CS 331 System Software Lab –Cycle of Experiments

Class: S5 CSE

List of Exercises/Experiments:

Part A

1. Simulate the following non-preemptive CPU scheduling algorithms to find turnaround time and waiting time.

a) FCFS b) SJF c) Round Robin (pre-emptive) d) Priority

[Online Meeting & Discussion: 18/08/2020, Submission: Before 23/08/2020, Evaluation: Starts on 24/08/2020]

2. Simulate the following file allocation strategies.

a) Sequential b) Indexed c) Linked

[Online Meeting & Discussion: 25/08/2020, Submission: Before 05/09/2020, Evaluation: Starts on 07/09/2020]

3. Simulate the following file organization techniques *

a) Single level directory b) Two level directory c) Hierarchical

[Online Meeting & Discussion: 25/08/2020, Submission: Before 05/09/2020, Evaluation: Starts on 07/09/2020]

4. Implement the banker's algorithm for deadlock avoidance.*

5. Simulate the following disk scheduling algorithms. *

a) FCFS b)SCAN c) C-SCAN

6. Implement the producer-consumer problem using semaphores. *

7. Write a program to simulate the working of the dining philosopher's problem.*

Part B

8. Implement pass one of a two pass assembler. *

9. Implement pass two of a two pass assembler. *

10. Implement a single pass assembler. *

11. Implement a two pass macro processor *

12. Implement a symbol table with suitable hashing.*