**PSG COLLEGE OF TECHNOLOGY, COIMBATORE - 641 004**

**Department of Applied Mathematics and Computational Sciences**

**MSc Data Science – Sem V – Computer Networks Lab**

**Lab Test -1 [ 25/Feb/2021 ]**

**Time : 1 Hour Maximum Marks: 25**

**Q1 Odd Roll Number**

**Implement a connection-oriented client-server socket program using C/C++/Python. Server is concurrent in handling multiple client requests (must support atleast 3 clients simultaneously). This server is a simple FTP server.**

**Implement server to respond to the following client messages**

* Client sends “mput <key, value>”
  + Server stores locally <key, value> in its table
* Client sends “mget <key>”
  + Server returns value associated with the key.
  + If the data associated with <key> is missing, the server responds accordingly
* Client wants to know the number of IPC sockets created in server (in which all communication occurs entirely within the operating system kernel). This is for gathering statistics to know the load on server.

So, Client sends “# of IPC sockets?

* Server responds with correct information

**You can make any meaningful assumptions that are necessary and appropriate for client server communication.**