File Handling

1. What is file?
2. What are the different types of files?
3. How to open a file in python? Explain functions like open, read and close
4. What are the various file opening modes? Explain any 2.
5. State and explain with statement with an example. What is its advantage?
6. What is file path? Explain its two types.
7. State and explain some functions of os module.
8. Explain how to read contents of file in various ways. OR Explain read, readline & readlines techniques.
9. How to write to file by appending contents to it? Give example.

Exception Handling

10. What is exception? What is the advantage of exception handling? OR What is exception? State any 4 exceptions that you have handled in Python. When do they occur?
11. State and explain various keywords to handle exception. 11.
12. Explain try-except with an example.
13. Write a note on else & finally block. Give example.
14. When can we make use of raise? Give example.
15. State minimum 3 ways using which you can catch different exception.

Regular Expression

16. .What is regular expression? What are the various applications of regular expressions?
17. State and explain any 5 patterns used to match regular expression in python.
18. Write a note on re module.
19. Explain the use of search function with examples. 22.Explain the use of match function with examples.
20. Find the difference in match() and search() function with examples.
21. How to use filter function in regular expression?

GUI Tkinter

22. What is GUI? Explain advantages of GUI.
23. What are the various elements of Tkinter module?
24. How to create a window using Tkinter? Explain with example.
25. State and explain any 5 widgets alongwith their use.
26. How to create label (or any control) in Tkinter? Give example.
27. . Explain how to create text entry components in python?
28. 31.How to process events in Tkinter? Give example.
29. How to change font and color of text on controls? Give example.
30. Explain pack function.
31. Explain grid function.
32. How function to draw line(or any basic shape) in Tkinter.
33. What is the difference in pack(), grid() and place() , explain by giving an example.

Database connectivity

34. .Explain the connect, cursor & close functions to connect to database.
35. What is cursor? How to create and use cursor object in database connectivity? Give example.
36. Explain fetchone and fetchall methods of cursor. Give examples.
37. How to traverse through result generated from selection query?
38. What is transaction? Write a note on transaction management functions of database connectivity. (commit)
39. Write down all steps to establish a connection from the backend to frontend
40. State and explain various exceptions that can occur in database connectivity.

DateTime

1. Explain datetime module and the various functions under it with example
2. What is pytz? What happens with it?
3. How to open calendar in Python? Write down and explain the command for it
4. What is datetime.datetime.now() ? explain output
5. When to use strftime() ? explain its usefulness

TCP – Socket

1. What is socket library? How to use?
2. what is TCP? What is its role to make a connection from one machine to another?

OOPs

1. What is the advantage of OOPs over Structured programming wrt Python?
2. What is dunder? How do we use init()?
3. How to initialize the instance of a class in Python?
4. Explain Python Class Constructor - Python __init__() Function
5. What do you mean by inheritance? Explain example
6. Explain polymorphism with an example

Threading

1. What is thread?
2. Explain the difference in process and a thread.

Pandas

1. What is the use of Pandas. Write a brief explanation on it