

Important question for viva:

Fundamentals

1. What is Python?
2. Why Python is called dynamically typed?
3. What are keywords?
4. Difference between list and tuple?
5. What is dictionary?
6. What is a set?
7. Is Python compiled or interpreted?
8. What is indentation? Why required?
9. Difference between = and == ?
10. What is type casting?

Data Types / Operators

11. What is mutable and immutable?
12. What are logical operators?
13. Explain identity operators.
14. Explain membership operators.
15. What is slicing in Python?
16. Explain negative indexing.
17. What is string concatenation?
18. How to reverse a string?

Control Statements

19. What is the difference between break and continue?
20. What is pass statement?

21. What is nested loop?
22. Explain range() function.
23. Can we use else with loops?

Functions

24. What is a function?
25. Difference between arguments and parameters?
26. What are default arguments?
27. What are keyword arguments?
28. What are lambda functions?
29. What is recursion?

OOP Concepts

30. What is class?
31. What is object?
32. What is constructor?
33. What is inheritance?
34. What are access specifiers?
35. What is polymorphism?
36. What is method overloading?
37. What is method overriding?
38. What are magic methods?
39. What is **init**?

File Handling

40. Modes used in file handling?
41. How to open and close file?

42. Difference between read(), readline(), readlines()?
43. How to write to a file?
44. What is file pointer?

Exception Handling

45. What is try-except?
46. What is raise keyword?
47. What is finally block?
48. What is multiple exception handling?

Modules & Libraries

49. What is a module?
50. What is package?

30 Python Coding Questions for Exams:

Basic Logic

1. Write a program to check odd or even.
2. Find max of three numbers.
3. Check leap year.
4. Print first n natural numbers.
5. Find factorial of a number.
6. Generate Fibonacci series.
7. Count digits of a number.

8. Reverse a number.
9. Sum of digits.
10. Check palindrome number.

Strings

11. Reverse a string.
12. Count vowels.
13. Check palindrome string.
14. Remove spaces.
15. Check substring exists or not.

Lists / Tuples

16. Find largest element in a list.
17. Remove duplicates from list.
18. Sort list without using sort().
19. Reverse list using loop.
20. Count frequency of elements.

Dictionary / Set

21. Count word frequency.
22. Convert two lists into dictionary.
23. Remove duplicate characters from string.

File Handling

24. Read a file content.
25. Count number of words in file.
26. Write string entered by user into file.

Functions

27. Write a function to find factorial.
28. Lambda function for square of number.

OOP

29. Class to store student details.
30. Single inheritance example with constructor.

Pattern printing questions:

1

3 5

7 9 11

13 15 17 19

* * * * *

* * * * *

* * * * *

* * * * *

1
3 5
7 9 11
13 15 17 19

A

AB
ABC
ABCD

A

BB
CCC
DDDD

1
1 1
1 2 1
1 3 3 1

1
2 3
4 5 6
7 8 9 10

*

*

*

*

1234

1234

1234

1234

1

22

333

4444

1

12

123

1234

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*

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**

*

*

*

12345

4

3

2

54321

ABCDE

D

C

B

ABCDE

123456

6

5

4

3

2

654321

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