**Python Quiz (QCM)**

**Part 1: Beginner**

**1. What is the correct syntax to print "Hello, World!" in Python?**

a) print("Hello, World!")  
b) echo("Hello, World!")  
c) printf("Hello, World!")  
d) print("Hello World")

**Correct Answer**: a) print("Hello, World!")

**2. Which of the following is the correct way to declare a variable in Python?**

a) var x = 10  
b) x : 10  
c) x = 10  
d) let x = 10

**Correct Answer**: c) x = 10

**3. How do you create a list in Python?**

a) list = [1, 2, 3]  
b) list = (1, 2, 3)  
c) list = {1, 2, 3}  
d) list = <1, 2, 3>

**Correct Answer**: a) list = [1, 2, 3]

**4. What does the len() function do in Python?**

a) Returns the length of a string or collection.  
b) Checks if a string is empty.  
c) Converts a string to lowercase.  
d) Converts a string to uppercase.

**Correct Answer**: a) Returns the length of a string or collection.

**5. What is the result of the following code?**

x = 10

y = 5

print(x + y)

a) 15  
b) 105  
c) Error  
d) 10

**Correct Answer**: a) 15

**6. How do you check the type of a variable in Python?**

a) checktype(x)  
b) x.type()  
c) type(x)  
d) get\_type(x)

**Correct Answer**: c) type(x)

**7. What is the correct way to define a function in Python?**

a) function myFunction()  
b) def myFunction:  
c) def myFunction():  
d) func myFunction():

**Correct Answer**: c) def myFunction():

**8. Which of the following types are immutable in Python?**

a) String  
b) Tuple  
c) List  
d) Dictionary

**Correct Answer**: b) Tuple

**9. How do you create a dictionary in Python?**

a) dict = []  
b) dict = {}  
c) dict = ()  
d) dict = set()

**Correct Answer**: b) dict = {a:12, ville:”FES”}

**10. Which operator is used to check equality in Python?**

a) ==  
b) =  
c) !=  
d) ===

**Correct Answer**: a) ==

**11. What is the output of the following code?**

x = "Hello"

print(x[0])

a) H  
b) e  
c) o  
d) Error

**Correct Answer**: a) H

**12. How do you remove an item from a list in Python?**

a) list.delete(item)  
b) list.pop(item)  
c) list.remove(item)  
d) list.clear(item)

**Correct Answer**: c) list.remove(item)

**13. What does the in keyword do in Python?**

a) It checks if a value is part of a list.  
b) It defines a function.  
c) It imports a module.  
d) It converts data types.

**Correct Answer**: a) It checks if a value is part of a list.

**14. How do you create a tuple in Python?**

a) tuple = []  
b) tuple = {1, 2, 3}  
c) tuple = (1, 2, 3)  
d) tuple = <1, 2, 3>

**Correct Answer**: c) tuple = (1, 2, 3)

**15. Which of the following is used to add a comment in Python?**

a) /\* comment \*/  
b) // comment  
c) # comment  
d) <!-- comment -->

**Correct Answer**: c) # comment

**Part 2: Moderate**

**16. What is the output of this code?**

x = [1, 2, 3]

x.append(4)

print(x)

a) [1, 2, 3, 4]  
b) [1, 2, 3]  
c) [4, 1, 2, 3]  
d) Error

**Correct Answer**: a) [1, 2, 3, 4]

**17. How can you define a class in Python?**

a) class MyClass:  
b) class = MyClass:  
c) def MyClass:  
d) object MyClass:

**Correct Answer**: a) class MyClass:

**18. What will be the output of the following code?**

x = "Hello"

print(x[-1])

a) H  
b) o  
c) Error  
d) l

**Correct Answer**: b) o

**19. How do you check if a key exists in a dictionary?**

a) key in dict  
b) dict.has\_key(key)  
c) dict[key]  
d) key.exists(dict)

**Correct Answer**: a) key in dict

**20. What is the purpose of the break statement in Python?**

a) It ends the program.  
b) It continues the loop.  
c) It skips the current loop iteration.  
d) It terminates the loop.

**Correct Answer**: d) It terminates the loop.

**21. How would you add an item to the beginning of a list?**

a) list.add(item)  
b) list.insert(0, item)  
c) list.append(item)  
d) list.push(item)

**Correct Answer**: b) list.insert(0, item)

**22. Which of the following methods can be used to convert a string to lowercase?**

a) string.toLowerCase()  
b) string.lower()  
c) lower(string)  
d) string.convertToLower()

**Correct Answer**: b) string.lower()

**23. What is the correct way to create a for loop in Python?**

a) for i in range(10):  
b) for i = 0 to 10:  
c) for i in (10):  
d) for i in [1, 10]:

**Correct Answer**: a) for i in range(10):

**24. Which of the following statements are true?**

a) List doesn’t allow duplicates  
b) Set is immutable  
c) List is mutable  
d) Set doesn’t allow duplicates

**Correct Answers**: c) and d)

**25. Which function is used to read a file in Python?**

a) readfile()  
b) open()  
c) read()  
d) input()

**Correct Answer**: b) open()

**26. How do you define a function that accepts a variable number of arguments?**

a) def func(\*args):  
b) def func(args...):  
c) def func([args]):  
d) def func(args=()):

**Correct Answer**: a) def func(\*args):

**27. What will be the output of this code?**

x = "apple"

x.upper()

print(x)

a) APPLE  
b) apple  
c) Error  
d) None

**Correct Answer**: b) apple

**28. Which of the following is used to import a module in Python?**

a) import module\_name  
b) require module\_name  
c) include module\_name  
d) use module\_name

**Correct Answer**: a) import module\_name

**29. What is the result of the following Python code?**

x = list(range(1, 10, 3))

x[1] = 8

print(x)

a) [1, 4, 7]

b) [1, 8, 7]

c) [1, 4, 8]

d) [1, 2, 3]

**Correct Answer**: b) [1, 8, 7]

**30. What is the result of x = [1, 2, 3]; x[1] = 4?**

a) [1, 2, 3]  
b) [1, 4, 3]  
c) [1, 2, 4]  
d) Error

**Correct Answer**: b) [1, 4, 3]

**31. How can you concatenate two lists in Python?**

a) list1 + list2  
b) list1.concat(list2)  
c) list1.add(list2)  
d) list1.append(list2)

**Correct Answer**: a) list1 + list2

**32. What is the correct way to check if a string starts with a certain substring in Python?**

a) string.startswith(substring)  
b) substring.startswith(string)  
c) string[0] == substring  
d) substring[0] == string

**Correct Answer**: a) string.startswith(substring)

**33. What is the output of the following code?**

x = "Hello"

x = x.replace("l", "x")

print(x)

a) Hexxo  
b) Hexlo  
c) Hexxl  
d) Hexxo

**Correct Answer**: d) Hexxo

**34. What is the output of the following code?**

x = "Hello"

x = x.replace("l", "x", 1)

print(x)

a) Hexxo  
b) Hexlo  
c) Hexxl  
d) Hexxo

**Correct Answer**: b) Hexlo

**35. What is the output of this code?**

x = {"a": 1, "b": 2}

del x["a"]

print(x)

a) {"a": 1, "b": 2}  
b) {"b": 2}  
c) {"a": 2}  
d) Error

**Correct Answer**: b) {"b": 2}

**36. Which statement is used to create a list comprehension in Python?**

a) [expression for item in iterable]  
b) for item in iterable, expression  
c) expression for item in iterable  
d) list(expression for item in iterable)

**Correct Answer**: a) [expression for item in iterable]

**Part 3: Pandas**

**37. How do you import Pandas in Python?**

a) import pandas as pd  
b) import pandas  
c) import pd  
d) from pandas import \*

**Correct Answer**: a) import pandas as pd

**38. How can you create a DataFrame from a dictionary in Pandas?**

a) pd.DataFrame(data)  
b) pd.create(data)  
c) pd.dictToDataFrame(data)  
d) DataFrame(data)

**Correct Answer**: a) pd.DataFrame(data)

**39. What does df.head() do in Pandas?**

a) It displays the first 5 rows of a DataFrame.  
b) It displays the last 5 rows of a DataFrame.  
c) It returns the DataFrame shape.  
d) It sorts the DataFrame.

**Correct Answer**: a) It displays the first 5 rows of a DataFrame.

**40. How would you get the number of rows in a Pandas DataFrame?**

a) df.rows()  
b) df.shape[0]  
c) df.length()  
d) df.size()

**Correct Answer**: b) df.shape[0]

**41. What does the pd.read\_csv() function do?**

a) Reads data from a CSV file.  
b) Reads data from a database.  
c) Writes data to a CSV file.  
d) Writes data to a database.

**Correct Answer**: a) Reads data from a CSV file.

**42. How do you filter a Pandas DataFrame by a specific condition?**

a) df[df['column'] > 10]  
b) df.filter(column > 10)  
c) df.condition('column' > 10)  
d) df.select(where column > 10)

**Correct Answer**: a) df[df['column'] > 10]

**43. How do you change the column names in a Pandas DataFrame?**

a) df.rename(columns={'old\_name': 'new\_name'})  
b) df.columns = ['new\_name']  
c) df.columns.replace('old\_name', 'new\_name')  
d) df.set\_column('old\_name', 'new\_name')

**Correct Answer**: a) df.rename(columns={'old\_name': 'new\_name'})

**44. How do you concatenate two Pandas DataFrames?**

a) pd.concat([df1, df2])  
b) df1.merge(df2)  
c) df1.combine(df2)  
d) df1.join(df2)

**Correct Answer**: a) pd.concat([df1, df2])

**45. How can you handle missing values in Pandas?**

a) df.fillna()  
b) df.dropna()  
c) df.dropna(axis=1)  
d) All of the above

**Correct Answer**: d) All of the above

**46. How do you group data by a specific column in Pandas?**

a) df.groupby('column')  
b) df.split('column')  
c) df.cluster('column')  
d) df.segment('column')

**Correct Answer**: a) df.groupby('column')