Q1. Is an assignment operator like += only for show? Is it possible that it would lead to faster results at the runtime?

Ans=>yes it is fast because we are not rewriting the variable so it will not occupy space and it will be fast.

Q2. What is the smallest number of statements you'd have to write in most programming languages to replace the Python expression a, b = a + b, a?

Ans=>

Q3. In Python, what is the most effective way to set a list of 100 integers to 0?

Ans=> buckets = [0] \* 100

Q4. What is the most effective way to initialise a list of 99 integers that repeats the sequence 1, 2, 3? S If necessary, show step-by-step instructions on how to accomplish this.

Ans=> l = [i for i in range(1,100)]

Q5. If you're using IDLE to run a Python application, explain how to print a multidimensional list as efficiently?

Ans=>with the help of numpy

Q6. Is it possible to use list comprehension with a string? If so, how can you go about doing it?

Ans=>yes we can use it but first we have to convert our string to list

Q7. From the command line, how do you get support with a user-written Python programme? Is this possible from inside IDLE?

Ans=>no we have to copy it first then print it

Q8. Functions are said to be “first-class objects” in Python but not in most other languages, such as C++ or Java. What can you do in Python with a function (callable object) that you can't do in C or C++?

Ans=>we have previledge like kwargs in python and not in other languages

Q9. How do you distinguish between a wrapper, a wrapped feature, and a decorator?

Ans=> Wrappers around the functions are also knows as decorators which are a very powerful and useful tool in Python since it allows programmers to modify the behavior of function or class. Decorators allow us to wrap another function in order to extend the behavior of the wrapped function, without permanently modifying it

Q10. If a function is a generator function, what does it return?

Ans=>it does not resturn any value it yields a value

Q11. What is the one improvement that must be made to a function in order for it to become a generator function in the Python language?

Ans=>we have add a keyword yield in it.

Q12. Identify at least one benefit of generators.

Ans=> Generators allow you to create iterators in a very pythonic manner