

LECTURE PLAN FOR Vth SEMESTER 2014-2015

Code No.: ETCS 307

L T C

Paper: Linux & X-Windows Programming

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TOTAL TEACHING WEEKS IN SEMESTER : 14 Weeks

TOTAL LECTURE CLASSES AVAILABLE: 39

TOTAL TUTORIAL CLASSES AVAILABLE: 14

S. NO.	TOPICS TO BE COVERED	TOTAL NO OF LECTURE / TUTORIAL
1	Linux – The Operating System: Linux history, Linux features, Linux distributions, Linux’s relationship to Unix,	2
2	Overview of Linux architecture,	1
3	Installation, Booting, Login and Shutdown Process,	2
4	Start up scripts, controlling processes, system processes (an overview),	2
5	Linux Security, Networking on Linux: Preparing Linux for Networking, Network Installation, configuring network setting after installation,	2
6	User Management: Types of users, The powers of Root, managing users (adding and deleting): using the command line,	2
7	Shell scripts and GUI tools,	1
8	The Linux File System: Basic Principles, Pathnames, Mounting and Unmounting File Systems, Different File Types, File Permissions,	2
9	Disk Usage Limits, Directory Structure, The Ext2 and Ext3 File Systems, Check and Repair File Systems.	2
Ist TERMINAL EXAMINATION		
10	Shell in Linux: Available shells under Linux (viz. Bash, TCSH, Korn or so on)	2
11	Different shell features,	2
12	Editors, shell commands,	3
13	Shell scripts: shell variables, environmental variables,	2
14	Purpose of shell scripts, writing, storing and executing scripts,	2
15	Filters- The grep family, advanced filters-sed and awk,	3
16	Using the X-Windows System: What is X clients, servers and Windows Management.	2
IInd TERMINAL EXAMINATION		
17	Exploring X Applications X – Lib Programming Model, creating and managing windows,	2
18	Handling events: key board and mouse management,	2

S. NO.	TOPICS TO BE COVERED	TOTAL NO OF LECTURE / TUTORIAL
19	An overview of drawing graphics,	1
20	Text handling colormap and manipulation.	2
END TERM EXAMINATION		

TEXT BOOKS:

1. N. Barkakati, “X-Windows System Programming”, PHI, 2001
2. K. Cox, “Red Hat Linux Administrator’s Guide”, PHI, 2001
3. Michael Jain, “Red Hat Linux 9”, BPB Publications, 2003.
4. Peterson Richard, “The Complete References Linux”, 2nd Ed., Tata McGraw Hill, 2002.
5. Yashavant P. Kanetkar, “Unix Shell Programming”, BPB.
6. Neil Matthew and Richard Stones, “Beginning Linux Programming”, 3rd Edition, Wiley Publishing.
7. W. Richard Stevens, “UNIX Network Programming”, PHI..
8. Meeta Gandhi, Tilak Shetty and Rajiv Shah, “The C Odyssey UNIX – The Open, Boundless C”, BPB.
9. <http://www.gnu.org/gnu/thegnuproject.html>

REFERENCES BOOKS:

1. O’Reilly and Associates Vol. 0: Protocol Reference Manual, 1992.
2. O’Reilly and Associates Vol. 1: Xlib Programming Manual, 1992.
3. O’Reilly and Associates Vol. 2: Xlib Programming Manual, 1992.
4. Bach, “The Design of the Unix Kernel”, PHI, 2000.