

~~2023~~ 2022

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) All keyword in Python are in :

- (i) Capitalized
- (ii) Lower case
- (iii) Upper case
- (iv) None of these

(b) Which of the following is used to define a block of code in Python Language ?

(i) Identification

(ii) Key

(iii) Brackets

(iv) All of these

(c) Which keyword is used for function in Python Language ?

(i) Function

(ii) Def

(iii) Fun

(iv) Define

(d) Which of following is the truncation division operation in Python ?

(i) /

(ii) //

(iii) |

(iv) %

(e) Which of following function is a built in function in Python ?

(i) Factorial()

(ii) Print()

(iii) Seed()

(iv) Sqrt()

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

- (a) Python has _____ function to output data to standard output device.
- (b) String is a sequence of _____.
- (c) Python has many predefined function called _____ function.
- (d) User defined function uses _____ keyword.
- (e) _____ is an ordered collection of item.

Group – B

(Short-answer Type Questions)

3. Answer any four questions of the following :

$3 \times 4 = 12$

- (a) What are Python Modules ?
- (b) Differentiate between lists and tuples.
- (c) What are key features of Python ?
- (d) What are Local Variable and Global Variable in Python ?
- (e) Write a program in Python to find the factorial of number n.
- (f) Write a program in Python to find the first 'n' number in fibonacci series.

Group – C

(Long-answer Type Questions)

3. Answer any four questions of the following :

$$7 \times 4 = 28$$

- (a) Write a program in Python to check whether an integer is Armstrong number or not.
- (b) Write a program in Python to check given number is Prime or not.
- (c) Write a program in Python to check whether a number is Palindrome or not.
- (d) Write a program in Python to find middle element of a linked list in single pass.
- (e) Explain the types of Errors in Python.
- (f) What is encryption and decryption with example ?

