BRAINWARE UNIVERSITY

Term End Examination 2024-2025
Programme – B.Tech.(CSE)-2023
Course Name – Introduction to Python Programming
Course Code - ESCG303
(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)   Identify the output of following code snippet a=[1,2,3,4,5] print(a[3:0:-1])

   a) syntax error
   b) [4,3,2]
   c) [4,3]
   d) [4,3,2,1]

(ii) Identify the output of the following code snippet init_tuple_a = 'a', 'b' init_tuple_b = ('a', 'b') print (init_tuple_a == init_tuple_b)

   a) 0
   b) 1
   c) False
   d) True

(iii) Observe and predict what would the following code print? Mali = 5 print("Mali" + " is " + str(Mali))

   a) Mali is Mali
   b) Mali is 5
   c) 5 is Mali
   d) 5 is 5

(iv) Observe and predict the correct output of the following String operations strOne = str("pynative") strTwo = "pynative" print(strOne == strTwo) print(strOne is strTwo)

   a) False False
   b) True True
   c) True False
   d) False True

(v)   Identify output of the following Python code from the options given: len("Python")

   a) 7
   b) 6
   c) 5
   d) "Python"

(vi) Examine the purpose of the finally clause in Python exception handling.

   a) To define a block of code that might raise an exception
   b) To specify the type of exception to catch
   c) To execute code regardless of whether an exception occurs
   d) To raise a custom exception

(vii) Select the process of raising a custom exception in Python.

   a) Using the raise keyword followed by the exception name
   b) Using the try-except block

c) Using the finally clause

d) Using the if-else statement

(viii) Identify the purpose of the raise statement in python.

a) To raise a new exception

b) To raise a custom exception

c) To re-raise a previously caught exception with additional information

d) To catch multiple exceptions in a single except clause

(ix) Define the role of the return statement in a function. Choose the correct one.

a) It outputs a value to the console but does not end the function's execution.

b) It defines default values for function parameters.

c) It imports external libraries into the function.

d) It provides a value to the caller of the function and ends the function's execution.

(x) Define what happens if you do not provide required arguments to a function. Choose the correct one.

a) The function will ignore missing arguments and continue execution.

b) The function will use default values for missing arguments.

c) A TypeError is raised indicating that required arguments are missing.

d) The function will automatically create new variables for the missing arguments.

(xi) Choose the correct option from the following is responsible for initialising the objects of its class

a) Constructor

b) Destructor

c) Iterator

d) None of the mention

(xii) Choose the correct option from the following is most accurate for the given declaration: x= Square()

a) x contains an int value

b) x contains an object of square type

c) An int value can be assigned to x

d) x contains a reference to a square object

(xiii) Select the correct function that can help us to find the version of Python that we are currently working on

a) sys.version(1)

b) sys.version(0)

c) sys.version()

d) sys.version

(xiv) Predict the correct answer: pip stands for in python_____

a) Pip Installs Python

b) Pip Installs Packages

c) Preferred Installer Program

d) All of the mentioned

(xv) Identify the mode is used to open a file for reading in Python?

a) 'w'

b) 'r'

c) 'a'

d) 'x'

Group-B
(Short Answer Type Questions)

3 x 5=15

2. Describe exception handling in Python with code snippet. (3)
3. Illustrate a Python program to calculate the factorial of a number also Use exception handling to handle negative input values. (3)
4. Describe the functions provided by the math module in Python. (3)
5. Define the random module and give an example of how it is used. (3)
6. Compare and contrast input and output operations in Python. (3)

OR

Illustrate a python program to read line by line from a given files file1 & file2 and write into file3. (3)

Group-C
(Long Answer Type Questions)

5 x 6=30

7. Discuss the role of the get() method in Python dictionaries. (5)

8. Analyze the method of removing any key-value pair from a dictionary in Python. (5)
9. Define a Python function and create an example function that calculates the factorial of a number. (5)
10. Explain passing arguments to the constructor method while creating an object in Python (5)
11. Describe about pass statement in python. (5)
12. Explain the different file mode operations in python with examples (5)

OR

Analyze the following statement fp = open('myfile', 'r') Now explain what happens if, 'myfile' does not exist on the disk 'myfile' exists on the disk (5)

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