PART 1: Python (10 Questions)

1. **File handling**: Used to read/write data to files.
   Modes: `r`, `w`, `a`, `x`, `rb`, `wb`.

2. **read()**: Reads full file
   readline(): Reads one line
   readlines(): Reads all lines as a list

3. **Exception hierarchy**: A structured way where exceptions inherit from the base `Exception` class.

4. **try-except**: Handles errors
   try-except-finally: Executes `finally` block whether error occurs or not

5. **with statement**: Automatically manages resources like file closing.

6. **Iterators**: Objects used to traverse elements one by one using `__iter__()` and `__next__()`.

7. **Generators**: Functions that return values using `yield`; memory efficient compared to normal functions.

8. ***args**: Passes variable number of positional arguments
   ****kwargs**: Passes variable number of keyword arguments

9. **Type casting**: Converting one data type to another
   Example: `int("5")`, `float(3)`

10. **Built-in functions**: Predefined Python functions
    Examples: `print()`, `len()`, `type()`, `range()`, `sum()`

PART 2: Matplotlib (5 Questions)

1. **Matplotlib**: A Python library used for creating plots and graphs.

2. **Line plot**: Shows trends
   Bar plot: Compares categories
   Scatter plot: Shows relationships

3. **Figure**: Whole plot window
   Axes: Area where data is plotted

4. They make graphs **clear, readable, and meaningful**.

5. It helps understand patterns, trends, and outliers in data.

PART 3: Seaborn (5 Questions)

1. **Seaborn**: A data visualization library built on Matplotlib with better styling and statistical plots.

2. **Statistical plot**: Displays data distribution and relationships.

3. **Histplot/Distplot**: Shows data distribution
   Boxplot: Shows median, spread, and outliers

4. **Heatmap**: Shows data values using colors (e.g., correlation matrix).

5. It makes data analysis **faster, easier, and more insightful.**