B. Sc. Comp. Sci. Sem. 4 Major 2 Continuous Assessment
Batch: 2024-27

Full Marks: 20 **Duration:** 1hr

Answer all questions 5 x 4

1. Consider the set of six processes whose arrival time and burst times are given below:

Process Id	Burst time
P1	3
P2	2
P3	1
P4	4
P5	5
P6	2

If the CPU scheduling policy is FCFS and there is 1 unit of overhead in scheduling the processes, find the efficiency of the algorithm.

2. Consider the following process state transitions: A) Running to Ready B) Waiting to Running C) Ready to Waiting D) Running to Terminated. Explain which of the transitions are possible and/or not-possible and why.

3. Consider an arbitrary set of -bound processes with unequal burst lengths submitted at the same time to a computer system. Which one of the process scheduling algorithms would minimize the average waiting time in the ready queue? Explain your answer.

4. Explain Starvation and Ageing.

5. Explain normal and abnormal termination of process.