

2021

Time : 3 hours

Full Marks : 50

*Candidates are required to give their answers in
their own words as far as practicable.*

The figures in the margin indicate full marks.

*Answer from **all** the Groups as directed.*

Group – A

(Objective Type Questions)

1. Select the correct answer of the following :

1×5 = 5

(a) Who developed Python Programming Language ?

(i) Wick van Rossum

(ii) Rasmus Lerdorf

☒ (iii) Guido van Rossum

(iv) Niene Stom

(b) Which type of programming does Python support ?

- (i) Object Oriented Programming
- (ii) Structural Programming
- (iii) Functional Programming
- (iv) All of these

(c) Which of the following is the correct extension of Python file ?

- (i) .python
- (ii) .pl
- ☒ (iii) .py
- (iv) .p

(d) What will be the value of the following Python expression ?

$$4+3\%5$$

- (i) 7
- ☒ (ii) 2
- ☒ (iii) 4
- (iv) 1

(e) Which keyword is used for function in Python language ?

(i) function

☒ (ii) def

(iii) fun

(iv) define

✓ 2. Fill in the blanks of the following : $1 \times 5 = 5$

(a) Python has Print function to output data to a standard output device.

(b) Python has many predefined function called built-in functions.

(c) The if statement is used for decision making.

(d) The process of identifying and removing logical errors and runtime errors is called debugging.

(e) User defined function uses def keyword.

Group – B

(Short-answer Type Questions)

✓ 3. Answer any four questions of the following :

$$3 \times 4 = 12$$

☒ (a) Define the features of Python.

- ✓ (b) Explain the various operators supported in Python.
- (c) Write a program that counts the number of lower case characters, upper case characters and digits entered by user.
- (d) Differentiate between Errors and Exceptions in Python.
- ✓ (e) Write a Python program to implement is Palindrome () function to check given string is Palindrome or not.
- ✓ (f) Differentiate List and Tuple in Python.

Group – C

(Long-answer Type Questions)

Answer any four questions of the following :

$$7 \times 4 = 28$$

4. (a) Write a program in Python to display the following pattern :

```

1
1 2
1 2 3
1 2 3 4
1 2 3 4 5

```

for (i=1; i<=n; i++)
i++
x+=a
x=x+a

- ✓ (b) Write a Python program to accept a number from keyboard and test whether a number is even or odd.
- ✓ (c) Explain the User Defined Function with the help of a programme in Python.
- ✓ (d) What is a Built in function that Python uses to iterate over a number sequence.
- (e) Differentiate between calling function and creating functions with example.
- (f) Explain the following :
- (i) Drawing using turtle
 - (ii) Classical Cipher
 - (iii) GUI Programming

