Q1 Why do we call Python as a general purpose and high-level programming language?

Ans) Because it is easy for humans to understand

Q2. Why is Python called a dynamically typed language?

Ans) Python don't have any problem even if we don't declare the type of variable. It states the kind of variable in the runtime of the program. Python also take cares of the memory management which is crucial in programming. So, Python is a dynamically typed language

Q3. List some pros and cons of Python programming language?

Ans) Pros- Easy to Read, Learn and Write ,Improved Productivity , Interpreted Language , Dynamically Typed , Free and Open-Source , Vast Libraries Support, Portability

Cons- Slow Speed , Not Memory Efficient , Weak in Mobile Computing , Database Access ,Runtime Errors.

Q4. In what all domains can we use Python?

Ans)Python is the go-to programming language for domains such as **artificial intelligence, machine learning and deep learning**, it's no surprise that it's also a fundamental tool for any data scientist.

Q5. What are variable and how can we declare them?

Ans. Variable is name given to a specific memory location , variable should start with alphabet.

Ex. abc\_123

\_123

Q6. How can we take an input from the user in Python?

Ans) Input is taken from the user taking **input** function

Ex. a = input(“Your age:”)

Q7. What is the default datatype of the value that has been taken as an input using input() function?

Ans) The default datatype of the value is always **string**

Q8. What is type casting?

Ans) Changing a datatype of a value is known as type casting.

Q9. Can we take more than one input from the user using single input() function? If yes, how? If no, why

Ans) Yes , using split() function

Ex. { a , b , c = input(“Enter 3 Numbers”),split() }

Q10. What are keywords?

Ans) Keywords are **some predefined and reserved words in python that have special meanings**. Keywords are used to define the syntax of the coding. The keyword cannot be used as an identifier, function, and variable name. All the keywords in python are written in lower case except True and False

Q11. Can we use keywords as a variable? Support your answer with reason.

Ans) No , Because python doesn’t support this functions

Q12. What is indentation? What's the use of indentation in Python?

Ans) the indentation in Python is very important. Python uses indentation **to indicate a block of code**.

Q13. How can we throw some output in Python?

Ans) We throw output using print function

Ex. print(“Hi , iNeuron”)

Q14. What are operators in Python?

Ans) In Python, there are seven different types of operators: arithmetic operators, assignment operators, comparison operators, logical operators, identity operators, membership operators, and boolean operators

Q15. What is difference between / and // operators?

Ans) / denotes division operators for float values

// denotes division operators for int values

Q16

name = "iNeuron"

print(name\*4)

Q17

a = int(input("Please provide a number:"))

print(a)

if (a % 2 == 0):

print("The Number is Even")

else :

print("The Number is odd")

Q18. What are boolean operator?

Ans) In Python, the Boolean type is bool , which is a subtype of int . Boolean values are the values True or False (with a capital T and F) in Python. A Boolean variable is a variable that can be either True or False .

Q19. What will the output of the following?

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1 or 0

0 and 0

True and False and True

1 or 0 or 0

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Ans) 1

0

False

1

Q20. What are conditional statements in Python?

Ans) The if statement is a conditional statement in python, that is used to determine whether a block of code will be executed or not. Meaning if the program finds the condition defined in the if statement to be true, it will go ahead and execute the code block inside the if statement.

Q21. What is use of 'if', 'elif' and 'else' keywords?

Ans) if… elif…else are conditional statements that provide you with the decision making that is required when you want to execute code based on a particular condition. The if… elif…else statement used in Python helps automate that decision making process.

Q22

age = int(input("Please provide your age:"))

if (age >= 18):

print("I can vote")

else :

print("I can't vote")

Q23

numbers = [12, 75, 150, 180, 145, 525, 50]

sum = 0

for i in range(7):

if (numbers[i] % 2 == 0):

sum = sum + numbers[i]

print(sum)

Q24

a , b, c = input("Enter 3 numbers :").split()

if (a > b and a > c):

print("A is greatest")

elif (b > a and b > c):

print("B is greatest")

else:

print("C is greatest")

Q25

a = [12, 75, 150, 180, 145, 525, 50]

b = []

for i in a:

if i > 150:

if i > 500:

break

continue

if i % 5 == 0:

b.append(i)

print(b)