Total No. of Questions: 6 *Total No. of Printed Pages:3*

Enrollment No.....

Faculty of Science

End Sem (Even) Examination May-2022

BC3SE09 Python Programming

Programme: B.Sc. Branch/Specialisation: Computer Science

Duration: 3 Hrs. **Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

Q.1 i. Which of the following symbol is used to make single line comments in Python? **1**

(a) # (b) ’ (c) * (d) //

ii. What will be the output of following statement? **1**

```
Sum=10 +'10'
```

(a) 1010 (b) 20 (c) TypeError (d) 10

iii. Consider the list L1 containing the elements L1= [1,2,3] **1**

What will be the output of the following statement?

```
L1=L1 + [4,5,6]
```

(a) L1= [1, 2, 3, 5, 7, 9] (b) L1= [5, 7, 9]

(c) L1= [4, 5, 6] (d) L1= [1, 2, 3, 4, 5, 6]

iv. What will be the output of the following program? **1**

```
a='\t\t\tPython\n\n'
print(a.strip( ))
```

(a) Python\n (b) Python\n\n

(c) Python (d) \t\tPython

v. What will be the output of the following program? **1**

```
count=35
for x in range(0,10):
   count=count-1
   if(x==2):
      break
print(count)
```

(a) 35 (b) 32 (c) 35, 34, 33 (d) 34, 33, 32

P.T.O.

vi. What will be the output of the following program? **1**

```
count=0
for x in range(1,3):
    for y in range (4,6):
        count=count+(x*y)
print(count)
```

(a) 32 (b) 64 (c) 81 (d) 27

vii. What will be the output of the following program? **1**

```
def perform_multiplication(Num1, Num2):
    Num2=Num1*Num2
    return Num1, Num2
Num2,Num1=perform_multiplication(5,4)
print(Num1,',',Num2)
```

(a) 20, 5 (b) 20, 4 (c) 5, 20 (d) 4, 20

viii. What will be the output of the following program? **1**

```
def say(message, times = 1):
    print(message * times)
say('Hello')
say('World', 5)
```

(a) Hello
WorldWorldWorldWorldWorld
(b) HelloHelloHelloHelloHello
WorldWorldWorldWorldWorld
(c) HelloWorld5
(d) Hello
World5

ix. The close() method is used to conserve memory because : **1**

(a) It closes all unused memory created by Python.
(b) It deletes all the text related to a file.
(c) It compresses a file.
(d) It removes the reference created by file *open()* function.

x. Which method is used to set the file pointer to a specific position in a file? **1**

(a) point( ) (b) move( ) (c) seek( ) (d) spec( )

Q.2 i. List the main features of Python. **2**

ii. Explain the basic data types available in Python with examples. **4**

iii. What is the role of indentation in Python? Explain with suitable example. **4**

OR iv. Discuss the arithmetic operators of Python? Write a program to read the weight of an object in kilogram and print its weight in pound and tonne. **4**
(Use 1 kg =2.20 pound
1 kg =0.001 tonne)

Q.3 i. Differentiate 'pop' and 'remove' method on lists. How to delete more than one element from a list. **4**

ii. What is dictionary? How is it different from list? Write a program to concatenate two dictionaries. **6**

OR iii. List any six methods associated with strings and explain each of them with an example. **6**

Q.4 i. Explain multi-way 'if-elif-else' statement suitable example. **4**

ii. Compare break, pass and continue statement with suitable programming example. **6**

OR iii. Write a program to generate and print all prime numbers between 10 and 50. **6**

Q.5 Attempt any two:

i. Compare local and global variable. Write a function that takes a string check whether entered string is palindrome or not. **5**

ii. What is recursive function? Write a program to calculate factorial of given number using recursive function. **5**

iii. Describe module in Python with its advantages? Explain how to create and import own module. **5**

Q.6 Attempt any two:

i. Describe different access modes of file. Give example of atleast two modes. **5**

ii. Explain the following methods associated with the file object **5**
(a) read( ) (b) readline( ) (c) tell( ) (d) write( )

iii. Write a program to demonstrate exception handling. **5**

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Marking Scheme
BC3SE09 Python Programming

Q.1	i.	(a) #		**1**
	ii.	(c) Type Error		**1**
	iii.	(d) L1= [1, 2, 3, 4, 5, 6]		**1**
	iv.	(c) Python		**1**
	v.	(b) 32		**1**
	vi.	(d) 27		**1**
	vii.	(a) 20, 5		**1**
	viii.	(a) Hello WorldWorldWorldWorldWorld		**1**
	ix.	(d) It removes the reference created by file *open()* function.		**1**
	x.	(c) seek( )		**1**
Q.2	i.	Step marking according to features listed		**2**
	ii.	Step marking according to description of basic data type.		**4**
	iii.	Explanation of role of indentation	2 Marks	**4**
		Example to explain role of indentation.	2 Marks	
OR	iv.	Step marking according to the correctness of program code.		**4**
Q.3	i.	Difference ‘pop’ and ‘remove’	2 Marks	**4**
		Explanation of methods to delete more than one element from a list.	2 Marks	
	ii.	Step marking according to the correctness of program code.	3 Marks	**6**
OR	iii.	Any six methods associated with strings	1 mark for each (1 Mark*6)	**6**
Q.4	i.	Explanation of multi-way ‘if-elif-else’ statement.	4 Marks	**4**
	ii.	Comparison	3 Marks	**6**
		Suitable programming example	3 Marks	
OR	iii.	Step marking according to the correctness of program code		**6**
Q.5		Attempt any two:		
	i.	Comparison of local and global variable	2 Marks	**5**
		Step marking according to the correctness of program code	3 Marks	
	ii.	Definition of recursion	1 Mark	**5**
		Step marking according to the correctness of program code.	4 Marks	
	iii.	Description of advantages of modules	2 Marks	**5**
		Explanation of creating and importing module.	3 Marks	
Q.6		Attempt any two:		
	i.	Step marking according to description of each access mode		**5**
	ii.	Description of methods -1.25 Marks for each	(1.25 Marks*4)	**5**
	iii.	Step marking according to the correctness of program code.		**5**

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