**Post Graduate Govt. College for Girls, Sector-42, Chandigarh**

**Teaching Plan (Odd Semester) Session (2019-2020)**

**Class: M.Sc(IT)-I**   **Name of the Teacher: Ms. Anu Chawla**

**Subject: Linux Administration Period: Mon& Tue(Lecture 4),**

**and Programming Fri &Sat (Lecture 3)**

**Paper: MS-66 Room No: 201,101**

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| **S. No** | **Dates** | **Topics to be Covered** |
| Week 1 | 23-07-2019 to 27-07-2019 | -------- |
| Week 2 | 29-07-2019 to 03-08-2019 | Functions of an operating system, Linux's History, different flavors of Linux, Minimum System Requirements for installing Linux |
| Week 3 | 05-08-2019 to 10-08-2019 | Starting and Stopping your Linux System, Linux Shutdown Commands, Login, Passwords; Linux Error Messages, Search Paths, Input and Output Redirection, Man pages, Wildcards: \* and ? |
| Week 4 | 13-08-2019 to 17-08-2019 | file and directory management commands, Absolute and relative filenames; pwd, cd, rm, cat, mkdir, mv, cp;, Files Overview, Common types of files, Important directories in the Linux file System: / , /home, /bin, /usr, /usr/bin, /usr/spool, /dev, /usr/bin, /sbin, /etc. |
| Week 5 | 19-08-2019 to 24-08-2019 | File and Directory ownership, User and ownership, Groups, Changing group ownership, File Permissions, UMASK Setting, Changing File Permission, Changing directory permissions; |
| Week 6 | 26-08-2019 to 31-08-2019 | Shell Programming: Creating and Running Shell Programs, Using variables, Positional Parameters and other built-in Shell Variables; importance of quotation marks, test Command, |
| Week 7 | 02-09-2019 to 07-09-2019 | Bourne Again Shell (BASH): Command-line Completion, Wildcards, Command History, Aliases, Pipelines, setting shell prompts, Job control, Customizing bash,bash variables. |
| Week 8 | 09-09-2019 to 14-09-2019 | Conditional Statements: if Statement, case Statement; Iteration Statements: for Statement, while Statement, until Statement, shift Command, select Statement, repeat Statement, Functions. |
| Week 9 | 16-09-2019 to 21-09-2019 | Bourne Again Shell (BASH): Command-line Completion, Wildcards, Command History, Aliases, Pipelines, setting shell prompts, Job control, Customizing bash, bash variables. |
| Week 10 | 23-09-2019 to 28-09-2019  (Youth Festival 24-09-2019 to 27-09-2019) | Environment Variables, process Commands: ps, kill, su command; |
| Week 11 | 30-09-2019 to 05-10-2019 | GREP pattern searching command, vi text-editor. |
| **Mid Semester Exams** | | |
| Week 12 | 16-10-2019 to 19-10-2019 | PERL: Creating and Executing Perl Programs, Handling Data in Perl: Variables, Numbers, Strings, File Operators: Arrays, Perl Programming Constructs: Statement Blocks, If Statements, unless Statements, for Statements, for each Statements, |
| Week 13 | 21-10-2019 to 26-10-2019 | while Statements, until Statements, Functions: Passing Arguments to Functions, Using Return Values; Perl Operators. |
| Week 14 | 29-10-2019 to 02-11-2019 | Linux for System Administrators: System Administration Basics, The root Account, Starting and Stopping the System; Mounting File Systems: Mounting a Device, |
| Week 15 | 04-11-2019 to 09-11-2019 | 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,Setting of DNS, Ping, WWW, and e-mail. |
| Week 16 | 11-11-2019 to 16-11-2019 | Using LILO; Linux's fdisk  System Calls: C as System Programming Language, I/O system calls – umask(); create(); open(); read(); write(); lseek(); dup(); link(); |
| Week 17 | 18-11-2019 to 23-11-2019 | access(); chmod(); chown(); Process management system calls; fork(); getpid(); getppid(); exit(); wait(); sleep() ; Signal system calls – kill(); signal(). |
| Week 18 | 25-11-2019 to 30-11-2019 | Revision |