

Module 7 Quiz and Explanation

1) Which mode is used to read a file in Python?

- a) `w`
- b) `r`
- c) `a`
- d) `x`

Answer: b) `r`

Explanation: `'r'` mode opens a file for reading only and raises an error if the file does not exist.

2) Which mode allows both reading and writing a file?

- a) `r`
- b) `w`
- c) `r+`
- d) `a`

Answer: c) `r+`

Explanation: `'r+'` lets you read and write without deleting the existing content.

3) Which method reads the full content of a file?

- a) `read()`
- b) `readline()`
- c) `readlines()`
- d) `readchar()`

Answer: a) `read()`

Explanation: `read()` returns the entire file content as a single string.

4) Which method moves the file pointer to a specific position?

- a) `close()`
- b) `seek()`
- c) `tell()`
- d) `flush()`

Answer: b) `seek()`

Explanation: `seek()` repositions the file pointer to a chosen byte location.

5) Why do we handle exceptions in Python?

- a) To stop execution always
- b) To handle runtime errors safely
- c) To print errors only
- d) To ignore warnings

Answer: b) To handle runtime errors safely

Explanation: Exception handling ensures the program can manage unexpected errors without crashing.

6) Which keyword is used to catch exceptions?

- a) `if`
- b) `else`
- c) `except`
- d) `finally`

Answer: c) `except`

Explanation: The `except` block is used to handle the raised exceptions.

7) What does the `finally` block do?

- a) Runs only on error
- b) Executes always
- c) Skips on success
- d) Runs after except only

Answer: b) Executes always

Explanation: The `finally` block executes whether or not an exception occurs, often used for cleanup actions.

8) Which statement automatically closes a file after use?

- a) `close()`
- b) `flush()`
- c) `with`
- d) `end`

Answer: c) `with`

Explanation: Using `with open()` automatically handles file closing, even if an error occurs.

9) What error occurs if you open a missing file in `'r'` mode?

- a) `ValueError`
- b) `KeyError`
- c) `FileNotFoundError`
- d) `IOError`

Answer: c) `FileNotFoundError`

Explanation: This error occurs when the specified file does not exist and you attempt to open it in read mode.