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

➔ Python is a general purpose and HLL because it is a human readable and can be used for building software in a wide variety of application domains.

Q2. Why is Python called a dynamically typed language?

➔ Because the type of data is defined during runtime, we don't need to assign a data type to a variable during declaration.

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

➔ Pros are:
Dynamically typed.
Easy to understand.
Large varieties of libraries and frameworks.

➔ Cons are:
Slow processing.
Majorly it is not used for mobile development.
Major chance of runtime error.

Q4. In what all domains can we use Python?

➔ Artificial Intelligence, Machine Learning, Data Science, Web development, Game Development etc.

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

➔ Variable are named memory location used to point object. We can declare them using character, Alpha numeric and underscore (a-z, A-Z, 0-9 or with _).

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

➔ Var = input() or var = int(input()) we can use different data type also.

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

➔ String.

Q8. What is type casting?

➔ Type casting means converting one data type to another data type.

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

➔ Yes, we can take multiple input using single input() function by using split() method.
x,y,z = input().split()

Q10. What are keywords?

➔ Keywords are reserved word that are predefined for specific purpose and cannot be used for variable, function and identifier declaration.
Example – if, else, elif, int, for, continue etc.

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

➔ No, we cannot use keyword as a variable.

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

➔ Indentation is used in different programming language for better readability.
In Python, Indentation represents a certain block of code. We give Indentation in Python using a tab or 4 space.

Q13. How can we throw some output in Python?

➔ By using print() function.

Q14. What are operators in Python?

➔ Operators are used to perform different computational operation. Example -> +, -, /, //, ==.

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

➔ / is a standard division it will always give a float value.
// is a floor division it will always give an integer value and will round off the value to next smallest integer.

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

➔ print(4*"iNeuron")

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

➔ num = int(input("Enter a Number = "))   #num is variable
  if num % 2 == 0:
      print("Even Number")
  else:
      print("Odd Number")

Q18. What are boolean operator?

➔ Boolean operator is built in data type. Boolean operators are True and False.

Q19. What will the output of the following?

➔

  1 or 0 -> 1

  0 and 0 -> 0

  True and False and True -> False

  1 or 0 or 0 -> 1

Q20. What are conditional statements in Python?

➔ Conditional statement in Python is used to perform conditional operation based on True or False.
  if
   statement
  else

```
    statement

    Nested if else
    if
      statement
    elif
      statement
    else
      statement
```

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

➔ **if** -> is used to check for true condition '**if**' true then the statement inside this is executed.
elif -> is used to check multiple condition '**if**' false then next it will go to next '**elif**' if mentioned or to '**else**' statement.
else -> when all the mentioned condition are false then else gets executed.

We can multiple '**elif**' or '**if**' statement.

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".

➔
```
age = int(input())
if 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.

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

➔
```
numbers = [12, 75, 150, 180, 145, 525, 50]
sum = 0
for i in numbers:
  if i % 2 == 0:
      sum = 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.

➔ num1 = int(input("Enter first number = "))
➔ num2 = int(input("Enter second number = "))
➔ num3 = int(input("Enter third number = "))
➔ if num1>num2 and num1>num3:
➔   print(num1)
➔ elif num2>num1 and num2>num3:
➔   print(num2)
➔ else:
➔   print(num3)

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]

```python
numbers = [12, 75, 150, 180, 145, 525, 50]
for i in numbers:
    if i>500:
        break
    elif i%5==0 and i<=150:
        print(i)
```