Python Practice Test (30 Questions)

Covers: String Functions, List Functions, if-elif-else, while, for loops

Note: No functions used, only code snippets and logic-based questions.

Part A - String Functions (10 Questions)

1. What will be the output of:

```
text = "PYTHON"
print(text.lower())
```

2. Write code to remove extra spaces from:

```
name = " Hello World "
```

3. Count how many times 'a' appears in:

```
fruit = "banana"
```

4. Replace "dog" with "cat" in:

```
sentence = "I have a dog"
```

5. Split this string into a list of words:

```
msg = "Python is fun"
```

6. Find the index of 'i' in:

```
text = "machine"
```

7. Check if string starts with 'Good':

```
greeting = "Good Morning"
```

8. Convert the following to uppercase:

```
word = "hello"
```

9. Check if this string is all digits:

```
number = "12345"
```

10. Join list items using '_':

```
items = ['data', 'science']
```

Part B - List Functions (12 Questions)

11. Add 10 to the end of this list:

$$I = [1, 2, 3]$$

12. Insert 99 at index 1:

$$I = [5, 6, 7]$$

13. Sort the list in ascending order:

$$I = [9, 1, 3, 8]$$

14. Remove the value 20 from this list:

$$I = [10, 20, 30, 40]$$

15. Pop the last element from the list:

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

16. Merge two lists:

$$a = [1, 2], b = [3, 4]$$

17. Count how many times 2 appears:

nums =
$$[2, 4, 2, 2, 6]$$

18. Find the total sum of:

$$I = [5, 10, 15]$$

19. Find the largest number:

$$marks = [44, 72, 91, 60]$$

20. Find the smallest number:

nums =
$$[20, 18, 5, 34]$$

21. Clear the entire list:

$$I = [8, 9, 10]$$

22. Copy this list to a new list:

original =
$$[1, 2, 3]$$

Part C - Control Statements (8 Questions)

- 23. Write a program to check if a number is even or odd.
- 24. Use if-elif-else to check whether a number is positive, negative, or zero.
- 25. Write a for loop to print numbers from 1 to 10.
- 26. Print the multiplication table of 5 using a for loop.
- 27. Use a while loop to print numbers from 10 down to 1.
- 28. Write code to calculate the sum of digits of a number using a while loop.
- 29. Count the number of vowels in a given string using for and if.
- 30. Check if the string "madam" is a palindrome using indexing and if.