Q1-Q8: Single Correct Answer

1. **Which of the following operators is used to calculate remainder in a division?**

  - A) #

  - B) &

  - C) %

  - D) $

  Answer: C) %

  The `%` operator is used to calculate the remainder of a division in Python.

2. **In Python, `2//3` is equal to?**

  - A) 0.666

  - B) 0

  - C) 1

  - D) 0.67

  Answer: B) 0

  The `//` operator performs integer (floor) division, which discards the fractional part, resulting in `0` for `2//3`.

3. **In Python, `6<<2` is equal to?**

  - A) 36

  - B) 10

  - C) 24

  - D) 45

Answer: C) 24

The `<<` operator performs a bitwise left shift. `6 << 2` shifts the bits of `6` two places to the left, which results in `24`.

4. **In Python, `6&2` will give which of the following as output?**

   - A) 2

   - B) True

   - C) False

   - D) 0

   Answer: D) 0

The `&` operator performs a bitwise AND operation. `6` (binary `110`) AND `2` (binary `010`) results in `0`.

5. **In Python, `6|2` will give which of the following as output?**

   - A) 2

   - B) 4

   - C) 0

   - D) 6

   Answer: D) 6

The `|` operator performs a bitwise OR operation. `6` (binary `110`) OR `2` (binary `010`) results in `6`.

6. **What does the `finally` keyword denote in Python?**
   - A) It is used to mark the end of the code

- B) It encloses the lines of code which will be executed if any error occurs while executing the lines of code in the try block.

- C) The `finally` block will be executed no matter if the try block raises an error or not.

- D) None of the above

Answer: C) The finally block will be executed no matter if the try block raises an error or not.

The `finally` block is executed regardless of whether an exception is raised or not in the `try` block.

7. **What does the `raise` keyword is used for in Python?**

- A) It is used to raise an exception.

- B) It is used to define a lambda function

- C) It's not a keyword in Python.

- D) None of the above

Answer: A) It is used to raise an exception.

The `raise` keyword is used to trigger an exception manually.

8. **Which of the following is a common use case of the `yield` keyword in Python?**

- A) In defining an iterator

- B) While defining a lambda function

- C) In defining a generator

- D) In a for loop.

Answer: C) In defining a generator

The `yield` keyword is used to define a generator function, which allows the function to return values one at a time and pause execution between each.

Q9-Q10: Multiple Correct Answers

9. **Which of the following are the valid variable names?**

  - A) _abc

  - B) 1abc

  - C) abc2

  - D) None of the above

  Answers: A) _abc, C) abc2

Variable names in Python must start with a letter or an underscore and can be followed by letters, digits, or underscores. `1abc` is invalid because it starts with a digit.

10. **Which of the following are keywords in Python?**

  - A) yield

  - B) raise

  - C) look-in

  - D) all of the above

  Answers: A) yield, B) raise

 `yield` and `raise` are keywords in Python, while `look-in` is not.