**Sections 6.2 Defining a Function**

6.1 If a function does not return a value, by default, it returns \_\_\_\_\_\_\_\_\_\_\_.

A. None

B. int

C. double

D. public

E. null

A

Answer analysis:A

6.2 The header of a function consists of \_\_\_\_\_\_\_\_\_\_\_\_.

A. function name

B. function name and parameter list

C. parameter list

B

Answer analysis:B

6.3 A function \_\_\_\_\_\_\_\_\_.

A. must have at least one parameter

B. may have no parameters

C. must always have a return statement to return a value

D. must always have a return statement to return multiple values

B

Answer analysis:B

**Sections 6.3 Calling a Function**

6.4 Arguments to functions always appear within \_\_\_\_\_\_\_\_\_\_.

A. brackets

B. parentheses

C. curly braces

D. quotation marks

B

Answer analysis:B

6.5 Does the function call in the following function cause syntax errors?

import math

def main():

math.sin(math.pi)

main()

A. Yes

B. No

B

Answer analysis:B

6.6 Each time a function is invoked, the system stores parameters and local variables in an area of memory, known as \_\_\_\_\_\_\_, which stores elements in last-in first-out fashion.

A. a heap

B. storage area

C. a stack

D. an array

C

Answer analysis:C

**Sections 6.4 Functions With/Without Return Values**

6.7 Which of the following should be defined as a None function?

A. Write a function that prints integers from 1 to 100.

B. Write a function that returns a random integer from 1 to 100.

C. Write a function that checks whether a number is from 1 to 100.

D. Write a function that converts an uppercase letter to lowercase.

A

Answer analysis:A

6.8 A function with no return statement returns \_\_\_\_\_\_.

A. void

B. nothing

C. 0

D. None

D

Answer analysis:D

6.9 Consider the following incomplete code:

def f(number):

# Missing function body

print(f(5))

The missing function body should be \_\_\_\_\_\_\_\_.

A. return "number"

B. print(number)

C. print("number")

D. return number

D

Answer analysis:D

**Sections 6.5 Positional and Keyword Arguments**

6.10 Given the following function header:

def f(p1, p2, p3, p4)

Which of the following is correct to invoke it?

A. f(1, 2, 3, 4)

B. f(p1 = 1, 2, 3, 4)

C. f(p1 = 1, p2 = 2, p3 = 3, 4)

D. f(p1 = 1, p2 = 2, p3 = 3, p4 = 4)

E. f(1, 2, 3, p4 = 4)

ADE

Answer analysis:ADE

6.11 Given the following function

def nPrint(message, n):

while n > 0:

print(message)

n -= 1

What will be displayed by the call nPrint('a', 4)?

A. aaaaa

B. aaaa

C. aaa

D. invalid call

E. infinite loop

B

Answer analysis:B

6.12 Given the following function

def nPrint(message, n):

while n > 0:

print(message)

n -= 1

What will be displayed by the call nPrint('a', 4)?

A. aaaaa

B. aaaa

C. aaa

D. invalid call

E. infinite loop

E

Answer analysis:E

6.13 Given the following function

def nPrint(message, n):

while n > 0:

print(message)

n -= 1

What is k after invoking nPrint("A message", k)?

k = 2

nPrint("A message", k)

A. 0

B. 1

C. 2

D. 3

C

Answer analysis:C

6.14 Given the following function

def nPrint(message, n):

while n > 0:

print(message)

n -= 1

What is k after invoking nPrint("A message", k)?

k = 2

nPrint(n = k, message = "A message")

A. 0

B. 1

C. 2

D. 3

C

Answer analysis:C

**Sections 6.6 Passing Parameters by Values**

6.15 When you invoke a function with a parameter, the value of the argument is passed to the parameter. This is referred to as \_\_\_\_\_\_\_\_\_.

A. function invocation

B. pass by value

C. pass by reference

D. pass by name

B

Answer analysis:B

**Section 6.9 The Scope of Variables**

6.16 A variable defined inside a function is referred to as \_\_\_\_\_\_\_\_\_\_.

A. a global variable

B. a function variable

C. a block variable

D. a local variable

D

Answer analysis:D

6.17 A variable defined outside a function is referred to as \_\_\_\_\_\_\_\_\_\_.

A. a global variable

B. a function variable

C. a block variable

D. a local variable

A

Answer analysis:A

6.18 Whenever possible, you should avoid using \_\_\_\_\_\_\_\_\_\_.

A. global variables

B. function parameters

C. global constants

D. local variables

A

Answer analysis:A

6.19 What will be displayed by the following code?

x = 1

def f1():

y = x + 2

print(y)

f1()

print(x)

A. 1 3

B. 3 1

C. The program has a runtime error because x is not defined.

D. 1 1

E. 3 3

B

Answer analysis:B

6.20 What will be displayed by the following code?

x = 1

def f1():

x = 3

print(x)

f1()

print(x)

A. 1 3

B. 3 1

C. The program has a runtime error because x is not defined.

D. 1 1

E. 3 3

B

Answer analysis:B

6.21 What will be displayed by the following code?

x = 1

def f1():

x = x + 2

print(x)

f1()

print(x)

A. 1 3

B. 3 1

C. The program has a runtime error because x is not defined.

D. 1 1

E. 3 3

C

Answer analysis:C

6.22 What will be displayed by the following code?

x = 1

def f1():

global x

x = x + 2

print(x)

f1()

print(x)

A. 1 3

B. 3 1

C. The program has a runtime error because x is not defined.

D. 1 1

E. 3 3

E

Answer analysis:E

**Section 6.10 Default Arguments**

6.23 What will be displayed by the following code?

def f1(x = 1, y = 2):

x = x + y

y += 1

print(x, y)

f1()

A. 1 3

B. 3 1

C. The program has a runtime error because x and y are not defined.

D. 1 1

E. 3 3

E

Answer analysis:E

6.24 What will be displayed by the following code?

def f1(x = 1, y = 2):

x = x + y

y += 1

print(x, y)

f1(2, 1)

A. 1 3

B. 2 3

C. The program has a runtime error because x and y are not defined.

D. 3 2

E. 3 3

D

Answer analysis:D

6.25 What will be displayed by the following code?

def f1(x = 1, y = 2):

x = x + y

y += 1

print(x, y)

f1(y = 2, x = 1)

A. 1 3

B. 2 3

C. The program has a runtime error because x and y are not defined.

D. 3 2

E. 3 3

E

Answer analysis:E

6.26 Which of the following function headers 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):

C

Answer analysis:C

**Section 6.11 Returning Multiple Values**

6.27 What will be displayed by the following code?

def f1(x = 1, y = 2):

return x + y, x - y

x, y = f1(y = 2, x = 1)

print(x, y)

A. 1 3

B. 3 1

C. The program has a runtime error because the function returns the multiple values

D. 3 -1

E. -1 3

D

Answer analysis:D

**Section 6.13 Function Abstraction and Stepwise Refinement**

6.28 \_\_\_\_\_\_\_\_\_\_ is to implement one function in the structure chart at a time from the top to the bottom.

A. Bottom-up approach

B. Top-down approach

C. Bottom-up and top-down approach

D. Stepwise refinement

B

Answer analysis:B

6.29 \_\_\_\_\_\_\_\_\_\_ is a simple but incomplete version of a function.

A. A stub

B. A function

C. A function developed using botton-up approach

D. A function developed using top-down approach

A

Answer analysis:A