Carnegie Mellon-Blackboard

LMS Evaluation





Examination Review Test Submission: Final Examination

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User	Rushabh Shah
Course	S17-Data Focused Python
Test	Final Examination
Started	5/9/17 6:05 PM
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Attempt Score	95 out of 100 points
Time Elapsed	45 minutes out of 1 hour and 15 minutes
Results Displaye	d All Answers, Submitted Answers, Correct Answers

Question 1 1.25 out of 1.25 points

True/False: A flowchart is a tool that programmers use to design programs.

Selected Answer: 🚫 True

Answers: True

False

Question 2 1.25 out of 1.25 points

> Assume that the customer file references a file object, and the file was opened using the 'w' mode specifier. How would you write the string 'Mary Smith' to the file?

Selected Answer: 🕜 A. customer.write('Mary Smith')

Answers:

A. customer.write('Mary Smith')

B. customer.write('w', 'Mary Smith')

C customer_file.write('Mary Smith')

D. customer.input('Mary Smith')

Question 3 1.25 out of 1.25 points

What would be the value of the variable list2 after the execution of the following code?

list1 = [1, 2, 3]

list2 = list1list1 = [4, 5, 6]

Selected Answer: C. [1, 2, 3]

Answers:

A invalid code

B. [1, 2, 3, 4, 5, 6]

⊘ C. [1, 2, 3]

D. [4, 5, 6]

Question 4

1.25 out of 1.25 points

True/False: A list cannot be passed as an argument to a function.

Selected Answer: 🕜 False

Answers:

True

False

Question 5

1.25 out of 1.25 points

True/False: Functions can be called from statements in the body of a loop, and loops can be called from the body of a function.

Selected Answer: 🚫 False

Answers:

True

False

Question 6

1.25 out of 1.25 points

True/False: Comments in Python begin with the # character.

Selected Answer: 🕜 True

Answers:

True

False

Question 7

1.25 out of 1.25 points

What is the widget that can take typed input from the end user?

Selected Answer: O. entry

Answers:

A frame

B. scale

🕜 C. entry

D. label

Question 8 1.25 out of 1.25 points

What does this code do?

```
import requests
from bs4 import BeautifulSoup
def main():
   html=requests.get("http://www.bigrigg.net").text
   soup = BeautifulSoup(html, 'html.parser')
   print(soup.prettify())
```

Selected C.

Answer:

Web scrapes the website www.bigrigg.net, stores the text of the requests object in a String, uses BeautifulSoup (along with a parser) to create a soup object, and prints the source code scraped in a readable format to the monitor.

Answers: A.

Web scrapes the text found on the website www.bigrigg.net, stores the requests object and uses BeautifulSoup to print the source code scraped in a readable format to the monitor.

B.

Web scrapes the website www.bigrigg.net, stores the requests object and uses BeautifulSoup to print the source code scraped in a readable format to the monitor.



Web scrapes the website www.bigrigg.net, stores the text of the requests object in a String, uses BeautifulSoup (along with a parser) to create a soup object, and prints the source code scraped in a readable format to the monitor.

1.25 out of 1.25 points

D. Invalid code

Question 9

In the following code, what object type is the programmer creating based on the csv file?

```
import pandas as pd
import numpy as np
df = pd.read csv("311 Service Requests from 2010 to Present.csv", low mem
orv=False)
```

Selected Answer: 👩 A. DataFrame

Answers:

👩 A. DataFrame

B. Index

C. DataSet

D. Series

Question 10 1.25 out of 1.25 points

True/False: An expression of the form string[i] = 'i' is a valid expression.

Selected Answer: 🕜 False

True



Question 11 1.25 out of 1.25 points

True/False: An object is a stand-alone program but is used by programs that need its service.

Selected Answer: 🎸 False

Answers: True

False

Question 12 1.25 out of 1.25 points

Given a string s = "WELCOME", which of the following code is incorrect?

Selected Answer: OB. s[1] = 'r'

Answers: A print(s.strip())

B. s[1] = 'r'

C. print(s[0])

D. print(s.lower())

Question 13 1.25 out of 1.25 points

What will be assigned to the string variable pattern after the execution of the following code?

i = 3 pattern = 'z' * (5*i)

Answers: A. 'zzzzz'

🕜 B. `zzzzzzzzzzzzzz'

C. The right side of the '*' must be an integer.

D Error: '*' operator used incorrectly

Question 14 1.25 out of 1.25 points

What would be the value of the variable list after the execution of the following code?

list = [1, 2] list = list * 3

Selected Answer: OB. [1, 2, 1, 2, 1, 2]

Answers: A. [[1, 2], [1, 2], [1, 2]]

```
✓ B. [1, 2, 1, 2, 1, 2]
C. [1, 2] * 3
D. [3, 6]
```

Question 15 0 out of 1.25 points

You use an internet connection to download Python libraries or packages.

Selected Answer: S False
Answers: True

False

Question 16 0 out of 1.25 points

Examine the following code. In the regular expression, what does the period (.) do?

```
import urllib.request
import re

def main():
    resp = urllib.request.urlopen(urllib.request.Request(url))
    allcontent = resp.read()
    paragraphs = re.findall(r'(.*?)',str(allcontent))
```

Selected Answer: 👩 C. Matches any combination of characters except newline.

Answers: Answers: Answers any single character except newline.

B. Matches for newline.

C. Matches any combination of characters except newline.

D. Invalid - a period is not valid.

Question 17 1.25 out of 1.25 points

You install BeautifulSoup by via: install pip

Selected Answer: False
Answers: True

False

Question 18 1.25 out of 1.25 points

Which of the following are valid import statements? (pick the best one). Pick the best, most complete/comprehensive answer.

Selected Answer:

import my_module from my_package import myFunction

Answers: import my_module

import from my_package import myFunction

import my_package.myFunction

Α.

import my_module from my_package import myFunction

B. import my_package.myFunction

import my_module import my_package.myFunction

C.

from my_package import myFunction import my_package.myFunction

D.

Question 19 1.25 out of 1.25 points

What is a package?

Selected Answer: 👩 D. a collection of modules

Answers: A a collection of functions

B. a collection of libraries

C. a collection of classes

D. a collection of modules

Question 20 1.25 out of 1.25 points

What will be assigned to s_string after the execution of the following code?

```
special = '1357 Country Ln.'
s_string = special[ :4]
```

Selected Answer: B. '1357'

Answers: A Invalid code

⊘ B. '1357'

C. '7'

D. '1357 '

Question 21 1.25 out of 1.25 points

True/False: If a file with the specified name already exists when the file is opened, and the file is opened in 'w' mode, then an alert will appear on the screen.

Selected Answer: False
Answers: True

False

Question 22 1.25 out of 1.25 points

Which of the following is the correct if clause to use to determine whether choice is other than 10?

Selected Answer: \bigcirc D. if choice != 10:

Answers: A if choice <> 10

B. if choice <> 10:

C if choice != 10

On if choice != 10:

Question 23 1.25 out of 1.25 points

What would be the result of the following code?

```
ages = {'Aaron' : 6, 'Kelly' : 3, 'Abigail' : 1}
value = ages['Brianna']
```

Selected Answer: OD. KeyError

Answers:

A. false

B. -1

C. 0

🕜 D. KeyError

Question 24 1.25 out of 1.25 points

What is an external library potential containing?

Selected Answer: On a collection of packages and modules

Answers: A modules

B. function definitions

C. packages

D. a collection of packages and modules

Question 25 1.25 out of 1.25 points

What is missing from the following code in order to make it work?

```
print('Available cars: ')
print('1.BMW')
print('2.Ford')
print('3.Tesla')
print('4.Chrysler')
print('5.Toyota')
x = input('Select your car: ')
if x == 1:
     print('You have selected BMW.')
elif x == 2:
    print('You have selected Ford.')
elif x == 3:
     print('You have selected Tesla.')
elif x == 4:
     print('You have selected Chrysler.')
elif x == 5:
     print('You have selected Toyota.')
else:
     print ('Invalid selection.')
Selected Answer: 👩 A. int() function
Answers:
               A. int() function
               B. type() function
               C float() function
               D. nothing
```

Question 26 1.25 out of 1.25 points

Consider the following function - what is fib (n-1)?

```
def fib(n):
    if n == 0 or n==1:
        return 1
    else:
        return n * fib(n-1)
```

Selected Answer: o B. a recursive function call

Answers: A a loop condition

⊗ B. a recursive function call

C. a base case

D. none of the answers apply

Question 27 1.25 out of 1.25 points

What will be assigned to the string variable even after the execution of the following code?

```
special = '0123456789'
even = special[0:10:2]
```

Selected Answer: C. '02468'

Answers: A Invalid code

B. '13579'

⊘ C. '02468'

D. '2468'

Question 28 1.25 out of 1.25 points

True/False: Both of the following for clauses would generate the same number of loop iterations.

for num in range(4):
for num in range(1,5):

Selected Answer: True
Answers: True

False

Question 29 1.25 out of 1.25 points

True/False: A value-returning function is like a simple function except that when it finishes it returns a value back to the called part of the program.

Selected Answer: 🤡 True

Answers: 🚫 True

False

Question 30 1.25 out of 1.25 points

What does pip do?

Selected Selected

Answer: a package management system that installs and manages Python packages

Answers: A. a software system that installs Python

👩 B.

a package management system that installs and manages Python packages

C. a package management system that installs Python packages

D. a package management system that manages Python packages

Question 31 1.25 out of 1.25 points

What is the value of the variable string after the execution of the following code?

string = 'Hello'
string += ' world'

Selected Answer: OB. 'Hello world'

Answers:

A. 'Hello'

🕜 B. 'Hello world'

C Invalid code

D. ' world'

Question 32

1.25 out of 1.25 points

What are the values that the variable num contains through the iterations of the following for loop?

for num in range (2, 9, 2):

Selected Answer: O. 2, 4, 6, 8

Answers:

A. 2, 3, 4, 5, 6, 7, 8, 9

B. 1, 3, 5, 7, 9

C. 2, 5, 8

O. 2, 4, 6, 8

Question 33

1.25 out of 1.25 points

True/False: Expressions that are tested by the if statement are called Boolean expressions.

Selected Answer: 🚫 True

Answers:

True

False

Question 34

1.25 out of 1.25 points

True/False: Boolean functions are useful for simplifying complex conditions that are tested in decision and repetition structures.

Selected Answer: 🕜 True

Answers:

True

False

Question 35

1.25 out of 1.25 points

After the execution of the following statement, the variable total will reference the value

total = int(68.587)

Selected Answer: OB. 68

A. 69

Answers:

🕜 B. 68

- C. 68.55
- D. 68.54

Question 36 1.25 out of 1.25 points

> True/False: Computer programs typically perform three steps: Input is received, some process is performed on the input, and output is produced.

Selected Answer: 🕜 True

Answers:

True

False

Question 37 1.25 out of 1.25 points

What is the result of the following Boolean expression, if x equals 5, y equals 3, and z equals 8?

not(x < y or z > x) and y < z

Selected Answer: 👩 A. false

Answers: 👩 A. false

B. 8

C. 5

D. true

Question 38 1.25 out of 1.25 points

Which list will be referenced by the variable list strip after the execution of the following code?

```
list string = '03/07/2008'
list strip = list string.split('/')
```

Selected Answer: A B. ['03', '07', '2008']

Answers:

A. ['3', '/', '7', '/', '2008']

B. ['03', '07', '2008']

C. ['3', '7', '2008']

D ['03', '/', '07', '/', '2008']

Question 39 1.25 out of 1.25 points

In the following line of code, what is the name of the subclass?

class Rose(Flower):

Selected Answer:

🕜 A. Rose

Answers:

- 🕜 A. Rose
- B. incorrect code
- C. either
- D. Flower

Question 40 1.25 out of 1.25 points

You would install a package called NLTK by typing: pip nltk

Selected Answer: 🚫 False

True Answers:

False

Question 41 1.25 out of 1.25 points

What is the output of below program?

```
def say(message, times = 1):
    print(message * times)
say('Hello')
say('World', 5)
```

Selected Answer:

Hello

👩 A. WorldWorldWorldWorld

Answers:

👩 A. WorldWorldWorldWorld

Hello

B World, World, World, World

Hello

C. d

Hello

D. World 5

Question 42 1.25 out of 1.25 points

> Which of the following is the correct syntax for defining a class dining which inherits from class furniture?

Selected Answer: OD. class dining(furniture):

Answers: A class furniture (dining):

R class furniture(dining)

C class dining(furniture)

```
⊘ D. class dining(furniture):
```

Question 43 1.25 out of 1.25 points

> True/False: According to the behavior of integer division, when an integer is divided by an integer, the result will be a float.

Selected Answer: 🚫 False

Answers: True

False

Question 44 1.25 out of 1.25 points

> True/False: Each subclass has a method named init that overrides the superclass's init .

Selected Answer: 🚫 True

True Answers:

False

Question 45 1.25 out of 1.25 points

What must be true for an end user's shipping cost to be \$8.00?

```
total = int(input('What is the total amount for your online shopping?'))
country = input('Shipping within the US or Canada?')
if country == "US":
     if total <= 50:
        print "Shipping Costs $6.00"
     elif total <= 100:</pre>
            print "Shipping Costs $9.00"
     elif total <= 150:
             print "Shipping Costs $12.00"
     else:
        print "FREE"
if country == "Canada":
     if total <= 50:
        print "Shipping Costs $8.00"
     elif total <= 100:</pre>
         print "Shipping Costs $12.00"
     elif total <= 150:
         print "Shipping Costs $15.00"
     else:
         print "FREE"
```

Selected Answer: 👩 B. The country is Canada and the total is less than or equal to 50.

A. The country is Canada and the total is greater than or equal to 50. Answers:

B. The country is Canada and the total is less than or equal to 50.

C. The country is US and the total is less than or equal to 50.

D. The country is US and the total is greater than or equal to 50.

Question 46 1.25 out of 1.25 points

pip automatically comes with the current version of Python.

Selected Answer: 🚫 True

Answers:

True

False

Question 47

1.25 out of 1.25 points

True/False: A superclass inherits attributes and methods from its subclasses without any of them having to be rewritten.

Selected Answer: 🚫 False

Answers:

True

False

Question 48

1.25 out of 1.25 points

What does the following statement mean?

num1, num2 = get num()

Selected

🕜 B.

Answer:

The function get num() is expected to return a value each for num1 and num2.

Answers:

A. Statement will cause a run-time error.

🕜 B.

The function get num() is expected to return a value each for num1 and num2.

C. Statement will cause a syntax error.

The function get num() is expected to return a value and assign it

to num1 and num2.

Question 49

1.25 out of 1.25 points

You created the following dictionary relationships = {'Jimmy':'brother'}. You then executed the following code, and received a KeyError exception. What is the reason for the exception?

relationships['jimmy']

Selected

🕜 C.

Answer:

String comparisons are case sensitive so 'jimmy' does not equal 'Jimmy'.

Answers:

A. You used the wrong syntax for creating the dictionary.

B. There is a bug in Python.

C.

String comparisons are case sensitive so 'jimmy' does not equal 'Jimmy'.

D You should have used the code relationships['brother'].

Question 50

1.25 out of 1.25 points

True/False: If the + operator is used on strings, it produces a string that is the combination of the two strings used as its operands.

Selected Answer: 🚫 True

Answers:

True

False

Question 51

0 out of 1.25 points

What would be the value of the variable list2 after the execution of the following code?

Selected Answer: p. [1, 2, 3]

Answers:

Question 52

1.25 out of 1.25 points

What would be the value of the variable list after the execution of the following code?

list =
$$[1, 2, 3, 4]$$

list $[3] = 10$

Answers:

Question 53

1.25 out of 1.25 points

What is this code missing in order for it to be complete?

```
import sqlite3
connection = sqlite3.connect("roster.db")
cursor = connection.cursor()
sql command = """INSERT INTO employee (staff_number, fname, lname,
gender, birth date)
    VALUES (NULL, "William", "Shakespeare", "m", "1961-10-25");"""
cursor.execute(sql command)
Selected Answer: OB Commit and close
```

Answers: A cursor close

B. commit and close

C. commit

D. close

Question 54 1.25 out of 1.25 points

> True/False: An exception handler is a piece of code that is written using the try/except statement.

Selected Answer: 🕜 True

Answers: True

False

Question 55 1.25 out of 1.25 points

What are the values that the variable num contains through the iterations of the following for loop?

for num in range (4):

Selected Answer: O. 0, 1, 2, 3

д 1, 2, 3 Answers:

B 0, 1, 2, 3, 4

C. 1, 2, 3, 4

O, 1, 2, 3

Question 56 1.25 out of 1.25 points

True/False: Closing a file disconnects the communication between the file and the program.

Selected Answer: 🕜 True

Answers: True

False

Question 57 1.25 out of 1.25 points

Each package directory must have an __init__.py file.

Selected Answer: 🕜 True

Answers:

True

False

Question 58 1.25 out of 1.25 points

What will be the values printed to the screen after the code below executes?

Selected Answer: 👩 A. d, c, b, a

Answers:

🕜 A. d, c, b, а

B 1, 2, 3, 4

C. 4, 3, 2, 1

D. a, b, c, d

Question 59 1.25 out of 1.25 points

> What is the name of the file that determines which variables, functions, and classes are used by default in a package?

Selected Answer: O. __init__.py

Answers:

A. __config__.py

B. __init.py

C. __config.py

O. __init__.py

Question 60 1.25 out of 1.25 points

In the following pseudocode, what is "myfunctiongoeshere" stand for?

foo = Button(root,text="Login",command= myfunctiongoeshere)

Selected Answer: o B. callback function

Answers: A void function

- o B. callback function
- C. value returning function
- D. return function

Question 61 1.25 out of 1.25 points

What will the following code print out to the monitor?

```
class Mammal:
    def __init__(self, species):
        self. species = species
    def show species(self):
        print('I am a', self. species)
    def make sound(self):
        print('Grrrrr')
class Cat(Mammal):
    def init (self):
        Mammal. init (self, 'Cat')
    def make sound(self):
        print('Meow')
def main():
    myanimal = Cat()
    myanimal.make sound()
    myanimal.show species()
main()
Selected Answer:
                    Meow
                    I am a Cat
               🕜 B.
Answers:
               A. Nothing - an error will occur
                    Meow
                    I am a Cat
               🕜 B.
                  Grrrrr
               C. I am a Cat
                  Meow
                  I am a Mammal
               D.
```

Question 62 1.25 out of 1.25 points

> True/False: An action in a single alternative decision structure is performed only when the condition is true.

Selected Answer: 🕜 True True Answers: False

Question 63 1.25 out of 1.25 points

True/False: A root widget's destroy method can be used as a callback function for a quit button.

Selected Answer: 🚫 True True Answers: False

Question 64 1.25 out of 1.25 points

When will the following loop terminate?

while keep on going != 999:

Selected Answer: 👩 A. When keep_on_going refers to a value equal to 999

Answers: A. When keep_on_going refers to a value equal to 999

B. When keep_on_going refers to a value not equal to 999

C. When keep_on_going refers to a value less than 999

D. When keep_on_going refers to a value greater than 999

Question 65 1.25 out of 1.25 points

What is the output of the below program?

```
def printMax(a, b):
    if a > b:
        print(a, 'is maximum')
    elif a == b:
        print(a, 'is equal to', b)
    else:
        print(b, 'is maximum')
printMax(3, 4)
```

Selected Answer: 👩 A. 4 is maximum

Answers: 👩 A. 4 is maximum

B. 4

C. a is maximum

D. none of the mentioned options are correct

Question 66 0 out of 1.25 points

```
What is the output of the following?
```

```
x = "abcdef"
i = "a"
while i in x:
    print('i', end = " ")
```

Selected Answer:

infinite output of:

aaaaaa



Answers:

A. abcdef

infinite output of:

🕜 B. İİİİİİİ

infinite output of:

aaaaaa

C.

D. no output

Question 67 1.25 out of 1.25 points

What is the output of the following print statement?

print("The path is D:\\sample\\test.")

Selected Answer: C. The path is D:\sample\test.

A. 'The path is D:\\sample\\test.' Answers:

B. The path is D:\\sample\\test.

C. The path is D:\sample\test.

D. The path is D\\sample\\test.

Question 68 1.25 out of 1.25 points

True/False: A subclass may not override any method other than the __init __method.

Selected Answer: 🚫 False

Answers: True

False

Question 69 1.25 out of 1.25 points

> True/False: A mutator method has no control over the way that a class's data attributes are modified.

Selected Answer: 🚫 False Answers:

True

False

Question 70 1.25 out of 1.25 points

What is the output of the following code?

```
def main():
    value = 99
    print('The value is', value)
    change me(value)
    print('Back in main the value is', value)
def change me(arg):
    print('I am changing the value.')
    arg = 0
    print('Now the value is', arg)
# Call the main function.
main()
```

Selected Answer: The value is 99

> I am changing the value. Now the value is 0

Α. Back in main the value is 99

Answers:

The value is 99

I am changing the value.

Now the value is 0

👩 A. Back in main the value is 99

The value is 99

I am changing the value.

Now the value is 0

B Back in main the value is 0

The value is 99

I am changing the value.

Now the value is 99

C. Back in main the value is 99

D Invalid code

Question 71 1.25 out of 1.25 points

Given the following function definition, what would the statement print (hello (5)) display?

```
def hello(num):
   return num + 2 * 10
```

Selected Answer: OD. 25

Answers: A Statement will cause a syntax error.

B. 70

C. Statement will cause a run-time error.

🕜 D. 25

Question 72 1.25 out of 1.25 points

What is the result of the following statement?

```
x = random.randint(5, 15) * 2
```

Selected Answer:

C. A random integer from 5 to 15, multiplied by 2, assigned to the variable x

Answers:

A random integer from 5 to 15, selected in 2 steps, assigned to the variable x

 $_{
m B.}$ A random integer from 5 to 15 assigned to the variable $_{
m X.}$

 $_{ extsf{C}_{ extsf{.}}}$ C. A random integer from 5 to 15, multiplied by 2, assigned to the variable $_{ extsf{x}}$

A random integer from 5 to 15, raised to the power of 2, assigned to the variable x

Question 73 1.25 out of 1.25 points

What is the following code checking for?

```
import random
i = random.randrange(0, 8)
j = random.randrange(-1, 6)
print(i, j)
some = [3, 10, 0, 8, 18]
     temp = some[j] / i
except ZeroDivisionError:
     print("Uh oh!")
```

Selected

% B.

Answer: it is performing exception handling by checking if the code is trying to divide by 0

Answers:

it is performing exception handling by checking if the code is trying to divide negative numbers

it is performing exception handling by checking if the code is trying to divide by 0

it is performing an if else statement by checking if the code is trying to divide by 0

D.

it is performing an if else statement by checking if the code is trying to divide negative numbers

Question 74 1.25 out of 1.25 points

> True/False: A problem can be solved with recursion if it can be broken into smaller problems that are identical in structure to the overall problem.

Selected Answer: 🚫 True

Answers:

True False

Question 75 1.25 out of 1.25 points

True/False: Different functions can have local variables with the same names.

Selected Answer: 🚫 True

Answers: True

False

Question 76 1.25 out of 1.25 points

How many times will "python is fun!" be printed?

for i in range(1, 5): print("python is fun!")

Selected Answer: 👩 C. 4

Answers: A. 3

B. 1

🕜 C. 4

D. 5

Question 77 1.25 out of 1.25 points

What is the value of the variable string after the execution of the following code?

string = 'abcd' string = string.upper()

Selected Answer: 👩 A. 'ABCD'

Answers: 🕜 A. 'ABCD'

B. 'abcd'

C. 'Abcd'

D. Invalid code

Question 78 1.25 out of 1.25 points

> True/False: If a whole paragraph is included in a single string, the <code>split()</code> method can be used to obtain a list of the sentences included in the paragraph.

Selected Answer: 🚫 True

Answers: True

False

Question 79 1.25 out of 1.25 points

What will be the output?

```
d = {"john":40, "peter":45}
```

"john" in d

Selected Answer: 👩 D. True

Answers:

A. False

B. None

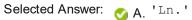
C. Error

O. True

Question 80 1.25 out of 1.25 points

What will be assigned to s string after the execution of the following code?

```
special = '1357 Country Ln.'
s string = special[-3: ]
```



Answers:

🕜 A. 'Ln.'

B. Ln.

C. '531'

D. '7531'

Wednesday, May 10, 2017 12:55:03 AM EDT

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