**Operating System Sheet FOR SDE Interviews**

Q1. What is the difference between process and thread?

Q2. What are the benefits of multithreaded programming?

Q3. What is Virtual Memory? How is it implemented?

Q4. What is Paging & Segmentation? (VVI)

Q5. What is Page Fault? How to handle it?

Q6. Implement LRU Cache.

Q7. Implement LFU Cache.

Q8. What is Thrashing? (VVI)

Q9. What is Belady’s Anomaly?

Q10. What is a semaphore?

Q11 . Differences between mutex and semaphore?

Q12. What is a Critical Section?

Q13. What is a deadlock? (VVI)

Q14. What are the necessary conditions for deadlock?

Q15. Implement a deadlock situation using JAVA.

Q16. Do you know about Process Scheduling ? Explain Priority Scheduling with examples and graph.

Q17. Why do we need scheduling?

Q18. How will you implement Priority Scheduler ? Write and Explain the code.

Q19. What is Race around Condition?