

[This question paper contains 8 printed pages.]

Your Roll No. 23020107005

Sr. No. of Question Paper : 1314

G

Unique Paper Code : 6202451101

Name of the Paper : Programming using Python

Name of the Course : B.Voc.

Semester : I

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt total 4 questions. Q1 is compulsory to attend. Rest, Attempt any 3 questions more. (15×4=60)

1. (a) Name the Python Library modules which need to be imported to invoke the following functions :

(i) sqrt()

(ii) dump()

(2)

P.T.O.



(i) Name the base class and the derived class.

(ii) Which concept of OOP is implemented in the figure given above? (4)

(f) Fill in the blanks :

- (i) Act of representing essential features without background detail is called _____.
- (ii) Wrapping up of data and associated functions into a single unit is called _____.
- (iii) _____ is called the instance of a class.
- (iv) Python exceptions are caught by the _____ keyword.

2/ (a) Differentiate between any 3 of the following : (4×3=12)

- (i) round() and floor() functions
- (ii) input() and raw_input()
- (iii) Del and Remove() functions on Lists

1314

2

- (b) Out of the following, find the identifiers, which cannot be used for naming Variable or Function in a Python program :

_Cost, Price*Qty, float, switch, Address one
Delete, Number12, do

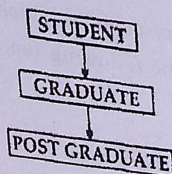
- (c) Which string method is used to implement the following : (2)

(i) To check whether given character is letter or a number.

(ii) To change lowercase to uppercase letter.

- (d) Write for statement to print the series 10,20,30,.....,300. (2)

- (e) Consider the figure given below and answer the questions that follows : (3)



3

- (i) Name the base class and the derived class.

- (ii) Which concept of OOP is implemented in the figure given above? (4)

- (f) Fill in the blanks :

(i) Act of representing essential features without background detail is called _____.

(ii) Wrapping up of data and associated functions into a single unit is called _____.

(iii) _____ is called the instance of a class.

(iv) Python exceptions are caught by the _____ keyword.

- 2/ (a) Differentiate between any 3 of the following : (4×3=12)

(i) round() and floor() functions

(ii) input() and raw_input()

(iii) Del and Remove() functions on Lists

P.T.O.

1314

4

(iv) local and global variables

(v) static and dynamic binding

(b) Which of the following are valid identifiers? If they are invalid, then mention the cause of violation. (3)

(i) #ofElements

(ii) No of elements

(iii) 3elements

3/ (a) What will be the output produced on execution of the following code segments? Justify your answers. (10)

(i) `def fun (a = 0, b = 1):``return a b``print (fun (5, 6))``print (fun (6))``print (fun (b = 5))``print (fun ())`

1314

(ii) `def m(s):``ans = "``for i in range (len (s)):``if i % 2 == 0:``ans += s[i]``return ans``print (m('HelloWorld'))`

(b) Write a program to find all the prime numbers up to a given number. (5)

 $(5 \times 2 = 10)$

4/ (a) Multiple Choice Questions :

1. Which of the following is python tuple?

(i) [1,2,3]

(ii) (1,2,3)

(iii) {1,2,3}

(iv) {}

P.T.O.



- assuming python version 3.14
- (i) `<type 'int'>`
 - (ii) `<type 'number'>`
 - (iii) `<type 'tuple'>`
 - (iv) `<type 'float'>`

3. Which of these is not a core data type?

- (i) List
- (ii) Dictionary
- (iii) Type
- (iv) Class

4. Python is _____ language.

- (i) Compiled
- (ii) Procedure
- (iii) Interpreted
- (iv) Non-Interactive

1314

7

5. To add a new element to the list, we use which command?

- (i) `list1.add (5)`
- (ii) `list1.append (5)`
- (iii) `list1.addLast (5)`
- (iv) `list1.addEnd (5)`

(b) Short notes :

(2.5×2=5)

- (i) Describe module in Python with its advantages?
- (ii) Explain different modes of opening a file.

5. (a) Explain different categories of operators used in python each with the help of an example. (10)

(b) Design a python program which will throw exception if the value entered by user is less than zero. (5)

6. (a) Illustrate the use of method overriding? Explain with example. (5)

P.T.O.

(b) Show how try...except blocks is used for exception handling in Python with example. (5)

(c) What is the Purpose of the Pass Statement? Illustrate with example. (5)