

SARDAR VALLABHBHAI PATEL INSTITUTE OF TECHNOLOGY, VASAD

S.Y.C.E-4th Semester

Syllabus for 2nd Mid Semester Examination

OPERATING SYSTEM (3140702)

Unit- 1 Deadlock

Principles of Deadlock, Starvation, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection, System calls.

Unit-2 Memory Management

Memory Management requirements, Memory partitioning: Fixed and Variable Partitioning, Memory Allocation: Allocation Strategies (First Fit, Best Fit, and Worst Fit), Swapping, Paging and Fragmentation. Demand Paging, Security Issues.

Virtual Memory

Concepts, VM management, Page Replacement Policies (FIFO, LRU, Optimal, Other Strategies), Thrashing.

Unit-3 I/O Management & Disk scheduling

I/O Devices, Organization of I/O functions, Operating System Design issues, I/O Buffering, Disk Scheduling (FCFS, SCAN, C-SCAN, SSTF), RAID, Disk Cache.