

**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



## 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']



- (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