**V Semester – SCSA1501 – Operating Systems**

**Assignment I**

**Fill in the Blanks:**

1. The operating system is a type of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ software.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ OS supports a program to run on more than one CPU at a time.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ provides interface between a process and the operating system.
4. The data structure used by computer operating systems to store all the information about the process is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a technique by which a device manager keeps the slower I/O devices busy when a process is not requiring I/O operations.

**Short Questions:**

1. List the services of system components in OS.
2. What is a virtual machine?
3. Explain the working principle of system call.
4. Explain the states in Process Life Cycle.
5. Explain buffering and its types.

**Long Questions:**

1. Explain the concept of thread and multithreading in detail.

**Instructions:**

1) Use A4 sheets for writing your assignments

2) Scan and send your assignment in any format preferably pdf and upload correct document 3) Save your assignment in file name (Register Number\_Name) eg: (39110018\_AARUSH)

4) For fill ups just write the answer alone