

NB-107

November-2021

B.C.A., Sem.-V

CC-302 : Python Programming

Time : 2 Hours]

[Max. Marks : 50

- Instructions :
- (1) All questions in Section - I carry equal marks.
 - (2) Attempt any TWO questions in Section - I.
 - (3) Question-5 in Section - II is compulsory.

Section - I

1. (A) What is byte code ? List and explain all features of Python. 10
(B) List out all sequences in Python. Explain any four types of sequences in Python. 10
2. (A) What is an array ? Explain creating and importing an array module in different ways with examples in Python. Explain any three methods to process the arrays. 10
(B) Explain how to define and call a function in Python with example. Explain positional and keyword arguments with examples. 10
3. (A) What is inheritance ? Discuss the problems with multiple inheritance. Describe MRO with suitable example. 10
(B) What is the use of self variable ? Explain instance and class variables in detail. Explain passing members of one class to another class with example. 10
4. (A) What is an exception ? Explain exception handling in Python with example. List out any five built-in exceptions. 10
(B) Explain the following methods with syntax and example : connect(), cursor(), execute(), fetchall(), commit(). 10

Section - II

5. MCQs.

- (1) In Python, single line comments start with a _____ symbol.
- (a) * (b) #
(c) // (d) None
- (2) The _____ operators compare the memory locations of two objects.
- (a) membership (b) logical
(c) identity (d) None
- (3) The format of range() function is _____ in list.
- (a) range(start, stop, stepsize) (b) range(stop, start, stepsize)
(c) range(start, stepsize, stop) (d) None of above
- (4) The _____ method returns the first occurrence of the element in tuple.
- (a) count() (b) index()
(c) min() (d) None
- (5) The _____ represents a group of elements arranged in the form of key-value pairs.
- (a) list (b) tuple
(c) dictionary (d) none
- (6) The super().method() call _____.
- (a) super class constructor
(b) super class method
(c) super class constructor with arguments
(d) None
- (7) What is the output of following code ?

```
import re
```

```
str= 'This is a beautiful place'
```

```
ans=re.findall("is",str)
```

```
print(ans)
```

- (a) 1 (b) 2
(c) ['is'] (d) ['is1', 'is']

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- (8) If a variable, object or method exhibits different behaviour in different contexts, it is called _____.
- (a) single inheritance (b) polymorphism
(c) multiple inheritance (d) None
- (9) The module used to create and manage virtual environments is called _____.
- (a) env (b) envs
(c) venv (d) None
- (10) The _____ command will display all of the packages installed in the virtual environment.
- (a) pip show (b) pip search
(c) pip list (d) pip freeze
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