

**BACHELOR OF COMPUTER APPLICATION
FIFTH SEMESTER
PYTHON
BCA-503.3**

**SET
B**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

(Objective)

Marks: 20

Choose the correct answer from the following:

1×20=20

1. What is the purpose of the pass statement in python?
a It is used to skip the yield statement of a generator and return a value of none. b It is used to pass control from one statement block to another.
c It is a null operation used mainly as a placeholder in functions, classes, etc. d It is used to skip the rest of a while or for loop and return to the start of the loop.
2. Python allows string slicing. What is the output of below code: s='cppbuzzchicago'
print(s[3:5])
a buzz b pbuzz
c bu d None of these
3. What is the output of the following python code?
dictionary1={'Atic':1,
 'World': 2,
 'Superb': 3}
print(dictionary1['World']);
a 2 4-3 3 b 2 2 -3 3.1 2
c 2 3 -3 3.1 2 d Error
4. What is the purpose of the pass statement in python?
a It is used to skip yield statement of a generator and return a value of None. b It is used to pass control from one statement block to another.
c It is a null operation used mainly as a placeholder in functions, classes, etc. d It is used to skip the rest of a while or for loop and return to the start of the loop.
5. If you don't explicitly return a value from a function, what happens?
a The function will return a Runtime Error if you don't return a value b If the return keyword is absent, the function will return True.
c If the return keyword is absent, the function will return None. d The function will return an infinite loop because it won't know when to stop executing its code.
6. What is a lambda function?

- a any function that makes us of scientific or mathematical constants, often represented by Greek Letters in academic writing
- b any function whose definition is contained within five lines of code or fewer
- c a small ,anonymous function that can take any number of arguments but has only expression to evaluate.
- d A function that get executed when decorators are used.

7. What is the output?

```
r=lambda q:q*2
s=lambda q:q*3
x=2
x=r(x)
x=s(x)
x=r(x)
print(x)
```

- a 48
 - b 8
 - c 24
 - d 4
- 8 The Boolean logical operators are:
- a and,or,but
 - b true,false
 - c and,not,or
 - d and ,neither,nor
- 9 Which function header is correct?
- a def f(a=1,b):
 - b def f(a=1,b,c=2):
 - c def f(a=1,b=1,c=2):
 - d def f(a=1,b=1,c=2,d)

10 The basic mechanism that python uses to control program flow is the__ statement.

- a pass
- b break
- c if
- d for

11 Which of the following is a features of DocString?

- a Provide a convenient way of associating documentation with python modules,functions,classes, and methods.
- b All functions should have a docstring
- c Docstrings can be accessed by the __doc__ attributes on objects
- d All the above

12 Which one of the following is the correct way of calling a function?

- a function function_name()
- b def function_name()
- c function_name()
- d call function_name()

13. What is the output of the following code?

```
my_string ="World"
n="i"
while n in my_string:
    print(n,end=" ")
```

- a iiiii
- c None

- b World
- d Compiler Error

14. Review the code below. What is the correct syntax for changing the price to 15 ?

```
fruit_info={  
    'fruit': 'apple',  
    'count':2,  
    'price':3.5  
}
```

- a my_list[3.5]=1.5
- c fruits_info['price']=1.5

- b 1.5=fruit_info['price']
- d my_list['price']==1.5

15. What is the term to describe this code?

```
count,fruit,price=(2,'apple',3.5)
```

- a Tuple assignemt
- c Tuple unpacking

- b Tuple matching
- d Tuple duplication

16. What is the purpose of an if/else statement?

- a. An if/ else statement tells the computer which chunk of code to run the instructions you coded are incorrect.
- c. An if/else statement executes one chunk of code if a condition it true, but a different chunk of code if the condition is false.

- b An if/else statement runs one chunk of code if all the imports were successful and another chunk of code if the imports were not successful.
- d An if/else statement executes one chunk of code o run if there is enough memory to handle it and which chunk of code to run if there is not enough memory to handle it.

17. What is the output of the following program?

```
x=['ab','cd']  
for i in x:  
    i.upper()  
print(x)
```

- a Error
- c ['ab','cd']

- b ['cd','ab']
- d None of these

18. Is python case sensitive when dealing with identifiers?

- a May be
- c Yes

- b No
- d None of these

19. When does a for loop stop iterating?

- a When it encounters an infinite loop
- c When it has assessed each item in the iterable it is working on or a break keyword is encountered.

- b When it encounters an if/else statement that contains a break keyword.
- d When the runtime for the loop exceeds $O(n^2)$

20. What is the output of the following python programs?

```
dictionary1={'Atic':1,  
            'World': 2,  
            'Superb': 3}  
print(dictionary1['World']);
```

- a Compiler error due to duplicate keys b Runtime error due to duplicate keys
c 2 d 3

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(Descriptive)

Time : 2 hrs. 30 mins.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. What are the different flow control statements supports in python. 10
Explain any 3 with an suitable example program and flow chart.
2. Describe the "is" and "is not" operators and type() function. Also, 5+5=10
discuss why Python is called as dynamic and strongly typed language.
3. Answer the following questions 4+6=10
 - i. Discuss the relation between tuples and lists, tuples and dictionaries in detail.
 - ii. Discuss the following list functions
 - a. len()
 - b. sum()
 - c. any()
 - d. all()
 - e. sorted()
 - f. abs()
4. What is an exception? What are the two parts in an error message? 2+2+6=10
How do you handle exception inside a program when you try to open a non-existent file explain?
5. Explain the need for continue and break statements. Write a program 5+5=10
to check whether a number is prime or not. Prompt the user for input.
6. a) Discuss inheritance in Python programming language. Explain in 2+3=5
brief types of Inheritance in Python.
b) Define module. Write notes on Modular design. Also explain the relationship between python module and packages. 2+3=5
7. Explain the difference between recursion and iteration. Also write the 5+5=10
advantages and disadvantages of recursion
8. a) Write a python program to separate positive and negative 5+2+3=10
number from a list.
 - a. [Hint: given x=[23,4,-6,23,-9,21,3,-45,-8]
 - b. Expected output
 - c. Result:
 - i. Positive:[23,4,23,21,3]
 - ii. Negative:[-6,-45,-9,-8]
- b) How will you update list items? Give Example. Can function return tuples? Explain with an example.

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