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

**Teaching Plan Session Even Semester**

**(2017-18)**

**Class: BCA II Name of the Teacher:Anu Chawla**

**Subject:** Operating System Concepts and Linux **Period : 3rd (3-6)**

**Paper :** BCA-16-404 **Room No : 201**

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| **S. No** | **Date From** | **Date Upto** | | **Topics to be covered** |
| Week 1 | Jan 08, 2018 | Jan 13, 2018 | | Operating Systems (OS): Introduction, its needs and services, Types of OS: Multi-user, Multitasking, Multiprocessing and |
| Week 2 | Jan 15, 2018 | Jan 20, 2018 | | Real time Operating Systems, Parallel systems, Distributed system |
| Week 3 | Jan 22, 2018 | Jan 27, 2018 | | Introduction to Linux: Linux's shell, Kernel, Features of Linux, Important directories in Linux File System, Absolute and relative filenames |
| Week 4 | Jan 29, 2018 | Feb 3, 2018 | | logging in and out, terminal Handling commands: who, Understanding wildcards, Environment variables Understanding I/O Redirection and Piping: , History, Minimum system requirements, Boot and Root disks Starting and stopping Linux system, passwords |
| Week 5 | Feb 5, 2018 | Feb 10, 2018 | | 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, |
| Week 6 | Feb 12, 2018 | Feb 17, 2018 | | 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, File and directory permissions using relative and absolute methods, Changing group ownership, umask settings |
| Week 7 | Feb 19, 2018 | Feb 24, 2018 | | Process Management: Introduction to Process, PCB, Process States  Process Management: Types of processes, ps, bg, fg, nice, kill. |
| Week 8 | Feb 26, 2018 | Mar 03 , 2018 | | CPU Scheduling: Scheduling Criteria and Algorithms: FCFS, SJF, Priority, Round Robin, Multilevel Queue Scheduling, Multilevel Feedback Queue Scheduling |
| **2nd week March (Mid Semester Exam)** | | | | |
| Week 9 | March 12, 2018 | | March 17, 2018 | Deadlocks: Necessary and sufficient conditions for Deadlocks, Introduction to methods for handling deadlocks |
| Week 10 | March 19 , 2018 | | March 24, 2018 | deadlock detection and recovery Memory Management: Logical vs Physical address space, Swapping, |
| Week 11 | March 26, 2018 | | March 31, 2018 | Introduction to Paging, Segmentation, Virtual Memory-Demand paging |
| Week 12 | April 02, 2018 | | April 07, 2018 | Introduction to Page Replacement algorithms: FIFO, Optimal Page replacement and LRU |
| Week 13 | April 09, 2018 | | April 14 , 2018 | Understanding System Administration activities: Superuser (su) command, Taking backups using tar, Managing disk space, Mounting and Un-mounting file system, Managing users, |
| Week 14 | April 16, 2018 | | April 21, 2018 | Managing printers with lpd, mknod, lpc, lpq, lprm |
| Week 15 | April 23, 2018 | | April 28, 2018 | Vi editor: starting vi, vi modes, inserting text, quitting vi, deleting text, copying and moving text, searching and replacing text. |
| Week 16 | April 30, 2018 | | May 05, 2018 | Revision |