

**V Semester – SCSA1501 – Operating Systems**

**Assignment II**

**Fill in the Blanks:**

- 1) Producer consumer problem is otherwise called as \_\_\_\_\_.
- 2) Any code segment that access shared variables and that has to be executed as an atomic action is called as \_\_\_\_\_.
- 3) If a process is executing in critical section, then no other process can be executing in their critical section is called \_\_\_\_\_.
- 4) Two types of semaphores are \_\_\_\_\_ and \_\_\_\_\_.
- 5) \_\_\_\_\_ is the decomposability property of a program into order-independent or partially ordered components.

**Short Questions:**

- 1) What is the use of mutex lock?
- 2) Define deadlock. State the necessary conditions for a deadlock.
- 3) What is meant by cooperating process?
- 4) What is the deadlock avoidance?
- 5) What is RAG in operating system?

**Long Questions:**

- 1) Explain in detail about critical section and explain how to implement it.

**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