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CHRISTIAN SERVICE UNIVERSITY COLLEGE KUMASI

FACULTY OF HEALTH AND APPLIED SCIENCES DEPARTMENT OF COMPUTER SCIENCE

End of Second Semester Examination, 2020/21 Academic Year

LEVEL 100

BSIT 102: PRINCIPLES OF PROGRAMMING II (PYTHON)

September 2021

Time: 2hrs30Mins

General Instructions: The paper is in **two (2) sections**; Section A and B.

Answer all Questions.

Answer section All Questions on the Question Paper

Section A (60 Marks)

1) Which keyword is use to define function?

- A. define
- B. declare
- C. def
- D. function

2) Which of the following items are present in the function header?

- A. function name
- B. parameter list
- C. return value
- D. Both A and B

3) How is a function declared in Python?

- A. def function function_name():
- B. declare function function_name():
- C. def function_name():
- D. declare function_name():

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

- A. function_name()
- B. call function_name()
- C. ret function_name()
- D. function function_name()

5) A function cannot return data as a result

- A. True
- B. False

6) Which of the following items marks the start of the function header

- A. definition
- B. function
- C. declare
- D. def

7) What is the output of the following code:

```
def greet(name):  
    print("Hello, " + name + ". Good  
morning!")
```

```
greet("James")
```

- A. "Hello, " + name + ". Good morning!"
- B. Hello, James. Good morning!
- C. "Hello, " + James + ". Good morning!"
- D. James Good morning!

8) What is the output of the following code:

```
def my_function(country = "Norway"):   
    print("I am from " + country)  
  
my_function("Sweden")
```

- A. I am from Norway
- B. I am from Sweden
- C. "I am from" +Norway
- D. "I am from " + country

9) What is the output of the following code:

```
def my_function(country = "Norway"):   
    print("I am from " + country)  
  
my_function()
```

- A. I am from Norway
- B. I am from my_function()
- C. "I am from" + country = Norway
- D. "I am from " + Norway

10) What is the scope of variables defined inside the body of a function:

- A. global
- B. local
- C. inside
- D. extra

11) What is the output of the following function call

```
def myself(name, age=20):  
    print(name, age)  
  
myself('Emma', 25)
```

- A. Emma, 20
- B. Emma, 25
- C. Emma
- D. 20

12) What is the output of the following function call

```
def arithmetic(num):
    return num + 25
```

arithmetic (5)

- A. 25
- B. 5
- C. 30
- D. num

13) What is the output of the following function call

```
def add(a, b):
    return a+5, b+5
```

```
result = add(3, 2)
print(result)
```

- A. 15
- B. 5
- C. 8, 7
- D. 3, 2

14) What will be printed when the following code executes?

```
def test(a, b = 5):
    print(a, ", ", b)
```

test(-3)

- A. a, b
- B. -3, 5
- C. a, 5
- D. -3, b

15) What will be printed when the following code executes?

print(int(33.7))

- A. 33.7
- B. 33
- C. 34
- D. 33.70

16) Which of the following logical operators is not supported by python

- A. ==
- B. !=
- C. >
- D. !>

17) Which of the following is used to declare a block of code in python

- A. curly bracket
- B. Square bracket
- C. Indentation
- D. Parenthesis

18.) Which one of the following is a valid Python if statement?

- A. if a>=2:
- B. if (a >= 2)
- C. if (a => 22)
- D. if a >= 22

19) What keyword would you use to add an alternative condition to an if statement?

- A. else_if
- B. elseif
- C. elif
- D. else_else

20) Which statement will check if a is equal to b?

- A. if a = b:
- B. if a == b:
- C. if a === b:
- D. if (a == b)

21) What does the following code print?

```
if 4 + 5 >= 10:
    print("TRUE")
else:
    print("FALSE")
print("TRUE")
```

- A. TRUE
- B. TRUE
FALSE
- C. FALSE
TRUE

D. TRUE
FALSE
TRUE

22) Which of the following is not a boolean expression?

- A. True
- B. $3 == 4$
- C. $3 + 4$
- D. $3 + 4 == 7$

23) $x = -10$

```
if x < 0:
    print("The negative number ",  
x, " is not valid here.")  
    print("This is always printed")
```

- A. This is always printed
- B. The negative number -10 is not valid here
 This is always printed
- C. The negative number -10 is not valid here
- D. This is always printed

24) Which of the following will evaluate to true?

- I. True and False
- II. False or True
- III. False and (True or False)

- A. I
- B. II
- C. I and II
- D. II and III

25) What is the output from the following code?

```
a = 3
b = (a != 3)
print(b)
```

- A. True
- B. False
- C. 3
- D. Syntax error

26) Which of the following evaluates to True when a is equal to b or when a is equal to 5?

- A. $a == b == 5$
- B. $a = b$ or $a = 5$
- C. $a == b$ or $a == 5$
- D. $a = b$ and $a = 5$
- E. $a == b$ and $a = 5$

27) What will be the output of the following code

marks = 205

```
if marks > 85 and marks <= 100:  
    print("Congrats ! you scored grade A ...")  
elif marks > 60 and marks <= 85:  
    print("You scored grade B + ...")  
elif marks > 40 and marks <= 60:  
    print("You scored grade B ...")  
elif marks > 30 and marks <= 40:  
    print("You scored grade C ...")  
else:  
    print("Sorry you have failed ")
```

- A. Congrats! you scored grade A ...
- B. Sorry you have failed
- C. Syntax Error
- D. You scored grade B ...

28) What will be the output of the following code

```
num = 0
if num >= 0:
    if num == 0:
        print("Zero")
    else:
        print("Positive number")
else:
    print("Negative number")
```

- A. Zero
- B. Positive number
- C. Negative number
- D. num

29) Having if...elif...else statement inside another if...elif...else statement is known as:

- A. if elif else
- B. nesting
- C. concatenation
- D. logical system

30) What is the output of this code?

```
spam = 7
if spam > 5:
    print("five")
if spam > 8:
    print("eight")
```

- A. eight
- B. five
- C. 7
- D. spam

31) What will the following code print?

```
counter = 1
sum = 0
while counter <= 6:
    sum = sum + counter
    counter = counter + 2
print(sum)
```

- A. 12
- B. 9
- C. 7
- D. 8

32) Which of the following is not used as loop in Python?

- A. for loop
- B. while loop
- C. do loop
- D. None of the options

33) How many times will the loop run?

```
x = 2
while (x > 0):
    x = x-1
```

- A. 2
- B. 3
- C. 1
- D. 0

34) How many times will the loop run?

```
for x in [1,2,3]:
    print(x)
```

- A. 0
- B. 1
- C. 2
- D. 3

35. What is the output of the following?

```
x = 2
while True:
    if x % 3 == 0:
        break
    print(x)
    x += 2
```

- A. 2
4
6
- B. 2
4
- C. 2
3
- D. error

36) In programming, what is iteration?

- A. The repetition of steps within a program
- B. The order in which instructions are carried out
- C. A decision point in a program
- D. Testing a program to make sure it works

- 37) Which two statements are used to implement iteration?
- A. IF and WHILE
 - B. ELSE and WHILE
 - C. FOR and WHILE
 - D. IF and ELSE

- 38) What is the output of the following?

```
d = {0, 1, 2}
```

```
for x in d:
```

```
    print(x)
```

- A. 0
1
2
- B. {0, 1, 2}
{0, 1, 2}
{0, 1, 2}
- C. error
- D. none of the options

- 39) What is the output of the following?

```
for x in range(1):  
    print(x)
```

- A. 0
- B. no output
- C. error
- D. 1

- 40) What is the output of the following?

```
for i in range(int(2.0)):  
    print(i)
```

- A. 0
1
2
- B. 0
1
- C. Error
- D. 2.0

- 41) What is the output of the following code:

```
fruits=["apple","banana","cherry"]  
for x in fruits:  
    if x == "banana":  
        break  
    print(x)
```

- A. apple
Banana
- B. apple
- C. Banana
- D. Banana
Cherry

- 42) What is the output of the following code:

```
fruits = ["apple", "banana", "cherry"]  
for x in fruits:  
    print(x)
```

- A. apple
banana
cherry
- B. apple
Cherry
- C. banana
Cherry
- D. apple
banana

- 43) Which statement can be used to stop a loop even if the while condition is true:

- A. continue
- B. break
- C. stop
- D. end

44) What is the output of the following code:

```
x = 1
while x < 6:
    print(x)
    if x ==3:
        break
    x+=1
```

A. 1
2
3

B. 1
2
3
4
5
6

C. 1
3

D. 1

45) Which loop is used to iterate over a sequence

- A. while
- B. else
- C. for
- D. if

46) The else part in a for loop specifies a block of code to be executed when the loop is finished

- A. True
- B. False

47) In the while loop, test expression is checked first and body of the loop is entered only if the test_expression evaluates to FALSE.

- A. True
- B. False

48) what is the output of the code below:

```
x = 2
for i in range(x):
    i -= 2
    print (i)
```

A. 0
2

B. -2
-1

C. -2
2

D. 0
-2

49) What will be the output of the following code?

```
x = 12
for i in x:
    print(i)
```

- A. 12
- B. 0
- C. Error
- D. None of the options

50) Elements of an array can be of different types

- A. True
- B. False

Ans: B

51) What is the output of the following code:

```
import array
balance = array.array('i', [300,200,100])
print(balance[1])
```

- A. 300
- B. 200
- C. 100
- D. [300, 200, 100]

52) What is the output of the following code:

```
import array
balance = array.array('i', [300,200,100])
print(balance[-2])
```

- A. 300
- B. 200
- C. 100
- D. [300, 200, 100]

53) What is the output of the following code:

```
import array as arr
abc = arr.array('d', [2.5, 4.9, 6.7])
print(abc[3])
```

- A. [2.5, 4.9, 6.7]
- B. 4.9
- C. 6.7
- D. IndexError

54) What is the output of the following code:

```
import array as arr
abc = arr.array('d', [2.5, 4.9, 6.7])
print(abc[-1])
```

- A. [2.5, 4.9, 6.7]
- B. 4.9
- C. 6.7
- D. IndexError

55) What is the output of the following code:

```
import array as arr
abc=
arr.array('q',[3,9,6,5,20,13,19,22,30,25])
print(abc[7:9])
```

- A. array('q', [30, 25])
- B. array('q', [22, 30])
- C. array('q', [19,22,30])
- D. array('q', [22,30,25])

56) _____ represents an entity in the real world with its identity and behaviour.

- A. A method
- B. An object
- C. A class
- D. An operator

57) What will be the output of the following Python code?

class test:

```
def __init__(self,a="Hello World"):
    self.a=a
```

def display(self):

```
    print(self.a)
```

obj=test()

obj.display()

- A. The program has an error because constructor can't have default arguments
- B. Nothing is displayed
- C. "Hello World" is displayed
- D. The program has an error display function doesn't have parameters

58) What will be the output of the following Python code?

class test:

```
def __init__(self,a):
    self.a=a
```

def display(self):

```
    print(self.a)
```

obj=test()

obj.display()

- A. Runs normally, doesn't display anything
- B. Displays 0, which is the automatic default value
- C. Error as one argument is required while creating the object
- D. Error as display function requires additional argument

59) What is Instantiation in terms of OOP terminology?

- A. Deleting an instance of class
- B. Modifying an instance of class
- C. Copying an instance of class
- D. Creating an instance of class

60) What will be the output of the following code:

```
import array as myarr
first = myarr.array('b', [20, 25, 30])
first.pop(2)
print(first)
```

- A. array('b', [20, 25])
- B. array('b', [20, 25, 30, 2])
- C. array('b', [20, 25, 2])
- D. array('b', [20, 30])

61) What will be the output of the following code:

```
import array as myarray
first = myarray.array('b', [2, 3, 4, 5])
first.remove(3)
print(first)
```

- A. array('b', [2, 4, 5])
- B. array('b', [2, 3, 4])
- C. array('b', [2, 3, 4, 3])
- D. array('b', [2, 4, 3])

62) In python, what is method inside class?

- A. attribute
- B. object
- C. argument
- D. function

63) To create a class, use the keyword?

- A. new
- B. except
- C. class
- D. object

64) All classes have a function called?

- A. __init__
- B. __init__()
- C. init
- D. init()

65) The _____ parameter is a reference to the current instance of the class, and is used to access variables that belong to the class.

- A. __init__()
- B. self
- C. both A and B
- D. None of the above

66) A variable that is defined inside a method and belongs only to the current instance of a class is known as?

- A. Inheritance variable
- B. Instance variable
- C. Functional variable
- D. Instantiation variable

67) What is the output of the following code?

```
class People():
```

```
    def __init__(self, name):
        self.name = name
```

```
    def namePrint(self):
        print("Name: " + self.name)
```

```
person1 = People("Sally")
person2 = People("Louise")
print(person1.name)
```

- A. Sally
- B. Louise
- C. Sally Louise
- D. person1

68) _____ is a convention that is used to represent the instance of a class and to access the attributes and methods of the class.

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- A. class
- B. def
- C. self
- D. init

69) Which of the following is the correct way to define an initializer method?

- A. def __init__(title, author):
- B. def __init__(self, title, author):
- C. def __init__():
- D. __init__(self, title, author):

70) Which of the following statements is true?

- A. A class is blueprint for the object.
- B. You can only make a single object from the given class.
- C. Both statements are true.
- D. Neither statement is true.