17575

Library
Brainware University
398, Ramkrishnapur Road, Barasat
Kolkata, West Bengal-700125

BRAINWARE UNIVERSITY

Term End Examination 2025-2026
Programme – B.Tech.(CSE)-2024/B.Tech.(CSE)-AIML-2024/B.Tech.(CSE)-DS-2024/B.Tech.(CSE)-AIR-2024
Course Name – Python Programming
Course Code - BES00007
(Semester III)

Full Marks : 60 **Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question) 1 x 15=15

1. *Choose the correct alternative from the following :*

(i) Select the year when Python was first released.
a) 1989 b) 1991
c) 2000 d) 2010

(ii) Identify the correct feature of Python.
a) Compiled language b) Low-level language
c) Interpreted language d) Assembly language

(iii) Identify the correct syntax to display output in Python.
a) echo('Hello') b) print('Hello')
c) printf('Hello') d) cout << 'Hello'

(iv) Identify the output of 'Python'[0].
a) 'P' b) 'y'
c) 'n' d) Error

(v) Select the method used to get the length of a string.
a) count() b) size()
c) len() d) length()

(vi) Identify the method to convert a string to uppercase.
a) upper() b) toUpper()
c) uppercase() d) makeUpper()

(vii) Select the correct syntax to define a list in Python.
a) {1, 2, 3} b) [1, 2, 3]
c) (1, 2, 3) d) <1, 2, 3>

(viii) Identify the method used to add an element to the end of a list.

a) add() b) append()
c) insert() d) extend()

(ix) Select the operator used to access list elements by index.

a) . b) ()
c) [] d) {}

Library
Brainware University
398, Ramkrishnapur Road, Barasat
Kolkata, West Bengal-700125

(x) Select the keyword used to define a function in Python.

a) function b) def
c) define d) func

(xi) Identify the correct way to call a function named 'display'.

a) call display() b) display()
c) display{} d) function display()

(xii) Select the function that returns a value.

a) print() b) input()
c) returning function d) value-returning function

(xiii) Select the keyword used to handle exceptions in Python.

a) catch b) try
c) handle d) except

(xiv) Identify the clause used to execute code regardless of exception.

a) finally b) last
c) end d) after

(xv) Select the method used to raise user-defined exceptions.

a) raise b) throw
c) except d) trigger

Group-B

(Short Answer Type Questions) 3 x 5=15

2. Define key features of Python programming language. (3)
3. Illustrate different ways to access characters in a Python string. (3)
4. Explain the role of the keys() and values() methods in a dictionary. (3)
5. Compare global and local variables in Python functions. (3)
6. Compare class attributes with instance attributes in Python. (3)

OR

Analyze the use of try-finally in managing resource cleanup. (3)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Match different looping types in Python with their applications and examine nested loop behavior. (5)
8. Explain the use of break, continue, and pass statements and represent their roles in loop control. (5)
9. Discuss the working and properties of Python lists with examples. (5)
10. Explain different types of function arguments with examples. (5)
11. Analyze the process of file handling including opening, reading, and writing in Python. (5)
12. List the impact of using polymorphism in Python object-oriented design. (5)

OR

Illustrate exception handling in Python using multiple except blocks and finally. (5)

****