**USHA RAMA COLLEGE OF ENGINEERING AND TECHNOLOGY**

***DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING***

**Lab Schedule Batch -A**

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| --- | --- | --- | --- | --- | --- |
| **Course**: OS& LINUX PROGRAMMING LAB | | | **Course code :** | | |
| **Academic year**: 2016-17 | | | **Semester** : I | | |
| **Class/ section** : III CSE -A | | | **Date of Commence of class work**:13-6-2016 | | |
| **Faculty Name** : G.Baleswari | | | **Date of End of class work** :8-10-2016 | | |
| **SOFTWARE** | | | | | |
| S.NO | Date | Name of Experiment | | No . of Periods | Mode of Execution |
| 1 | 18-6-2016 | 1. a) Study of Unix/Linux general purpose utility command list  man,who,cat, cd, cp, ps, ls, mv, rm, mkdir, rmdir, echo, more, date, time, kill, history, chmod, chown, finger,  pwd, cal, logout, shutdown. | | 3 | Linux OS |
| 2 | 25-6-2016 | b) Study of vi editor.  c) Study of Bash shell, Bourne shell and C shell in Unix/Linux operating system  d) Study of Unix/Linux file system (tree structure).  e) Study of .bashrc, /etc/bashrc and Environment variables. | | 3 |
| 3 | 2-7-2016 | 2. Write a C program that makes a copy of a file using standard I/O, and system calls  3. Write a C program to emulate the UNIX ls –l command. | | 3 |
| 4 | 9-7-2016 | 4. Write a C program that illustrates how to execute two commands concurrently with a command pipe.  Ex: - ls –l | sort  5. Write a C program that illustrates two processes communicating using shared memory | | 3 |
| 5 | 16-7-2016 | 6. Write a C program to simulate producer and consumer problem using semaphores  7. Write C program to create a thread using pthreads library and let it run its function. | | 3 |
| 6 | 23-7-2016 | 8. Write a C program to illustrate concurrent execution of threads using pthreads library | | 3 |
| 7 | 30-7-2016 | Revision | | 3 |
|  |  | **Os lab** | |  | Windows OS |
| 1 | 6-8-2016 | 1. Simulate the following CPU scheduling algorithms  a) Round Robin b) SJF c) FCFS d) Priority | | 3 |
| 2 | 20-8-2016 | 2. Multiprogramming-Memory management- Implementation of fork (), wait (), exec() and exit (), System calls | | 3 |
| 3 | 27-8-2016 | 3. Simulate the following  Multiprogramming with a fixed number of tasks (MFT)  Multiprogramming with a variable number of tasks (MVT) | | 3 |
| 4 | 3-9-2016 | 4. Simulate Bankers Algorithm for Dead Lock Avoidance | | 3 |
| 5 | 10-9-2016 | 5. Simulate Bankers Algorithm for Dead Lock Prevention. | | 3 |
| 6 | 17-9-2016 | 6. Simulate the following page replacement algorithms.  a) FIFO b) LRU c) LFU | | 3 |
| 7 | 24-9-2016 | 7. Simulate the following File allocation strategies  a) Sequenced b) Indexed c) Linked | | 3 |
| 8 | 1-10-2016 | revision | | 3 |
| 9 | 8-10-2016 | Internal Lab examination | | 3 |

**Signature of the HOD Signature of the Faculty**

**USHA RAMA COLLEGE OF ENGINEERING AND TECHNOLOGY**

***DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING***

**Lab Schedule**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course**: OS & LINUX PROGRAMMING LAB | | | **Course code :** | | |
| **Academic year**: 2016-17 | | | **Semester** : I | | |
| **Class/ section** : III CSE –B & IT | | | **Date of Commence of class work**:13-6-2016 | | |
| **Faculty Name** : G.Baleswari | | | **Date of End of class work** :8-10-2016 | | |
| **SOFTWARE** | | | | | |
| S.NO | Date | Name of Experiment | | No . of Periods | Mode of Execution |
| 1 | 16-6-2016 | 1. a) Study of Unix/Linux general purpose utility command list  man,who,cat, cd, cp, ps, ls, mv, rm, mkdir, rmdir, echo, more, date, time, kill, history, chmod, chown, finger,  pwd, cal, logout, shutdown. | | 3 | Linux OS |
| 2 | 23-6-2016 | b) Study of vi editor.  c) Study of Bash shell, Bourne shell and C shell in Unix/Linux operating system  d) Study of Unix/Linux file system (tree structure).  e) Study of .bashrc, /etc/bashrc and Environment variables. | | 3 |
| 3 | 30-6-2016 | 2. Write a C program that makes a copy of a file using standard I/O, and system calls  3. Write a C program to emulate the UNIX ls –l command. | | 3 |
| 4 | 14-7-2016 | 4. Write a C program that illustrates how to execute two commands concurrently with a command pipe.  Ex: - ls –l | sort  5. Write a C program that illustrates two processes communicating using shared memory | | 3 |
| 5 | 21-7-2016 | 6. Write a C program to simulate producer and consumer problem using semaphores  7. Write C program to create a thread using pthreads library and let it run its function. | | 3 |
| 6 | 28-7-2016 | 8. Write a C program to illustrate concurrent execution of threads using pthreads library | | 3 |
| 7 | 4-8-2016 | Revision | | 3 |
|  |  | **Os lab** | |  | Windows OS |
| 1 | 11-8-2016 | 1. Simulate the following CPU scheduling algorithms  a) Round Robin b) SJF c) FCFS d) Priority | | 3 |
| 2 | 18-8-2016 | 2. Multiprogramming-Memory management- Implementation of fork (), wait (), exec() and exit (), System calls | | 3 |
| 3 | 25-8-2016 | 3. Simulate the following  Multiprogramming with a fixed number of tasks (MFT)  Multiprogramming with a variable number of tasks (MVT) | | 3 |
| 4 | 1-9-2016 | 4. Simulate Bankers Algorithm for Dead Lock Avoidance | | 3 |
| 5 | 8-9-2016 | 5. Simulate Bankers Algorithm for Dead Lock Prevention. | | 3 |
| 6 | 15-9-2016 | 6. Simulate the following page replacement algorithms.  a) FIFO b) LRU c) LFU | | 3 |
| 7 | 22-9-2016 | 7. Simulate the following File allocation strategies  a) Sequenced b) Indexed c) Linked | | 3 |
| 8 | 29-9-2016 | revision | | 3 |
| 9 | 6-10-2016 | Internal Lab examination | | 3 |

**Signature of the HOD Signature of the Faculty**