

a) Explain with example how to add elements to a list.

b) What is variable? State rule for variable declaration in Python.

c) Write a Python function that takes a number as a parameter and check the number is prime number or not.

d) What is constructor? How to implement it in Python? Explain with example.

3. **Attempt any THREE of the following:** **12**

a) Write a program to check if a number is a Positive, Negative or Zero.

b) Write a program to print the number in words using list. Like 1234 $\Rightarrow$ One, Two, Three, Four etc.

c) Explain with example how to rename and delete directory in Python.

d) Write a program for importing module for addition and subtraction of two numbers.

4. **Attempt any THREE of the following:** **12**

a) Enlist and explain any two building blocks of Python.

b) Write a program to take limit from user and print a fibbonnacci series.

c) Explain concept of local and global variable in Python with example.

d) Create a class employee with data members name, department and salary. Create suitable methods to accept and print employee information.

e) Explain different way of opening a file in Python.

5.   **Attempt any TWO of the following:**   **12**

   a) Write a program to create a class to print the area of a square and a rectangle. The class has two methods with the same name but different number of parameters.

   b) Write programs on following questions of tuple –

       Given t1 = (10, 20, 50, 30, 50, 40)

       i)   Find the length of tuple.

       ii) Check if an element exists in a tuple.

   c) Explain any two looping statements with syntax in Python with example.

6.   **Attempt any TWO of the following:**   **12**

   a) Enlist steps to create package in Python and design a package containing the class which define the method to find area of rectangle. Import it in another Python program to calculate area of rectangle.

   b) Write a program that accept name and salary. Create a user defined exception 'Negative salary', if salary is negative.

   c) What is dictionary? State the use of dictionary in Python and explain ways of adding and deleting elements from dictionary.

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