Test

Python Exception Handling (Try-Except) - Test

Part A: Multiple Choice Questions (MCQs)

Choose the correct answer for each question:

1. What is the purpose of exception handling in Python?

   a) To debug code

   b) To log errors

   c) To gracefully handle runtime errors

   d) To enforce coding standards

2. Which keyword is used to catch exceptions in Python?

   a) catch

   b) exception

   c) try

   d) except

3. What will be the output of the following code?

```
try:
    print(1 / 0)
except ZeroDivisionError:
    print("Cannot divide by zero")
```

   a) 0

   b) Error

   c) Cannot divide by zero

d) Infinite

4. What is the correct order of using exception handling blocks?

   a) try-except-finally

   b) except-try-finally

   c) try-finally-except

   d) finally-except-try

5. What is the use of the `finally` block in Python?

   a) Executes only when an exception occurs

   b) Executes only if no exception occurs

   c) Executes before the except block

   d) Always executes regardless of exceptions

Part B: Practical Questions

1. **Write a program that takes two numbers as input and divides the first number by the second. Handle division by zero using try-except and print an appropriate message.**
2. **Create a function that takes a list of integers and returns the first even number. Use exception handling to catch `IndexError` if no even number is found.**
3. **Demonstrate the use of `finally` block by writing a program that opens a file, reads its contents, and ensures the file is closed even if an exception occurs.**
4. **Write a program that catches multiple exceptions (e.g., `ValueError`, `ZeroDivisionError`) in a single try block. Prompt the user for numeric input and divide 100 by that number.**
5. **Raise a custom exception `InvalidAgeError` if the input age is less than 18. Write code to handle this exception and display a suitable message.**
