



Seat No. : 00766

NB-122

November-2023

B.C.A., Sem.-V

**CC-302 : Python Programming
(Theory)**

Time : 2½ Hours]

[Max. Marks : 70

1. Write the following :

- (i) Why is Python called General purpose, interpreted, dynamically typed and multi paradigm scripting language ? Justify your answer in detail. 7
- (ii) Write difference between C and Python. 7

OR

1. (i) Explain membership and identity operator in detail and also explain the use of id() method. 7
- (ii) List and explain different flavors of Python. 7

2. Write the following :

- (i) Define Array. List and explain methods to process array in Python with example. 7
- (ii) Write the difference between function and method. Also explain default argument, keyword argument and variable length argument with example. 7

OR

2. (i) Write difference between List and Tuple. Explain different methods to process tuple in Python with example. 7
- (ii) Explain anonymous function and function decorators in detail. 7

3. Write the following :

- (i) Explain instance method, class method and static method in detail. 7
- (ii) What is constructor ? How can we create a constructor in Python ? Explain self keyword in detail. 7

OR

3. (i) What is inheritance ? List different type of inheritance in Python and also explain super() method with example. 7
- (ii) Discuss MRO in detail. 7

4. Write the following :

- (i) Explain necessary statements for database connectivity in Python with example. 7
- (ii) What do mean by exception ? Explain try, except, else and finally block to handle exceptions with proper example. 7

OR

- 4. (i) Explain any five standard libraries available in Python. 7
- (ii) Write a short note on virtual environment and pip command. 7

5. Attempt any seven out of twelve :

- (1) What will be the output of following code : `print ("hello"*2)`. 14
 - (a) `hello*2`
 - (b) `hellohello`
 - (c) `hello`
 - (d) `error`
- (2) _____ method adds a content of list2 to the end of list1.
 - (a) `insert()`
 - (b) `extend()`
 - (c) `append()`
 - (d) `add()`
- (3) _____ function prints data type of the object.
 - (a) `type()`
 - (b) `datatype()`
 - (c) `show()`
 - (d) `view()`
- (4) _____ method returns current working directory.
- (5) Integer data type has fixed size in Python ? (T/F)
- (6) _____ function prints memory address of the object.
 - (a) `address()`
 - (b) `id()`
 - (c) `show()`
 - (d) `view()`
- (7) `__init__(self)` is the name of constructor in Python. (T/F)
- (8) Byte data type has 0 to 255 range in Python ? (T/F)
- (9) The `split()` method by default splits the values where a _____ is found.
 - (a) comma
 - (b) semicolon
 - (c) space
 - (d) None
- (10) Define Method overloading.
- (11) _____ method is used to create array.
 - (a) `array`
 - (b) `create`
 - (c) `insert`
 - (d) `append`
- (12) _____ sequence data type only stores unique data and eliminates duplicate data.
 - (a) list
 - (b) tuple
 - (c) set
 - (d) dictionary