**PG.GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Even Semester**

**Session (2018-19)**

**Class:** BCA II (Sem IV)  **Name of the Teacher:** Ms. Anu Chawla

**Subject:** Operating System Concepts and Linux **Period :** 3rd (Wed- Sat)

**Paper :** BCA-16-404 **Room No :** 202

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| **S. No** | **Dates** | **Topics to be covered** |
| Week 1 | 14 /01/2019 – 19/01/2019 | Operating Systems (OS): Introduction, its needs and services, |
| Week 2 | 21/01/2019 –  25/01/2019 | creating files and directories, listing files (ls), pwd, moving and copying files (mv, cp), moving directories, Removing files and directories, using wildcards with files and directories, |
| Week 3 | 28/01/2019 –  2/02/2019 | Types of OS: Multi-user, Multitasking, Multiprocessing and Real time Operating Systems, Parallel systems, Distributed system Process Management: Introduction to Process, PCB, Process States, |
| Week 4 | 4/02/2019 –  9/02/2019 | CPU Scheduling: Scheduling Criteria and Algorithms: FCFS, SJF, Priority, Round Robin, Multilevel Queue Scheduling, Multilevel Feedback Queue Scheduling |
| Week 5 | 11/02/2019 –  16/02/2019 | History, Minimum system requirements, Boot and Root disks Starting and stopping Linux system, passwords logging in and out, terminal Handling commands: who, Understanding wildcards, Environment variables Understanding I/O Redirection and Piping: |
| Week 6 | 18/02/2019 –  23/02/2019 | Introduction, cut, paste, sort, tee; Introduction to Regular Expressions and grep . Using file system: Introduction to common types of files, Filenames, Introduction to different types of directories: Parent, Subdirectory, Home directory; rules to name a directory, Important directories in Linux File System, Absolute and relative filenames, |
| Week 7 | 25/02/2019 –  02/03/2019 | File and directory permissions using relative and absolute methods, Changing group ownership, umask settings |
| **Mid Semester Exam** | | |
| Week 8 | 11/03/2019 –  16/03/2019 | Deadlocks: Necessary and sufficient conditions for Deadlocks, Introduction to methods for handling deadlocks deadlock detection and recovery |
| Week 9 | 18 /03/2019 –  22/03/2019 | Memory Management: Logical vs Physical address space, Swapping, |
| Week 10 | 25/03/2019 –  30/03/2019 | Introduction to Paging, Segmentation, Virtual Memory-Demand paging Introduction to Page Replacement algorithms: FIFO, Optimal Page replacement and LRU |
| Week 11 | 1/04/2019 –  6/04/2019 | Process Management: Types of processes, ps, bg, fg, nice, kill. Understanding System Administration activities: Superuser (su) command, |
| Week 12 | 8/04/2019 –  12/04/2019 | Taking backups using tar, Managing disk space, Mounting and Un-mounting file system, Managing users, |
| Week 13 | 15/04/2019 –  20/04/2019 | Managing printers with lpd, mknod, lpc, lpq, lprm |
| Week 14 | 22/04/2019 –  27/04/2019 | Vi editor: starting vi, vi modes, inserting text, quitting vi, deleting text, copying and moving text, searching and replacing text. |
| Week 15 | 29 /04/2019 –  3/05/2019 | Revision |