Course Title :Operating System & Compiler Design Laboratory			
Course Code: P18CSL67	**Semester : 6**	**L:T:P - 0 : 0 : 3**	**Credits: 1.5**
Contact Period : Practical :3 Hr/Week, Exam: 3Hr		**Weightage :CIE:50% SEE:50%**	

Course Content

1. a) Given the list of processes and their CPU burst times, write a program to compute and print the average waiting time and average turnaround time using FCFS algorithm.
   b) Write a LEX program to count the number of characters, words, spaces and lines in a given input file.
2. a) Given the list of processes, their CPU burst times, write a program to compute and print the average waiting time and average turnaround time using SJF algorithm.
   b) Write a LEX program to count the number of comment lines in a given C program. Also eliminate them and copy that program into separate file.
3. a) Given the list of processes, their CPU burst times and time slice, write a program to compute and print the average waiting time and average turnaround time for Round robin scheduling policy.
   b) Write a LEX program to recognize a valid arithmetic expression and identity the identifiers and operators present. Print them separately.
4. a) Write a program to implement the FIRST FIT allocation technique.
   b) Write a LEX program to recognize whether a given sentence is simple or compound.
5. a) Write a program to implement the BEST FIT memory allocation technique.
   b) Write a YACC program to recognize a valid variable, which starts with a letter, followed by any number of letters or digits.
6. a) Write a program to implement the FIFO page replacement algorithm.
   b) Write a YACC program to evaluate an arithmetic expression involving operators +, -, * and /.
7. a) Write a program to implement the Optimal page replacement algorithm.
   b) Write a YACC program Program to recognize strings ‘aaab’, ‘abbb’, ‘ab’ and ‘a’ using the grammar ($a^n b^n$ n>=0).
8. a) Write a program to implement the FCFS Disk scheduling algorithm.
   b) Write a YACC Program to recognize a valid arithmetic expression that uses operators +, -, * and /.