

Final Test 1

Question 1: Which of the following statements are TRUE? Select two answers)

- A. A source file named `__init__.py` is used to mark a directory/ folder as containing a Python package, and to initialize the package.**
- B. The `.pby` extension marks files that contain Python semi-compiled byte-code.
- C. A programmer is obliged to manually create a directory/ folder named `__pycache__` inside every package.
- D. The variable named `__name__` is a string containing the module name.**

Question 2: What is TRUE about the built-in `dir()` mechanism in the context of modules and packages?

- A. It is a dictionary contained by a module reflecting the module contents.
- B. It is a list contained by a module reflecting the module contents.
- C. It is a function which can be invoked with a module passed as an argument in order to obtain the module content.**
- D. It is a method which can be invoked from within a module in order to obtain the module contents.

Question 3: A function named `f()` is included in a module named `m`, and the module is a part of a package named `p`. Which of the following code snippets allows you to properly invoke the function? (Select two answers)

- A. `from p.m import f`**

`f()`

- B. `import p.m.f`

`f()`

- C. `import p.m`**

`p.m.f()`

- D. `import p`

`m.f()`

Question 4: Which of the following functions come from the math module? (Select two answers)

- A. seed()
- B. processor()
- C. sqrt()**
- D. hypot()**

Question 5: What is the expected output of the following code?

```
>>> import math  
  
>>> x = -1.5  
  
>>> print(abs(math.floor(x) + math.ceil(x)))
```

- A. 2
- B. 3**
- C. -2
- D. -3

Question 6: Which of the following variables will Python consider to be private?

- A. private__data
- B. __privatedata**
- C. privatedata__
- D. _privatedata_

Question 7: What is the expected output of the following code?

```
>>> consts = (3.141592, 2.718282)  
  
>>> try:  
  
>>>     print(consts[2])  
  
>>> except Exception as exception:  
  
>>>     print(exception.args)
```

```
>>> else:
```

```
>>> print(('success'))
```

A. 2.718282

B. ('tuple index out of range',)

C. 3.141592

D. ('success')

Question 8: What is the expected output of the following code?

```
>>> def fun(x):
```

```
>>>     assert x >= 0
```

```
>>>     return x ** 0.5
```

```
>>> def mid_level(x):
```

```
>>>     try:
```

```
>>>         fun(x)
```

```
>>>     except Error:
```

```
>>>         raise
```

```
>>> try:
```

```
>>>     x = mid_level(-1)
```

```
>>> except RuntimeError:
```

```
>>>     x = -1
```

```
>>> except:
```

```
>>>     x = -2
```

```
>>> print(x)
```

- A. An error message appears on the screen
- B. 0
- C. -2
- D. -1

Question 9: Which of the following are the names of built-in Python exceptions? (Select two answers).

- A. **KeyError**
- B. **AssertionError**
- C. LookupException
- D. ProgramTooComplicatedError

Question 10: What is expected output of the following code?

```
>>> x, y = 3.0, 0.0

>>> try:

>>>     z = x/y

>>> except ArithmeticError:

>>>     x = -1

>>> else:

>>>     z = -2

>>> print(z)
```

- A. **An error message appears on the screen**
- B. +INF
- C. -2
- D. -1

Question 12: Which of the following are valid Python string literals? (Select two answers)

- A. **"King's Cross Station"**

B. `"/"`

C. `'All the king's horses'`

D. `""""The Knights Who Say 'Ni!""""`

Question 13: Which of the following snippets can be used to build a new string consisting of sorted characters contained in the `'zyx'` string assigned to the `letters` variable? (Select two answers)

```
>>> letters = 'zyx'
```

A. `new_string = sorted(letters)`

B. `new_string = ' '.join(sorted(letters))`

C. `tmp = letters.sort()`

```
new_string = str(tmp)
```

D. `tmp = list(letters)`

```
tmp.sort()
```

```
new_string = ' '.join(tmp)
```

Question 14: Which of the following assignments can be performed without raising any exceptions? (Select two answers)

A. `s = 'rhyme'`

```
s = s[-2]
```

B. `s = 'rhyme'`

```
s = s[::2]
```

C. `s = 'rhyme'`

```
s = s[9]
```

D. `s = 'rhyme'`

```
s[0] = s[1]
```

Question 15: What is expected output of the following code?

```
>>> plane = "Cessna"
```

```
>>> counter = 0

>>> for c in plane * 2:

>>>     if c in ["e", "a"]:

>>>         counter +=1

>>> print(counter)
```

- A. 0
- B. 2
- C. 4**
- D. The code is erroneous and cannot be run

Question 16: What is the expected output of the following code?

```
>>> foo = "Mary had 21 little sheep"

>>> print(foo.split()[2].isdigit())
```

- A. 2
- B. 21
- C. True**
- D. False

Question 17: Which of the following expressions evaluate to TRUE and raise no exception?
(Select two answers)

- A. `str(None) != "None"`
- B. `str(None) == None`
- C. `' ' * 0 < 1 * ' '`**
- D. `'Analog' < 'analog'`**

Question 18: Which of the following expressions evaluate to TRUE and raise no exception?
(Select two answers)

- A. `'bc' in 'abc'`**

- B. `' ' not in ' '`
- C. `'xyz' not in 'uvwxyz'`
- D. `' ' in 'alphabet'`**

Question 19: Which of the following are character encoding standard names? (Select two answers)

- A. ASCII**
- B. Unicode**
- C. Intcod
- D. Unilang

Question 31: If you want to check if a Python file is either used as a module or run as a standalone program, you should check a built-in variable named:

- A. `__run_mode__`
- B. `__used_as__`
- C. `__module_name__`
- D. `__name__`**

Question 32: Which of the following statements are TRUE? (Select two answers)

- A. Trying to write a file opened in read-only mode removes its contents.
- B. The second argument of the *open()* function is a string.**
- C. Read, write, and delete are the names of file open modes.
- D. The *open()* function raises an exception when its operation fails.**

Question 33: What is the expected output of the following code?

```
>>> def quote(quo):  
>>>     def embed(str):  
>>>         return quo + str + quo  
>>>     return embed
```

```
>>> dblq = quote(' ')
>>> print(dblq('Jane Doe'))
```

- A. **"Jane Doe"**
- B. `"Jane Doe"`
- C. Jane Doe
- D. `'Jane Doe'`

Question 34: What is the expected output of the following code if the file named *existing_text_file* is a non-zero length text file located in the working directory, and the *open()* function invocation is successful?

```
>>> try:
>>>     f = open("existing_text_file", "rt")
>>>     spam = f.readlines()
>>>     print(len(spam))
>>>     f.close()
>>> except IOError:
>>>     print(-1)
```

- A. **The number of lines contained inside the file.**
- B. The length of the last line from the file.
- C. -1
- D. The length of the first line from the file.

Question 35: Which of the following lines contain valid Python code? (Select two answers)

- A. `lambda x, y -> x ** y`
- B. **`lambda x, y: '0123456789v [x:y]`**
- C. `lambda f(x, y): return x >> y`

D. `lambda x, y: x + y`

Question 36: Which method is used to break the connection between the file handle and a physical file?

A. `lock()`

B. `close()`

C. `shutup()`

D. `disconnect()`

Question 37: What is the expected output of the following code?

```
>>> vect = ["alpha", "bravo", "charlie"]
```

```
>>> new_vect = filter(lambda s: s[-1].upper() in ["A", "O"], vect)
```

```
>>> for x in new_vect:
```

```
>>>     print(x[1], end = " ")
```

A. RH

B. lr

C. rh

D. LR

Question 38: What is expected output of the following code?

```
>>> l = [x for x in range(1, 10, 3) if x % 2 == 0]
```

```
>>> print(len(l))
```

A. 2

B. 8

C. 4

D. 1

Question 39: What is expected output of the following code?

```
>>> v = [1, 2, 3]
```

```
>>> def g(a, b, m):  
>>>     return m(a, b)  
>>> print(g(1, 1, lambda x, y: v[ x : y + 1]))
```

A. [2]

B. []

C. [3]

D. [1]

Question 40: What is the expected output of the following code?

```
>>> def f(1):  
>>>     return 1(-1, 3)  
>>> print(f(lambda x, y: x if x > y else y))
```

A. -3

B. 0

C. None

D. 3