

Dr. B. C. Roy College of Pharmacy & AHS, Durgapur

Course Name : Basic Programming with Python and its application in database management, artificial intelligence and machine learning(AI/ML).

Exam Date : 29/01/2024

F.M : 60

Time : 1.30 Hrs

General Instructions : Question paper contains three groups A, B and C. Group A contains MCQ type questions with 1 marks each. Group B contains short answer type questions with 3 marks each and in Group C, you have to write Python program, carries 5 marks each.

A. choose the most appropriate answer from the options given below

1. Which type of Programming does Python support?
a) object oriented programming b) structured programming
c) functional programming d) all of the mentioned
2. Is Python case sensitive when dealing with identifiers?
a) no b) yes c) machine dependent d) none of the mentioned
3. Is Python code compiled or interpreted?
a) Python code is both compiled and interpreted
b) Python code is neither compiled nor interpreted
c) Python code is only compiled
d) Python code is only interpreted
4. What will be the value of the following Python expression?
 $4 + 3 \% 5$
a) 7 b) 2 c) 4 d) 1
5. 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
6. Which of the following character is used to give single-line comments in Python?
a) # b) = c) ! d) *
7. What are the values of the following Python expressions?
 $2^{(3^2)}$
 $(2^3)^2$
 2^{3^2}
a) 512, 64, 512 b) 512, 512, 512 c) 64, 512, 64 d) 64, 64, 64
8. What will be the output of the following code snippet?
a)
b) 1
print(a, b)
a, b = b, a
print(a, b)
a) 3 1 1 3 b) 1 3 3 1 c) 1 1 3 3 d) none of these
9. Which of the following declarations is incorrect in python language?
a) `xyzp = 5000000` b) `x y z p = 5000 6000 7000 8000`
c) `x,y,z,p = 5000, 6000, 7000, 8000` d) `x_y_z_p = 5,000,000`




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10. `print("javatpoint"[5:])`
What will be the output of this code?
a) Javatpoint b) java c) point d) None of these
11. `a = True`
`b = False`
`c = False`
if a or b and c
 `print("ABC")`
else:
 `print("abc")`
a) abc b) ABC c) ABC abc d) abc ABC
12. Which of the following is the truncation division operator in Python?
a) | b) // c) / d) %
13. What will be the output:
`a="10"`
`b="20"`
`c=a+b`
`print(c)`
a) 30 b) 1020 c) 2010 d) none of these
14. How many times will Python execute the code inside the following while loop?
`i = 0`
while `i < 0 and i > 2` :
 `print ("Hello ...")`
 `i = i+1`
a) 0 times b) 1 times c) 2 times d) infinite times
15. Extension of python file is:
a) .python b) .py c) .prog d) None of these

B. Answer the following questions:

- Write the difference between :
(a) = and == (b) "and" and "or" (c) / and // (d) * and **
- Rewrite the following for loop into while loop:
`for a in range(25,500,25):`
 `print(a)`
- What is the significance of "else" in loop explain with example.
- How many return statement can be used in a function? Explain with example.
- Explain actual and formal arguments with example.
- Write Python code to create a Dictionary and display the length of the dictionary.



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7. What is the output of the following?

```
i = 1
while True:
    if i%7 == 0:
        break
    print(i)
    i += 1
```

a) 1 2 3 4 5 6 b) 1 2 3 4 5 6 7 c) error d) none of the mentioned

8. what will be the output if value of a is 5

```
def sum(a):
    a=a+10
    print(a)
```

```
a=int(input("enter a number"))
sum(a)
print(a)
```

9. Write python code to input a string and print the first and last character of it.

10. What will be the output?

```
for x in range(6):
    print(x)
else:
    print("Finally finished!")
```

C. Write python program for the following:

1. Cost of an apple is Rs. 10 and Mango is Rs. 8. You have purchased m and n number of Apples and Mangoes. You will get a discount of 2% if your purchase amount is more than Rs. 5000. Write a program to input the value of m and n and display the purchase amount, discount and net payable amount.
2. Input any 10 numbers in a list and display the maximum element.
3. Display the sum of all the numbers between 1 to 100 which are divisible by both 3 and 7.