हिमाचलप्रदेशकेंद्रीयविश्वविद्यालय
Central University of Himachal Pradesh
(Established under Central Universities Act 2009)
**Academic Campus, Shahpur, Distt. Kangra, Himachal Pradesh-
176206**

Course Title: Linux and Shell Scripting Lab

Course Code: BIN 418

Total Hours: 20

Learning Outcomes: The outcomes of the subject is to ensure that a student can apply the knowledge of the following
- Linux administration
- File / Data management
- Stream processing

Course Content

What is Linux, Linux architectures: root, files system, standard directories general commands for files and directories cd, ls, cp, rm, mkdir, rmdir, pwd, file, more, less
Creating and viewing files using cat file comparisons
Essential Linux commands: Processes in Linux, Process fundamentals, Connecting processes with pipes, Redirecting input, Redirecting output, Background processing

Managing multiple processes, Process scheduling – (at,batch), nohup command,, kill, ps, who find, sort, touch, file, file processing commands – wc, cut, paste etc,
Mathematical commands – expr, factor etc
Creating files with editors: vi, vim, kate. Kwrite, pico etc

System administration
Common administrative tasks
Identifying administrative files
Configuration and log files
Role of system administrator
Managing user accounts -adding users
Managing user accounts -deleting users
Changing permissions and ownerships
Creating and managing groups
Modifying group attributes

Simple filter commands & Understanding various Servers.
Filter Commands-pr, head, tail
Filter Commands -cut, sort.
Filter Commands- uniq, tr.
Filter using regular expression grep.
Filter using regular expression egrep, sed Basics, Variables, Substitution & Quoting
Flow Control, Loops and Documentation
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