**Guidelines:**

* In one page, a maximum of 5 MCQs and a minimum of 2 MCQs can be included.
* Questions Numbered 1 to 35
* The font name is Calibri (Body), and the size is 12.
* The primary part of the code must be in bold.
* The four choices should be labeled in uppercase, from A to D, followed by**).**
* All choices must begin with a tab space.
* Write each option on a new line.
* Write the correct answer as shown above, without a tab space after all the options.
* Leave a one-line gap between each question.
* True/False type questions can also be written.

**Note:** Without practice, don't simply copy and paste from other websites. If you feel it's worthwhile, change the values and process, then put it into the document.

1. Select the correct result of the following expression **(2\*\*3\*\*2) + 10 – 5 % 100 // 10**

A) 522

B) 512

C) 502

D) 523

**Answer: A**

2. What does the following Python code print?

**a = 6 / 3 \* 2 + 10 // 5**

**b = 6 \* 2 / 3 + 10 // 2**

**print (a, b)**

A) 6 9

B) 69

C) 6.0 9.0

D) 6.0, 9.0

**Answer: C**

3. Which of the following is the operator for exponentiation in Python?

A) math.pow(base, exponent)

B) pow(base, exponent)

C) ^

D) \*\*

**Answer: D**

4. What does the following Python code print?

**a = -10.0**

**b = 3**

**print (a % b)**

A) 1.0

B) 2.0

C) 2

D) -1

**Answer: B**

5. What does the following Python code print?

**a, b = 5, 2**

**res = a\*\*b // a + b**

**print (int (res + 3.0) / 4 // 2)**

A) 1

B) 7

C) 7.0

D) 1.0

**Answer: C**

6. What does the following Python code print?

**print (10 != 10 <= 15)**

A) True

B) False

C) Error

D) None

**Answer: B**

7. Which of the following is a valid comparison in Python?

A) **10 > (5 == 0)**

B) **(10 > 5) == True < 1**

C) **10 != 5 == True**

D) **All the above**

**Answer: D**

8. What does the following Python code print?

**print ("apple" > "banana")**

A) True

B) Error

C) False

D) None

**Answer: C**

9. What does the following Python code print?

**print ([] <= [0])**

A) True

B) False

C) 0

D) None

**Answer: A**

10. What does the following Python code print?

**print ("10" > "2")**

A) True

B) False

C) Error

D) None

**Answer: B**

11. What does the following Python code print?

**print ("car" < "cat" and "dog" != "Dog")**

A) True

B) Error

C) False

D) None

**Answer: A**

12. What does the following Python code print?

**print (10 > 5 and 5 / 0)**

A) True

B) False

C) ZeroDivisionError

D) ValueError

**Answer: C**

13. What does the following Statement imply?

**"Python’s and and or operators return one of their operands."**

A) They always return True or False.

B) They evaluate all operands before returning a value.

C) They return the first operand if it determines the result

D) This behaviour is only applicable when using and.

**Answer: C**

14. Which of the following statements about not Operator is correct?

A) not has the lowest precedence among Python operators.

B) not converts None to True.

C) not is applied to both operands in a binary expression.

D) not only works with Boolean values.

**Answer: B**

15. Which logical expression will NOT short-circuit in Python?

A) False and (5 / 0)

B) True or (10 / 0)

C) not (10 / 0)

D) (10 > 5) and (5 / 0)

**Answer: D**

16. What does the following Python code print?

**x = 5**

**print(~x)**

A) -5

B) -6

C) 5

D) 0

**Answer: B**

17. Which of the following is the correct method to check if a number is a power of 2 using bitwise operators?

A) n & (n - 1) == 0

B) n ^ (n + 1) == 1

C) n << 1 == 0

D) n & (n + 1) == 1

**Answer: A**

18. In a list, which bitwise operation can be used to find the unique element in a list of numbers where all other elements appear twice?

A) |

B) &

C) ^

D) ~

**Answer: C**

19. What does the following Python code print?

**x = -8**

**y = 4**

**result = x >> y**

**print(result)**

A) -1

B) 0

C) -2

D) -8

**Answer: A**

20. What does the following Python code print?

**x = 14**

**y = 5**

**print ( x & y ^ (x << 1) >> 2)**

A) 7

B) 5

C) 3

D) 6

**Answer: C**

21. What does the following Python code print?

**x = 5**

**x += 3**

**x \*= 2**

**x -= 4**

**print(x)**

A) 17

B) 12

C) 13

D) 16

**Answer: B**

22. What does the following Python code print?

**x = 10**

**for i in range (5):**

**x += i**

**print (x, end = " ")**

**print (x, end = " ")**

A) 10 11 13 16 20 20

B) 10 12 13 15 20 20

C) 11 13 16 18 19 19

D) 10 11 14 16 20 20

**Answer: A**

23. In which of the following cases will the //= operator raise an error?

A) When dividing by 0.

B) When the left operand is a string.

C) When the left operand is a float and the right operand is an integer.

D) When dividing by 1.

**Answer: A**

24. What is the result of the expression x \*= 2 when x is a list and x = [1, 2, 3]?

A) [1, 2, 3, 1, 2, 3]

B) [2, 4, 6]

C) TypeError

D) [1, 2, 3, 4, 5, 6]

**Answer: A**

25. What is the result of x -= 10 when x is a string, and x = "Hello"?

A) Hello10

B) "Hello"

C) TypeError

D) "Hello-10"

**Answer: C**

26. What does the following Python code print?

**x = ["apple", "banana", "cherry"]**

**print ("banana" in x)**

A) True

B) False

C) None

D) TypeError

**Answer: A**

27. What will be the result of "Mango" in "MangoLassi"?

A) True

B) False

C) None

D) TypeError

**Answer: A**

28. In which of the following situations would **not in** return True?

A) When a string is present in a list of strings.

B) When an integer is not found in a list of integers.

C) When the value is found in a dictionary.

D) When a substring is found at the end of a string.

**Answer: B**

29. Which of the following statements is correct regarding the **in** operator with dictionaries?

A) It checks for the presence of a value.  
B) It checks for the presence of a key.  
C) It checks for the presence of an item (key-value pair).  
D) It only works with string keys.

**Answer: B**

30. When using the **is** operator, what is being compared?

A) The value of the objects.  
B) The memory address or identity of the objects.  
C) The type of the objects.  
D) The length of the objects.

**Answer: B**

31. What does the following Python code print?

**x = ["apple", "banana", "cherry"]**

**y = "banana"**

**print (y in x[1:2])**

A) True

B) False

C) IndexError

D) TypeError

**Answer: A**

32. What does the following Python code print?

**a = [1, 2, 3]**

**b = a**

**print (a is b)**

**a = [1, 2, 3]**

**b = [1, 2, 3]**

**print (a is b)**

A) True  
 False  
B) False  
 True  
C) True  
 True  
D) False  
 False

**Answer: A**

33. What does the following Python code print?

**a = [1, 2, 3]**

**b = a[:]**

**print(a is b)**

A) True

B) False

C) None

D) TypeError

**Answer: B**

34. What does the is operator compare in Python?

A) The memory addresses of two objects.

B) The equality of values in two objects.

C) The types of two objects.

D) The size of two objects.

**Answer: A**

35. Which of the following statements is true about the behavior of the is operator when comparing two empty lists in Python?

A) Two empty lists are always considered the same object in memory.

B) The is operator will return True if two empty lists have the same value.

C) The is operator may return True or False, depending on whether the two empty lists are stored in the same memory location.

D) The is operator always returns False when comparing two empty lists.

**Answer: D**