

Linux Operating System Syllabus

1) Linux installation on Virtual Box(Ubuntu installation)

2) Introduction to Linux

- i) What is meant by Operating System?
- ii) Need of Operating System?
- iii) What is Linux?
- iv) Characteristics of Linux OS?
- v) Features of Linux
- vi) Components of Linux
- **vii) Linux file System Hierarchy
- viii) Difference between Linux and Unix?

3) Linux Commands

- 1) Basic commands -pwd , exit, clear, date, cal
- 2) Commands execution flow
- 3) File System Navigation commands
- 4) ls command
- 5) Working with Directory
- 6) Working with Files
- 7) Compressing and Un-compressing files
- 8) Input and output commands and redirection
- 9) Sorting of content of files
- 10) find content in the files using uniq command
- 11) Working with editors
- 12) cut,mv,cp,scp commands
- 13) piping concept and Aliasing a commands
- 14) find command and locate command
- 15) head , tail , more , less
- 16) Regular Expression

Part 2: Shell Scripting or Shell programming

- 1) What is shell script and first script?
- 2) shell variables
- 3) variable substitution and command substitution
- 4) command line argument
- 5) How to read dynamic data from users?
- 5) operators
- 6) control statement
- 7) Arrays
- 8) shell script functions
- 9) Project on shell programming
- 10) Stream Editors
- 11) AWK programming
- 12) Project On awk programming

Part 3: Linux Administration Basics

- 1) JOB scheduling with crontab
- 2) User management
- 3) working with putty, Mobaxterm and Xshell
- 4) process management
- 5) communication commands (write ,wall, msg, mail)
- 6) package management
- 7) Job Controlling
- 8) nohup command
- 9) at command
- 10) Memory related commands
- 11) Networking related commands
- 12) working with winscp command
- 13) working with filezilla