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| **Course – 50 Title: Operating System Sessional** |  |
| **Course No.: CIT-322 Credit : 1.5 Contact Hours: 2** | **Total Marks: 100** |

**11.1 Rationale:**

Computer Engineers should be competent in Operating System. They must be able to apply the basic concepts of operating system, various types of CPU scheduling algorithms, Deadlock problem and some deadlock handling strategies, Paging, segmentation, fragmentation and file-management strategies.

**11.2 Objectives:**

* To implement the different types of scheduling algorithms,
* To apply the Banker’s algorithms
* To apply deadlock-recovery algorithm to recover from this situation.

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| **11.3 Learning Outcomes** | **11.4 Course Content** | **11.5 Teaching  Learning Strategy** | **11.6 Assessment Strategy** |
| * Apply & analyze FCFS scheduling algorithm | FCFS(First Come First Serve) scheduling algorithm | * Demonstration * Exercise | * Assignment * Observation |
| * Apply & analyze SJF non-preemptive scheduling algorithm | SJF(Shortest Job First) non-preemptive scheduling algorithm | * Demonstration * Exercise | * Assignment * Observation |
| * Apply & analyze SJF preemptive scheduling algorithm | SJF (Shortest Job First) preemptive scheduling algorithm. | * Demonstration * Exercise | * Assignment * Observation |
| * Apply & analyze Priority non-preemptive scheduling algorithm | Priority non-preemptive scheduling algorithm | * Demonstration * Exercise | * Assignment * Observation |
| * Apply & analyze Priority preemptive scheduling algorithm | Priority preemptive scheduling algorithm | * Demonstration * Exercise | * Assignment * Observation |
| * Apply & analyze Round-Robin scheduling algorithm | RR(Round-Robin) scheduling algorithm | * Demonstration * Exercise | * Assignment * Observation |
| * Apply & analyze Banker’s algorithm | Banker's algorithm | * Demonstration * Exercise | * Assignment * Observation |

RECOMMENDED BOOKS AND PERIODICALS