Objective Questions

1. What does the following code do? `print("Hello, world!")`
   a) Prints "Hello, world!" to the screen
   b) Adds two numbers together
   c) Creates a list

2. How do you store the value 5 in a variable called `x`?
   a) `x = 5`
   b) `5 = x`
   c) `x == 5`

3. What is a dictionary in Python?
   a) A book with words and their meanings
   b) A collection of key-value pairs
   c) A type of snake

4. What is the output of `print(3 + 7)`?
   a) 10
   b) 37
   c) 3 + 7

5. Write a Python code to calculate the square of a number.
   a) `def square(x): return x * x`
   b) `square = x * x`
   c) `x ** 2`

6. What does the `if` statement do in Python?
   a) Executes a block of code only if a condition is true
   b) Loops through a block of code
   c) Prints a message to the screen

7. How do you check if a number is even in Python?
   a) `if num % 2 == 0:`
   b) `if num / 2 == 0:`
   c) `if num == even:`

8. How do you import a module in Python?
   a) import
   b) include
   c) add

9. What is the output of `print("Hello" + " " + "world")`?
   a) "Hello world"
   b) "Helloworld"
   c) Error

10. Write a Python code to count the number of characters in a string.
    a) `len(string)`
    b) `string.length()`
    c) `count(string)`

11. How do you create an empty list in Python?
    a) `my_list = []`
    b) `my_list = {}`
    c) `my_list = ()`

12. Write a Python code to add two numbers.
    a) `sum = num1 + num2`
    b) `add(num1, num2)`
    c) `num1 += num2`

13. What does the `range()` function do in Python?
    a) Generates a sequence of numbers
    b) Reverses a list
    c) Finds the length of a list

14. How do you access an item in a dictionary?
    a) Using []
    b) Using {}
    c) Using ()

15. What does the "if" statement do in Python?
    a) It repeats a block of code
    b) It checks a condition and runs code if true
    c) It prints something to the screen

16. Write a Python code to reverse a string.
    a) `reversed_string = string[::-1]`
    b) `string.reverse()`
    c) `reversed(string)`

17. What is the output of `print("abc" * 3)`?

a) "abcabcabc"
b) "aaabbbccc"
c) "abc3"

18. How do you remove an item from a list in Python?
a) `my_list.remove(item)`
b) `my_list.pop()`
c) `del my_list[index]`

19. What is a variable in Python?
a) A value that never changes
b) A container for storing data
c) A type of snake

20. What does the `append()` method do in Python lists?
a) Adds an item to the end of the list
b) Removes an item from the list
c) Reverses the list

21. What is a loop in Python?
a) A type of dance move
b) A way to repeat code
c) A type of snake

22. How do you print something in Python?
a) console.log()
b) print()
c) display()

23. How do you define a function in Python?
a) def
b) function
c) define

24. What does the "return" statement do in a function?
a) It ends the function
b) It returns a value from the function
c) It prints a message

25. What are some things you can do with Python?
   a) Play games
   b) Write programs
   c) Cook dinner

26. How do you convert a string to uppercase in Python?
    a) `string.upper()`
    b) `convert_upper(string)`
    c) `uppercase(string)`

27. How do you write a comment in Python?
   a) Using // symbol
   b) Using # symbol
   c) Using /* */ symbols

28. Why is Python called a programming language?
   a) Because it's used to write programs
   b) Because it's used to talk to snakes
   c) Because it's used to make phone calls

29. What is Python?
   a) A type of snake
   b) A programming language
   c) A type of food

30. How do you create an object in Python?
    a) Using a class
    b) Using a loop
    c) Using a function