



Date:

Registration number:

ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU-27
BCA(DATA ANALYTICS) - II SEMESTER
SUPPLEMENTARY EXAMINATION: APRIL 2022
(EXAM CONDUCTED IN JULY 2022)
BCADA 2320 – PYTHON PROGRAMMING

Time- 2.5 Hrs

Max Marks-70

This question paper contains FOUR printed pages and THREE parts

PART A

Answer ALL the questions

20 X 1 = 20

- Given a function that does not return any value, What value is thrown by default when executed in shell.
 - int
 - bool
 - void
 - float
- Is Python case sensitive when dealing with identifiers?
 - yes
 - no
 - machine dependent
 - none of the mentioned
- Which of the following is an invalid variable?
 - my_string_1
 - 1st_string
 - foo
 - _
- What is the type of inf ?
 - Boolean
 - Integer
 - Float
 - Complex
- Which of the following is incorrect?
 - x = 0b101
 - x = 0x4f5
 - x = 19023
 - x = 03964
- Which of the following statements create a dictionary?
 - d = {}
 - d = {"john":40, "peter":45}
 - d = {40:"john", 45:"peter"}
 - All of the mentioned

7. Suppose `t = (1, 2, 4, 3)`, which of the following is incorrect?
- a) `print(t[3])`
 - b) `t[3] = 45`
 - c) `print(max(t))`
 - d) `print(len(t))`
8. What will be the output of the following Python code?
- ```
>>>t=(1,2,4,3)
>>>t[1:3]
```
- a) (1, 2)
  - b) (1, 2, 4)
  - c) (2, 4)
  - d) (2, 4, 3)
9. Which of these about a set is not true?
- a) Mutable data type
  - b) Allows duplicate values
  - c) Data type with unordered values
  - d) Immutable data type
10. What will be the output of the following Python code?
- ```
nums = set([1,1,2,3,3,3,4,4])print(len(nums))
```
- a) 7
 - b) Error, invalid syntax for formation of set
 - c) 4
 - d) 8
11. If `a={5,6,7,8}`, which of the following statements is false?
- a) `print(len(a))`
 - b) `print(min(a))`
 - c) `a.remove(5)`
 - d) `a[2]=45`
12. Which of the following is used to define a block of code in Python language?
- a) Indentation
 - b) Key
 - c) Brackets
 - d) All of the mentioned
13. What is the order of precedence in python?
- a) Exponential, Parentheses, Multiplication, Division, Addition, Subtraction
 - b) Exponential, Parentheses, Division, Multiplication, Addition, Subtraction
 - c) Parentheses, Exponential, Multiplication, Division, Subtraction, Addition
 - d) Parentheses, Exponential, Multiplication, Division, Addition, Subtraction
14. Suppose list1 is `[1, 3, 2]`, What is `list1 * 2`?
- a) `[2, 6, 4]`
 - b) `[1, 3, 2, 1, 3]`
 - c) `[1, 3, 2, 1, 3, 2]`
 - d) `[1, 3, 2, 3, 2, 1]`
15. To remove string "hello" from list1, we use which command?
- a) `list1.remove("hello")`
 - b) `list1.remove(hello)`

- c) list1.removeAll("hello")
 - d) list1.removeOne("hello")
16. If a is a dictionary with some key-value pairs, what does a.popitem() do?
- a) Removes an arbitrary element
 - b) Removes all the key-value pairs
 - c) Removes the key-value pair for the key given as an argument
 - d) Invalid method for dictionary
17. What will be the output of the following Python code?
- ```
>>>list("a#b#c#d".split('#'))
```
- a) ['a', 'b', 'c', 'd']
  - b) ['a b c d']
  - c) ['a#b#c#d']
  - d) ['abcd']
18. What is returned by math.modf(1.0)?
- a) (0.0, 1.0)
  - b) (1.0, 0.0)
  - c) (0.5, 1)
  - d) (0.5, 1.0)
19. What is the pickling?
- a) It is used for object serialization
  - b) It is used for object deserialization
  - c) None of the mentioned
  - d) All of the mentioned
20. Correct syntax of file.writelines() is?
- a) file.writelines(sequence)
  - b) fileObject.writelines()
  - c) fileObject.writelines(sequence)
  - d) none of the mentioned

## PART B

**Answer any SIX questions**

**6 X 5 = 30**

21. List and explain different arithmetic operators supported by Python. Discuss about their precedence and associativity.
22. What is slice operation? Explain with an example.
23. Discuss the following dictionary methods with an example.  
a) keys() b) pop() c) update() d) values() e) items()
24. Explain with syntax how to create a user-defined function and how to call the user-defined function from the main function.
25. Differentiate between the following:  
a. pop() and remove() methods of list.  
b. Del statement and pop() method of list.
26. "Strings in python are immutable". Justify this statement with an example. Write pythonic code to find the factorial of any number entered through the keyboard.
27. Explain the role of Exception Handling in Python. How Exception differs from Assertion?
28. Discuss the importance of \_\_init\_\_ and \_\_main\_\_ function in python. Give an example

**PART C**

**Answer any TWO questions**

**2 X 10 = 20**

29. What is operator overloading? Write pythonic code to overload "+", "-" and "\*" operators by providing the methods `__add__`, `__sub__` and `__mul__`.
30. Tabulate the different modes for opening a file and explain the same.
31. What are the different types of inheritance supported by Python? Explain with an example.