1. \*\*Which of the following classes is used for reading characters from a stream?\*\*

- A) `BinaryReader`

- B) `TextReader`

- C) `FileStream`

- D) `StreamReader`

- \*\*Answer:\*\* D) `StreamReader`

2. \*\*What is the base class for all stream-based classes in C#?\*\*

- A) `FileStream`

- B) `Stream`

- C) `TextReader`

- D) `StreamReader`

- \*\*Answer:\*\* B) `Stream`

3. \*\*Which method is used to write data to a `FileStream`?\*\*

- A) `Read()`

- B) `Write()`

- C) `Flush()`

- D) `Close()`

- \*\*Answer:\*\* B) `Write()`

4. \*\*Which class is used for reading and writing primitive data types as binary values in C#?\*\*

- A) `StreamWriter`

- B) `BinaryReader`

- C) `TextWriter`

- D) `MemoryStream`

- \*\*Answer:\*\* B) `BinaryReader`

5. \*\*Which of the following classes should be used to write characters to a file in text format?\*\*

- A) `BinaryWriter`

- B) `FileStream`

- C) `StreamWriter`

- D) `MemoryStream`

- \*\*Answer:\*\* C) `StreamWriter`

6. \*\*Which class provides methods for reading text from a file?\*\*

- A) `TextReader`

- B) `StreamWriter`

- C) `FileStream`

- D) `StreamReader`

- \*\*Answer:\*\* D) `StreamReader`

7. \*\*What is the default encoding for `StreamWriter`?\*\*

- A) ASCII

- B) Unicode

- C) UTF-8

- D) UTF-16

- \*\*Answer:\*\* C) UTF-8

8. \*\*Which method of the `FileStream` class is used to seek to a specific position in the stream?\*\*

- A) `Seek()`

- B) `Position()`

- C) `SetPosition()`

- D) `Goto()`

- \*\*Answer:\*\* A) `Seek()`

9. \*\*What is the purpose of the `Flush()` method in stream classes?\*\*

- A) To close the stream

- B) To reset the stream position

- C) To clear the buffer and write any buffered data to the underlying storage

- D) To set the stream to read mode

- \*\*Answer:\*\* C) To clear the buffer and write any buffered data to the underlying storage

10. \*\*Which class in C# allows you to create a temporary file in memory?\*\*

- A) `FileStream`

- B) `MemoryStream`

- C) `StreamReader`

- D) `StreamWriter`

- \*\*Answer:\*\* B) `MemoryStream`

11. \*\*Which method should you call to close a `Stream` object and release any associated resources?\*\*

- A) `Dispose()`

- B) `Close()`

- C) `End()`

- D) `Release()`

- \*\*Answer:\*\* B) `Close()`

12. \*\*Which class provides methods to read a specific number of bytes from a stream into a byte array?\*\*

- A) `StreamReader`

- B) `BinaryReader`

- C) `FileStream`

- D) `TextReader`

- \*\*Answer:\*\* B) `BinaryReader`

13. \*\*Which class in C# is used for binary serialization of objects?\*\*

- A) `BinaryWriter`

- B) `FileStream`

- C) `StreamWriter`

- D) `ObjectSerializer`

- \*\*Answer:\*\* A) `BinaryWriter`

14. \*\*Which of the following methods in `StreamReader` reads a single character from the stream?\*\*

- A) `Read()`

- B) `ReadLine()`

- C) `ReadToEnd()`

- D) `ReadChar()`

- \*\*Answer:\*\* A) `Read()`

15. \*\*In C#, which class is used to create a `Stream` for reading and writing to a file in binary mode?\*\*

- A) `BinaryReader`

- B) `StreamWriter`

- C) `FileStream`

- D) `StreamReader`

- \*\*Answer:\*\* C) `FileStream`

16. \*\*What is the purpose of the `BaseStream` property in `StreamReader` and `StreamWriter` classes?\*\*

- A) To get the underlying `Stream` object

- B) To set the encoding used by the stream

- C) To get the current position in the stream

- D) To flush the buffer

- \*\*Answer:\*\* A) To get the underlying `Stream` object

17. \*\*Which method is used to read a line of characters from the `StreamReader`?\*\*

- A) `ReadLine()`

- B) `Read()`

- C) `ReadToEnd()`

- D) `ReadChar()`

- \*\*Answer:\*\* A) `ReadLine()`

18. \*\*Which of the following operations is typically performed using a `BufferedStream`?\*\*

- A) Direct reading from a file

- B) Reading and writing in a buffered manner

- C) Writing binary data

- D) Reading a single character

- \*\*Answer:\*\* B) Reading and writing in a buffered manner

19. \*\*What is the primary benefit of using `MemoryStream`?\*\*

- A) To read and write data from/to a file

- B) To serialize and deserialize objects

- C) To perform operations on data in memory without creating files on disk

- D) To handle file system operations

- \*\*Answer:\*\* C) To perform operations on data in memory without creating files on disk

20. \*\*Which class in C# provides methods to work with file paths and directories?\*\*

- A) `FileInfo`

- B) `Path`

- C) `DirectoryInfo`

- D) `FileSystem`

- \*\*Answer:\*\* B) `Path`