Python Mock Test

Ref: TV/AM/P/60/1   MM: 60

Note: Each question carries 4 marks

1. Explain the difference between mutable and immutable data types in Python. Provide examples for both.
2. List out all the Python keywords and explain lambda concept using map, filter and reduce
3. How does Python handle variable scope and what are the different types of variable scopes available?
4. Write a Python function to print all prime numbers between given number1 and number2.
5. Create function to check given number is an Armstrong number or not.
6. Write a Python function to generate the first n Fibonacci numbers.
7. Write a Python function to reverse a list without using list.reverse() method or reversed() function.
8. Explain the concept of *args and **kwargs in function and difference b/w return and print with example.
9. What is generator and yield concept in python.
10. Write a Python function to check if two strings are anagrams without using any methods.
11. Write a Python program to print the given pattern

```
         *
        * *
       * * *
      * * * *
     * * * * *
    * * * * * *
```

12. Explain the difference ways to import module and methods. Provide an example of some math, random and time module
13. Write a Python program that catches a Value Error or Type Error exception and prints an appropriate message, what are the different Block of try and exception handling.
14. Write a Python program to read a textual file and write it into a new file, explain different modes of file handling with explanation.
15. Write a Python program using regular expressions to find all email addresses in a given string.
    text = "Contact us at techvidya@education.com or support@techvidya.org"