

**MASTER OF COMPUTER APPLICATION
FOURTH SEMESTER
PYTHON PROGRAMMING
MCA-402.6**

**SET
B**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

(Objective)

Time: 30 mins.

Marks: 20

Choose the correct answer from the following:

1 × 20 = 20

1. Is python case sensitive when dealing with identifiers?
a. Yes
b. No
c. May be
d. None of these
2. Which one of the following has the highest precedence in an expression?
a. Addition
b. Parenthesis
c. Multiplication
d. Exponential
3. Which of the following is not a declaration of the dictionary?
a. {1:'A',2:'B'}
b. {1,"A",2"B"}
c. dict([[1,"A"],[2,"B"]])
d. {}
4. What is the output of this code?
a,b=1,0
a=a^b
b=a^b
a=a^b
print(a)
a. 0
b. 1
c. 2
d. Code will rise a runtime error
5. Which of the following is used to initialize multiple variables with a common value?
a. x=y:y=33
b. x=y=z=33
c. x=z;y=z;x=33
d. x&y&z=33
6. Which can be an Identifier among them in Python?
a. -abc
b. -\$12a
c. _xy1
d. -@python
7. What is the output of the following python programs?
y=18
z=lambda x:x*y
print(z(3))
a. 54
b. 48
c. 64
d. None of these
8. What will be the datatype of the var in the below code snippet?
var = 10
print(type(var))
var = "Hello"
print(type(var))

- a. int and str
c. int and int
- b. str and str
d. str and int
9. Which of the following types of loops are not supported in Python?
a. for
c. do while
- b. while
d. none of these
10. Which of the following are valid escape sequences in Python?
a. \n
c. \t
- b. \\
d. All the above
11. 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 is 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 to 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
12. All keywords in python are in:
a. UPPER CASE
c. Capitalized
- b. Lower case
d. None of the mentioned
13. Python allows string slicing. What is the output of below code?
s='cppbuzzchicago'
print(s[3:5])
a. buzz
c. pbuzz
- b. bu
d. None of these
14. What will be the output of the following python code?
i=0
while true:
 if i%2==0:
 break
 print i
 i+=2
a. 1
c. 1 3 5 7 9 11
- b. 1 2 5 8 9
d. None of these
15. How do you denote the end of a block in python?
a. By indenting the next line less than the current
c. With the end keyword
- b. With the semicolon ;
d. With a backslash /
16. What is the output of the following code?
def func(x, ans):
 if(x==0):
 return 0
 else:
 return func(x-1, x+ans)
print(func(2,0))

- a. 0
- b. -1
- c. -2
- d. -3

17. What will be the output of the following code snippet?
example=["sunday","monday","tuesday","wednesday"];
print(example[-3: -1])

- a. ['monday','tuesday']
- b. ['sunday','monday']
- c. ['tuesday','wednesday']
- d. ['monday','tuesday','wednesday']

18. What value is printed when the following code is executed?

```
name="Computer_Science"  
defmyfunction(parameter):  
    value="First"  
    value="parameter"  
    print(value)  
myfunction("Second")
```

- a. Computer_Science
- b. First
- c. Second
- d. parameter

19. What will be the output of the following code snippet?

```
print(type(5 / 2))  
print(type(5 // 2))
```

- a. float and float
- b. float and int
- c. int and float
- d. int and int

20. What will be the output of the following code snippet?

```
square = lambda x: x ** 2  
a = []  
for i in range(5):  
    a.append(square(i))
```

print(a)

- a. [1,4,9,16,25]
- b. [0,1,2,3,4]
- c. [0,1, 4 ,9 ,16]
- d. [1,2,3,4,5]

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(Descriptive)

Time : 2 hr. 30 mins.

Marks : 50

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

1. a) Define the following with the necessary examples. 5+5=10
 - i) if statement
 - ii) if-else-if statement
 - iii) nested -if statement.b) With the necessary examples describe the use of continue and break statement.
2. Illustrate the different types of control flow statements available in Python with flowcharts. Explain the following list of methods with an example: a) append() b) extend() c) insert() d) index() e) sort() 5+5=10
3. Answer the following questions: 5+5=10
 - a) Discuss the relation between tuples and lists in detail.
 - b) How does constructor overriding work? Briefly explain with a relevant example. How may a child class be made to contain a parent class's properties? Give an instance.
4. What is the difference between local and global variables? Explain with the help of a suitable example. Write a Python program using a function that returns a list of the numbers of the Fibonacci series, instead of printing it. 3+2+5=10
5. a) Explain the need for a continue and break statement. Also explain why Python is called as dynamic and strongly typed language? 2+3+3+2=10
b) Why do we need Encapsulation in Python? What do you mean by Protected member?
6. a) List different data types in Python. 2×5=10
b) State how to perform lambda function in Python.
c) Write the difference between Class and Instances.
d) Mention the use of //, **, and % operators in Python.
e) Explain the use of Self() function in Python.
7. a) Explain the difference between modules and packages. How do you define an Abstract class in Python? 5+5=10
b) Write a program to find given string is palindrome or not using function.
8. How would you define inheritance? Briefly describe the various inheritance types using an appropriate example. 10

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