

📖 Easy Level (10 Questions)

Q1. Which term refers to arguments that have default values in a function definition?

- A. Positional arguments
 - B. Mandatory arguments
 - C. Optional arguments
 - D. Variable arguments
-

Q2. Which built-in function returns the data type of an object?

- A. `dir()`
 - B. `str()`
 - C. `type()`
 - D. `id()`
-

Q3. Which function converts an object into a string representation?

- A. `repr()`
 - B. `str()`
 - C. `dir()`
 - D. `format()`
-

Q4. Which list method adds an element at the end of the list?

- A. `insert()`
 - B. `extend()`
 - C. `append()`
 - D. `add()`
-

Q5. Which method reverses a list in place?

- A. `sort()`
 - B. `reverse()`
 - C. `reversed()`
 - D. `flip()`
-

Q6. Which function lists all attributes and methods of an object?

- A. `type()`
- B. `help()`

- C. `dir()`
 - D. `vars()`
-

Q7. Which string method converts all characters to uppercase?

- A. `upper()`
 - B. `capitalize()`
 - C. `title()`
 - D. `swap()`
-

Q8. What does a Python socket primarily enable?

- A. File handling
 - B. Database connection
 - C. Network communication
 - D. Process management
-

Q9. Which list method removes the first occurrence of a value?

- A. `delete()`
 - B. `remove()`
 - C. `pop()`
 - D. `discard()`
-

Q10. Which of the following is a valid named argument call?

- A. `func(x=5, 10)`
 - B. `func(10=x)`
 - C. `func(a=10, b=20)`
 - D. `func(=10)`
-

☐ Medium Level (15 Questions)

Q11. What will be the output?

```
def f(a, b=5):  
    return a + b  
print(f(10))
```

- A. 5
 - B. 10
 - C. 15
 - D. Error
-

Q12. Which list method adds elements of another list individually?

- A. `append()`
 - B. `insert()`
 - C. `extend()`
 - D. `add()`
-

Q13. Which function shows object identity in memory?

- A. `type()`
 - B. `dir()`
 - C. `id()`
 - D. `hash()`
-

Q14. What will be the output?

```
x = [1, 2, 3]
y = x
y.append(4)
print(x)
```

- A. `[1, 2, 3]`
 - B. `[4]`
 - C. `[1, 2, 3, 4]`
 - D. Error
-

Q15. Which socket type is used for TCP communication?

- A. `SOCK_DGRAM`
 - B. `SOCK_RAW`
 - C. `SOCK_STREAM`
 - D. `SOCK_SEQPACKET`
-

Q16. Which string operation removes leading and trailing whitespace?

- A. `strip()`

- B. `trim()`
 - C. `cut()`
 - D. `clean()`
-

Q17. Which function returns a human-readable description of an object?

- A. `dir()`
 - B. `str()`
 - C. `type()`
 - D. `id()`
-

Q18. What will be the output?

```
lst = [3,1,2]
lst.sort()
print(lst)
```

- A. `[3,1,2]`
 - B. `[1,2,3]`
 - C. `[2,1,3]`
 - D. Error
-

Q19. Which of the following is TRUE about object references?

- A. Variables store values directly
 - B. Variables store memory addresses
 - C. Variables store object references
 - D. Variables store data types
-

Q20. Which method removes and returns the last list element?

- A. `remove()`
 - B. `del()`
 - C. `pop()`
 - D. `clear()`
-

Q21. Which call correctly uses both positional and named arguments?

- A. `func(a=5, 10)`
- B. `func(10, b=5)`

- C. `func(b=5, 10)`
 - D. `func(=10, b=5)`
-

Q22. Which socket function binds a socket to an address?

- A. `listen()`
 - B. `accept()`
 - C. `connect()`
 - D. `bind()`
-

Q23. What will be the output?

```
s = "python"
print(s[::-1])
```

- A. python
 - B. nohtyp
 - C. Error
 - D. None
-

Q24. Which built-in function displays documentation of an object?

- A. `dir()`
 - B. `doc()`
 - C. `help()`
 - D. `info()`
-

Q25. Which list method inserts an element at a specific index?

- A. `append()`
 - B. `extend()`
 - C. `insert()`
 - D. `add()`
-

Hard Level (15 Questions)

Q26. What will be the output?

```
def f(a, b, c=10):  
    return a + b + c  
print(f(1, b=2))
```

- A. Error
 - B. 3
 - C. 13
 - D. 12
-

Q27. Which operation demonstrates string immutability?

- A. `s[0] = 'P'`
 - B. `s.upper()`
 - C. `s = s + "!"`
 - D. `s.replace("a", "b")`
-

Q28. Which built-in function returns all callable attributes of an object?

- A. `type()`
 - B. `dir()`
 - C. `callable()`
 - D. `vars()`
-

Q29. What will be the output?

```
a = [1, 2]  
b = a.copy()  
b.append(3)  
print(a)
```

- A. `[1, 2, 3]`
 - B. `[1, 2]`
 - C. `[3]`
 - D. Error
-

Q30. Which socket method waits for an incoming connection?

- A. `connect()`
- B. `accept()`
- C. `bind()`
- D. `send()`

Q31. What does `list.extend("abc")` do?

- A. Adds "abc" as one element
 - B. Adds 'a', 'b', 'c'
 - C. Causes error
 - D. Clears list
-

Q32. What is the output?

```
def f(x, y=2, z=3):  
    return x * y + z  
print(f(5, z=10))
```

- A. 25
 - B. 20
 - C. 13
 - D. 20
-

Q33. Which statement about object references is TRUE?

- A. Reassignment changes original object
 - B. Mutable objects can change via references
 - C. Immutable objects change via reference
 - D. References store copies
-

Q34. Which string method is equivalent to `reverse()` for lists?

- A. `[::-1]`
 - B. `reverse()`
 - C. `invert()`
 - D. `swap()`
-

Q35. Which function converts any object into a developer-oriented string?

- A. `str()`
 - B. `dir()`
 - C. `repr()`
 - D. `format()`
-

Q36. What will be the output?

```
x = [1, 2, 3]
print(sorted(x, reverse=True))
```

- A. [1, 2, 3]
 - B. [3, 2, 1]
 - C. Error
 - D. None
-

Q37. Which socket protocol is connectionless?

- A. TCP
 - B. HTTP
 - C. UDP
 - D. FTP
-

Q38. What happens when named arguments are placed before positional arguments?

- A. Works normally
 - B. Raises SyntaxError
 - C. Converts to tuple
 - D. Ignores named arguments
-

Q39. Which function checks whether an object can be called like a function?

- A. `type()`
 - B. `callable()`
 - C. `dir()`
 - D. `help()`
-

Q40. Which scenario best demonstrates shared object reference?

- A. `x=5; y=5`
- B. `x=[1]; y=x`
- C. `x=(1, 2); y=(1, 2)`
- D. `x="hi"; y="hi"`