

SOFTWARE DEVELOPMENT- PP 2 Mock test- 21/7/15

Test Content

Question 1 3 Points

What is used to define a block of code in Python?

- ☐ (A) None of the above
- ☒ (B) Indentation
- ☐ (C) Parenthesis
- ☐ (D) Curly braces

Question 2 3 Points

Match the following examples to the expected result

Prompts

15//2	7
15%2	1
15.0/2	7.5

Submitted Answers

Choose a match

- ☒ 8
- ☐ 1
- ☐ 7
- ☐ Error
- ☐ 7.5

Question 3

Which error does not cause a program error, but produces incorrect

- ☒ (A) syntax
- ☐ (B) runtime
- ☐ (C) semantic

Question 2

3 Points

Match the following examples to the expected result

Prompts

Submitted Answers

15//2

Choose a match

15%2

Choose a match

15.0/2

8

1

7

Error

7.5

Question 3

Which error does not cause a program error, but produces incorrect

A

 syntax

B

 runtime

C

 semantic

86 minutes remaining

Last so

Question 2

3 Points

Match the following examples to the expected result

Prompts

Submitted Answers

15//2

Choose a match

15%2

Choose a match

15.0/2

8

1

7

Error

7.5

Question 3

Which error does not cause a program error, but produces incorrect

A

 syntax

B

 runtime

C

 semantic

86 minutes remaining

Last so

Question 3

3 Points

Which error does not cause a program error, but produces incorrect results.

- ☐ (A) syntax
- ☐ (B) runtime
- ☒ (C) semantic

Question 4

3 Points

Which of the following is NOT a valid augmented assignment operator?

- ☒ (A) `x=`
- ☐ (B) `*=`
- ☐ (C) `-=`
- ☐ (D) `+=`

Question 5

3 Points

`x = 10`

Blank 1

Write the line of code that will multiply by five the value of `x` - ensure your answer uses an augmented assignment operator.

Blank 1 Add your answer `x*=5`

Question 6

3 Points

Which of the following will read a string into variable `name`?

- ☐ (A) `name = string("Enter name ")`
- ☐ (B) `name = string(input("Enter name "))`
- ☒ (C) `name = input("Enter name ")`
- ☐ (D) `String name = "Some Name"`

Question 7

3 Points

How would you access the substring 'end'?

```
s = 'Blended'
```

Blank 1

Blank 1 Add your answer `s[2:5]`

Question 8

3 Points

Which of the following is **NOT** a valid operation on a Python string variable?

- ☒ (A) Changing a string. E.g., `name[3] = 'a'` ✓
- ☐ (B) Multiplication of string. E.g., `'b' * 5`
- ☐ (C) Indexing a string to get a single letter of the string. E.g.,
`module = 'maths'`
`module[0]`
- ☐ (D) Addition of strings. E.g., `'Good' + ' Bye'`

Question 9

3 Points

```
found = True
```

Given the above, which of the following if statements includes a condition that evaluates to true?

- ☐ (A) `if found = True:`
- ☐ (B) All answers are correct
- ☐ (C) `if found == "True":`
- ☒ (D) `if found:` ✓

Question 10

4 Points

Which of the following expressions checks if a value assigned to the **number** variable falls in the range 1000 to 2000?

- ☐ (A) `number >= 1000 or number <= 2000`
- ☐ (B) `number => 1000 or number =< 2000`
- ☐ (C) `number => 1000 and number =< 2000`
- ☐ (D) `number > 1000 and number < 2000`
- ☐ (E) `number > 1000 or number < 2000`
- ☒ (F) `number >= 1000 and number <= 2000` ✓

Question 11

4 Points

To apply a discount on tickets, which of the following expressions checks whether a value for the **age** variable is either less than 16 or more than 60?

- ☐ A age <= 16 or age >= 60
- ☐ B age <= 16 and age >= 60
- ☐ C age <= 16 or age <= 60
- ☒ D age < 16 or age > 60
- ☐ E age < 16 and age > 60
- ☐ F age <= 16 and age >= 60

Question 12

3 Points

y = 4

x = 5

Which of the following is true?

- ☐ A not (x == 5)
- ☐ B not (y == 4)
- ☐ C y != 4
- ☒ D not (y == 5)

Question 13

3 Points

Which of the following will cause an error if x = 3, y = 10, and z = 0?

- ☒ A y / z
- ☐ B None will cause an error
- ☐ C x ** z
- ☐ D y + 12
- ☐ E y % x



Question 14

2 Points

The following fragment of code is written using a for loop.

```
sum = 0
for k in range(0, 16, 3):
    sum = sum + k
print(sum)
```

The following shows the above loop re-written as a while loop. Fill in the gaps.

```
sum = 0
```

Blank 1

```
while k < 16:
```

```
    sum = sum + k
```

Blank 2

```
print(sum)
```

Blank 1 Add your answer

k=0

Blank 2 Add your answer

k+=3



Question 15

3 Points

```
for i in range(10):
    print(i)
    if i == 2:
        # missing line
    print('Exited loop')
```

Which keyword could be entered on the missing line to make the program jump out of the loop early so that the following is displayed:

0

1

2

Exited loop

(A) stop

(B) exit

(C) continue

(D) break



Question 16

3 Points

```
colour = ["red", "green"]
fruits = ["apple", "banana", "grape"]

for x in colour:
    for y in fruits:
        print(x, y)
```

How would the above display when run?

☐ A red apple
green apple
red banana
green banana
red grape
green grape

☐ B red
green
apple
banana
grape

☒ C red apple
red banana
red grape
green apple
green banana
green grape

☐ D red green apple
red green banana
red green grape

Question 17

3 Points

s = "hello"

Which of these is correct?

☐ A upper(s) returns a new string with the first letter as a capital letter

☐ B upper(s) returns new string with all capital letters

☐ C s.upper() returns a new string with the first letter as a capital letter

☒ D s.upper() returns new string with all capital letters

Question 18

3 Points

Question - Which of the following returns a sequence 1, 2, 3, 4

- ☐ (A) range(1, 4)
- ☒ (B) range(1, 5) ✓
- ☐ (C) range(1, 2, 3, 4)
- ☐ (D) None of these answers.

Question 19

3 Points

Which range function call will produce the following ordered sequence:
28, 21, 14, 7

- ☐ (A) range(28, 7, 4)
- ☒ (B) range(28, 5, -7) ✓
- ☐ (C) range(28, 7, -7)
- ☐ (D) range(7, 28, 7)

Question 20

3 Points

Which is **true**?

- ☐ (A) An argument is the variable listed inside the parentheses in a function definition
- ☐ (B) A parameter is a value passed to a function when the function is called.
- ☒ (C) An argument is a value passed to a function when the function is called. ✓
- ☐ (D) A parameter is always a global variable. parameter is always a local variable

Question 21

3 Points

What is the default return value for a user-defined function that does not return any value explicitly?

- ☐ (A) An empty string
- ☐ (B) null
- ☐ (C) 0
- ☒ (D) None

Question 22

3

Consider a function named **sum**. It accepts two integer arguments and returns their sum as an integer. Fill in the blanks.

```
def sum(Blank 1):
```

```
    ans = x + y
```

```
    Blank 2
```

```
result = Blank 3(4,5)
```

Blank 1 Add your answer **x,y**

Blank 2 Add your answer **return ans**

Blank 3 Add your answer **sum**

Question 23

Which of the following function headers is valid?

- ☐ (A) All are valid
- ☐ (B) All are invalid
- ☐ (C) `def calculate(a = 2, b, c = 5):`
- ☐ (D) `def calculate(a = 2, b):`
- ☒ (E) `def calculate(a, b = 3, c = 5):`

Question 25

3 Points

Match the code to the expected result

Prompts

```
numbers = [1, 2, 3, 4, 5, 6, 7]
numbers.append(10)
```

```
numbers = [1, 2, 3, 4, 5, 6, 7]
numbers.insert(0,10)
```

Submitted Answers

Choose a match

☒ [10, 1, 2, 3, 4, 5, 6, 7]

☐ [1, 2, 3, 4, 5, 6, 7, 10]

☐ [0, 10, 1, 2, 3, 4, 5, 6, 7]

☐ [1, 2, 3, 4, 5, 6, 7, 0, 10]

Question 26

```
month = [['Jan', 'Feb', 'March', 'April', 'May', 'June'],
```

84 minutes remaining

☐ A Salary: 16000
Salary: 16000

☐ B Salary: 16000
Salary: 15000

☐ C Salary: 15000
Salary: 15000

☐ D Salary: 15000
Salary: 16000

Question 25

3 Points

Match the code to the expected result

Prompts

```
numbers = [1, 2, 3, 4, 5, 6, 7]
numbers.append(10)
```

```
numbers = [1, 2, 3, 4, 5, 6, 7]
numbers.insert(0,10)
```

Submitted Answers

Choose a match

Choose a match

☒ [10, 1, 2, 3, 4, 5, 6, 7]

☐ [1, 2, 3, 4, 5, 6, 7, 10]

☐ [0, 10, 1, 2, 3, 4, 5, 6, 7]

☐ [1, 2, 3, 4, 5, 6, 7, 0, 10]

Question 26

```
month = [['Jan', 'Feb', 'March', 'April', 'May', 'June'],
```

84 minutes remaining

Question 26

```
month = [['Jan', 'Feb', 'March'],  
         ['April', 'May', 'June'],  
         ['July', 'August', 'Sept'],  
         ['Oct', 'Nov', 'Dec']]
```

How would you use indexing to access the value August?

Blank 1

Blank 1

Add your answer

month[2][1]

Question 27

6 Points

Match the following definitions to the correct example.

Prompts

Defines a TUPLE?

Defines a DICTIONARY?

Defines a LIST?

Submitted Answers

Choose a match

☒ ["name": "grape", "color": "green"]

☐ {"grape", "apple", "orange"}

☐ {"name": "grape", "color": "green"}

☒ ("grape", "apple", "orange")

☐ ["grape", "apple", "orange"]

☐ ("name": "grape", "color": "green")

Question 28

Match the code to the expected results

Prompts

```
pets = {"cat":15, "dog":6, "hamster":13}  
print("dog" in pets)
```


Question 27

6 Points

Match the following definitions to the correct example.

Prompts

Defines a TUPLE?

Defines a DICTIONARY?

Defines a LIST?

Submitted Answers

Choose a match

Choose a match

☒ ["name": "grape", "color": "green"]

☐ {"grape", "apple", "orange"}

☒ {"name": "grape", "color": "green"}

☐ ("grape", "apple", "orange")

☐ ["grape", "apple", "orange"]

☐ ("name": "grape", "color": "green")

Question 28

Match the code to the expected results

Prompts

```
pets = {"cat":15, "dog":6, "hamster":13}
print("dog" in pets)
```

84 minutes remaining

Last saved 11:11:54

Match the following definitions to the correct example.

Prompts

Defines a TUPLE?

Defines a DICTIONARY?

Defines a LIST?

Submitted Answers

Choose a match

Choose a match

Choose a match

☒ ["name": "grape", "color": "green"]

☐ {"grape", "apple", "orange"}

☐ {"name": "grape", "color": "green"}

☐ ("grape", "apple", "orange")

☒ ["grape", "apple", "orange"]

☐ ("name": "grape", "color": "green")

Question 28

Match the code to the expected results

Prompts

```
pets = {"cat":15, "dog":6, "hamster":13}
print("dog" in pets)
```

```
pets = {"cat":15, "dog":8, "hamster":13}
print(13 in pets)
```

```
pets = {"cat":15, "dog":8, "hamster":13}
print(pets["dog"])
```

84 minutes remaining

Last saved 11:11:54

Question 28

Match the code to the expected results

Prompts

```
pets = {"cat":15, "dog":6, "hamster":13}  
print("dog" in pets)
```

```
pets = {"cat":15, "dog":8, "hamster":13}  
print(13 in pets)
```

```
pets = {"cat":15, "dog":8, "hamster":13}  
print(pets["dog"])
```

☒ 8

☐ True

☐ False

☐ dog : 8

☐ Error

Question 29

Which is true?

- ☐ A Tuples are mutable while lists are immutable
- ☐ B Both tuples and lists are mutable
- ☐ C Both tuples and lists are immutable
- ☒ D Tuples are immutable while lists are mutable ✓

D Tuples are immutable while lists are mutable

Question 30

Match the code to the expected result

Prompts

```
numbers = [1, 2, 3, 4, 5, 6, 7]  
numbers.pop(2)
```

```
numbers = [1, 2, 3, 4, 5, 6, 7]  
numbers.pop()
```

☒ [1, 2, 4, 5, 6, 7]

☐ [2, 3, 4, 5, 6, 7]

☐ [1, 2, 3, 4, 5, 6]

☐ [1, 2, 3, 4, 5, 6, 7]

☐ [1, 3, 4, 5, 6, 7]

Question 31

Which of the following are true of Python Lists?

- ☐ (A) All answers are true
- ☐ (B) A list may contain any type of element except another list
- ☐ (C) All elements in a list must be of the same type
- ☒ (D) An element may appear in a list more than once ✓

Question 32

Which of the following are true of Python Dictionaries?

- ☐ (A) Dictionaries are immutable
- ☐ (B) All answers are true
- ☒ (C) Items are accessed by their key ✓
- ☐ (D) Items are accessed by their position in a dictionary