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

**Teaching Plan Odd Semester**

**Session (2017-18)**

**Class:** MS - 66 **Name of the Teacher:**Ms. Anu Chawla

**Subject:** Linux System Administration and Programming **Period :** 2nd (Mon-Thur)

**Paper :** MS – 66  **Room No :** 201

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| **S. No** | **Date From** | **Date Upto** | | **Topics to be covered** |
| Week 1 | July 22 & July 24 2017 | July 29, 2017 | | Classes Started from 11th Aug because of centralized counselling |
| Week 2 | July 31 2017 | Aug 5, 2017 | |
| Week 3 | Aug 7, 2017 | Aug 12, 2017 | | Introduction to Linux: Functions of an operating system, Linux's History |
| Week 4 | Aug 14, 2017 | Aug 19, 2017 | | different flavors of Linux, Minimum System Requirements for installing Linux:Using Linux: Starting and Stopping your Linux System |
| Week 5 | Aug 21, 2017 | Aug 26, 2017 | | Linux Shutdown Commands, Login, Passwords; Linux Error Messages, Search Paths, Input and Output Redirection, Man pages, Wildcards: \* and ?, Environment Variables process Commands: ps, kill, su command; GREP pattern searching command, vi text-editor. |
| Week 6 | Aug 28, 2017 | Sept 2, 2017 | | Using the File System : Files Overview, Common types of files, file and directory management commands, Absolute and relative filenames; pwd, cd, rm, cat, mkdir, mv, cp;, Important directories in the Linux file System: / , /home, /bin, /usr, /usr/bin, /usr/spool, /dev, /usr/bin, /sbin, /etc. |
| Week 7 | Sept 4, 2017 | Sept 9, 2017 | | File and Directory Permissions: File and Directory ownership, User and ownership, Groups, Changing group ownership, File Permissions, UMASK Setting, Changing File Permission, Changing directory permissions; |
| Week 8 | Sept 11, 2017 | Sept 16, 2017 | | Bourne Again Shell (BASH): Command-line Completion, Wildcards, Command History, Aliases, Pipelines, setting shell prompts, Job control, Customizing bash,bash variables. |
| Week 9 | Sept 18, 2017 | Sept 23, 2017 | | Shell Programming: Creating and Running Shell Programs, Using variables, Positional Parameters and other built-in Shell Variables; importance of quotation marks, test Command, Conditional Statements: if Statement, case Statement; Iteration Statements: for Statement, while Statement, until Statement, shift Command, select Statement, repeat Statement, Functions. |
| Week 10 | Sept 25, 2017 | Sept 29, 2017 | | Linux for System Administrators: System Administration Basics, The root Account, Starting and Stopping the System; Mounting File Systems: Mounting a Device, Creating a New file System, Un-mounting file Systems, Checking file Systems, Compressing files with gzip and compress: Using tar, Backups, Setting the Login Message, |
| **Autumn Break (30 Sept 2017- 09 Oct 2017)**  **Mid Semester Exam (10 Oct 2017 – 17 Oct 2017)** | | | | |
| Week 11 | Oct 18, 2017 | | Oct 21, 2017 | Setting of DNS, Ping |
| Week 12 | Oct 23, 2017 | | Oct 28, 2017 | WWW, and e-mail. |
| Week 13 | Oct 30, 2017 | | Nov 4, 2017 | PERL: Creating and Executing Perl Programs, Handling Data in Perl: Variables, Numbers, Strings, File Operators: Arrays, Perl Programming Constructs: Statement Blocks, |
| Week 14 | Nov 6, 2017 | | Nov 11, 2017 | If Statements, unless 5 Statements, for Statements, for each Statements, while Statements, until Statements, Functions: Passing Arguments to Functions, Using Return Values; Perl Operators. |
| Week 15 | Nov 13, 2017 | | Nov 18, 2017 | System Calls: C as System Programming Language, I/O system calls – umask(); create(); open(); read(); write(); lseek(); dup(); link(); access(); chmod(); chown(); Process management system calls; fork(); getpid(); getppid(); exit(); wait(); sleep() ; Signal system calls – kill(); signal(). |
| Week 16 | Nov 20, 2017 | | Nov 25, 2017 | Using LILO; Linux's fdisk. |
| Week 17 | Nov 27, 2017 | | Dec 1, 2017 | Revision |