

Roll No.

BCA–E-605

B. C. A. (Sixth Semester)

EXAMINATION, 2022-23

PROGRAMMING USING PYTHON

Time : $2\frac{1}{2}$ Hours

Maximum Marks : 60

Note : Attempt all questions.

Section—A

1. Multiple choice questions : 1 each
- (a) Which of the following statements is correct regarding the object-oriented programming concept in python ? (CO3, BL-1)
- (i) Classes are real-world entities while objects are not real
 - (ii) Both classes and objects are real.
 - (iii) Objects are real-world entities while classes are not real
 - (iv) Reflection

P. T. O.

- (b) How is a code block indicated in Python ?
(CO4, BL-2)
- (i) Indentation.
 - (ii) Brackets
 - (iii) Key
 - (iv) None of the above
- (c) Who developed the Python language ?
(CO2, BL-1)
- (i) Zim Den
 - (ii) Guido van Rossum
 - (iii) Niene Stom
 - (iv) Wick van Rossum
- (d) Which of the following is not the part of python programming ?
(CO2, BL-2)
- (i) Loops
 - (ii) Dynamic typing
 - (iii) Pointers
 - (iv) Adopting problem-focused strategies
- (e) it is possible to convert the Numpy array to list in python ?
(CO5, BL-2)
- (i) Yes
 - (ii) No
 - (iii) Sometimes
 - (iv) None of the above

- (f) The project builds on top of pandas and matplotlib to provide easy plotting of data.

(CO2, BL-1)

- (i) Seaborn
 - (ii) Yhat
 - (iii) Vincent
 - (iv) Pychart
- (g) What is the standard way to import matplotlib's pyplot library in python ? (CO5, BL-2)

- (i) import matplotlib as plt
 - (ii) from matplotlib import pyplot as plt
 - (iii) import matplotlib.pyplot as plt
 - (iv) import matplotlib.pyplot as plt
- (h) What will be the output of the following code ?

(CO2, BL-1)

```
a = [1, 2, 3]
```

```
a = tuple(a)
```

```
a[0] = 2
```

```
print(a)
```

- (i) Error
- (ii) [2, 2, 3]
- (iii) (2,2,3)
- (iv) [1,2,3]

(1) Which of the following statements are used in Exception Handling in Python ? (CO4, BL-1)

- (i) try
- (ii) catch
- (iii) finally
- (iv) all of the above

(j) Which of the following words cannot be a variable in python language ? (CO2, BL-2)

```
a = [1, 2, 3, 4, 5]
```

```
sum = 0
```

```
for ele in a :
```

```
    sum += ele
```

```
print (sum
```

- (i) 0
- (ii) 15
- (iii) 20
- (ib) 25

(k) What will be the output of the following code ?

(CO1, BL-1)

```
square= lambda x : x** 2
```

```
a = [ ]
```

for i in range(5) :

 a.append(square(i))

print(a)

(i) [0, 1, 4, 9, 16]

(ii) [1, 4, 9, 16, 25]

(iii) [0, 1, 2, 3, 4]

(iv) [1, 2, 3, 4, 5]

(i) List in Python is in nature. (CO1, BL-2)

(i) functionable

(ii) Immutable

(iii) mutable

(iv) None of the options

2. Attempt any *four* of the following : 3 each

(a) What is an indentation in Python ? (CO1, BL-1)

(b) Write an examples for mutable and immutable type. (CO1, BL-2)

(c) What is an identifier ? Give examples. (CO2, BL-1)

(d) Explain range() function. (CO2, BL-2)

(e) Is tuple mutable ? Lisout three methods of tuple. (CO2, BL-1)

3. Attempt any *two* of the following : 6 each
- (a) What do you mean by Anonymous function ?
Utilize map() function with reference to lambda function. (CO4, BL-3)
 - (b) Write the general syntax of class declaration in python. Evaluate the declaration of class and its object with example. (CO3, BL-5)
 - (c) Write a syntax to define functions in Python ?
Write a python program to find largest of two numbers using function. (CO1, BL-6)
4. Attempt any *two* of the following : 6 each
- (a) List out keywords used in exception handling and explain with example. Write a Python program which will throw exception if the value entered by user is less than zero. (CO4, BL-1)
 - (b) Write step to connect database in Python. (CO5, BL-6)
 - (c) What is polymorphism ? Explain method overloading and operator overloading with example. (CO4, BL-1)

5. Attempt any *two* of the following :
- (a) Analyze the methods of regular expression. How to use regular expressions on file ? Explain with example. (CO1, BL-4)
 - (b) Infer the significance of docstring. (CO4, BL-2)
 - (c) Demonstrate on the use of different library in Python ? Why do we use it ? (CO5, BL-3)