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

A) Python is a high-level language. This means it is not tied to a system architecture such as x86 or ARM. As such, you can write Python code as well as run it on any device or computer.

Python is an object-oriented, high-level programming language. Object-oriented means this language is based around objects (such as data) rather than functions, and high-level means it's easy for humans to understand.

Q2. Why is Python called a dynamically typed language?

A) Python is a dynamically typed language. What is dynamic? We don't have to declare the type of variable while assigning a value to a variable in Python. Other languages like C, C++, Java, etc.., there is a strict declaration of variables before assigning values to them.

Python doesn'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. So, Python is a dynamically typed language.

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

A) Pros of Python - Easy to learn syntax, flexible to use

Cons of Python - Time-consuming language and has low execution speed.

Q4. In what all domains can we use Python?

A) We can use Python in Data analysis, Machine learning, Web development, Automation, Web scraping, and NLP.

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

A) Variable is a name we give to point at a memory location.

Declaration rules:

-Variable name should start from an alphabet and

no special characters are allowed in the variable name except '\_'.

example: a = 10

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

A) Using the input() function, the input function always gives data as a string.

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

A) Default datatype is "string".

Q8. What is typecasting?

A) Type casting is the process of changing the data type of any variable.

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

A) You can use the split operator.

Eg: input().split(seprator)

Q10. What are keywords?

A) Keywords are pre-defined words that have special meanings and values.

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

A) No, keywords are pre-defined words that cannot be used as variables as doing that may confuse the

compiler and will give us the error.

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

A) Indentation in python is an appropriate amount of spaces and it

is used instead of curly braces in other languages.

Q13. How can we throw some output in Python?

A) By using the print() function.

Q14. What are operators in Python?

A) Operators are who carry out logical and arithmetic operations.

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

A) The difference between / and // is that // is a division that gives integer value as output and / gives Float value as output or decimal value.

Q16. Write a code that gives following as an output.

```

iNeuroniNeuroniNeuroniNeuron

```

A) print("iNeuron"\*5)

Q17. Write a code to take a number as an input from the user and check if the number is odd or even.

A) var1=int(input("Enter a number"))

if var1%2 == 0:

print("EVEN number")

else:

print("ODD number")

Q18. What are boolean operator?

A) Boolean operators are the ones that give output as true or false,

these are: and or not

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

```

A) 1, 0, False,1

Q20. What are conditional statements in Python?

A) Conditional statements in python are if, elif, and else. These are used for decision making it gives boolean values.

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

A) if, elif, and else are used to check conditions in a program and then execute the programs in their respective blocks.

Q22. Write a code to take the age of person as an input and if age >= 18 display "I can vote". If age is < 18 display "I can't vote".

A) person\_age = int(input("Enter your age"))

if person\_age>=18:

print("I can vote")

else:

print("I can't vote ")

Q23. Write a code that displays the sum of all the even numbers from the given list.

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

```

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

sum=0

for i in numbers:

if i%2 == 0:

sum+=i

print(sum)

Q24. Write a code to take 3 numbers as an input from the user and display the greatest no as output.

A) n1 = int(input("Enter first number"))

n2 = int(input("Enter second number"))

n3 = int(input("Enter third number"))

if n1>n2 and n1>n3:

print(n1," is greater")

elif n2>n1 and n2>n3:

print(n2," is greater")

else:

print(n3," is greater")

Q25. Write a program to display only those numbers from a list that satisfy the following conditions

- The number must be divisible by five

- If the number is greater than 150, then skip it and move to the next number

- If the number is greater than 500, then stop the loop

```

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

```

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

for i in numbers:

if i%5==0:

print(i)

elif i>150:

continue

elif i>500:

break

else:

pass