DIPLOMA IN CYBER SECURITY

SL.No	Course Name	Theory	Practical	Credit	Weeks
SEMISTER-1					
1	Operating Systems(Windows7,Linux)	50	50	6	8
2	Networking Fundamentals	50	50	6	8
3	Networking Advanced	50	50	6	6
SEMISTER-2					
4	Security Managment	50	50	6	8
5	System Application Security	50	50	6	8
6	Project	100	Viva:20	2	4

SEMISTER-1

OPERATING SYSTEMS

WINDOWS 7

Windows-7	1	My Computer
	2	Recycle Bin
	3	Desktop
	4	Drives
	5	How to create a directoy/folder
	6	How to change to a directory/folder
	7	Creating a file in a directory/folder
	8	Make the file read only
	9	Make the file hidden
	10	Editing a file in a directory/folder
	11	Renaming a file in a directory/folder
	12	How To Delete a file in a directory/folder
	13	Listing the files in the directory
	14	Copy a file from one directory /folder to the other
	15	Deleting all files from a directory/folder
	16	Deleting a directory/folder
	17	Formatting a hard disk and loading Operating System

LINUX

1	INTRODUCTION	1	History Of Linux
		2	Distributions Of Linux
		3	Devises and drivers used
		4	File System Heirarchy
		5	The Components: Kernel, Distribution, XFree86, Sawfish, Gnome
2	User Software	6	GNOME Basics.
		7	Changing the screen resolution
		8	Evolution - the default e-mail client in Fedora
		9	Working with Mozilla - Web browser
		10	Working with OpenOffice - Word processor, spreadsheet, presentation software
		11	gaim - Chat application
		12	XScreensaver
		13	How user preferences are stored in your home directory
		14	Updating the system with up2date / yum
		15	How to restart X11: Ctrl-Alt-Backspace
		16	Deleting a directory/folder
		17	Formatting a hard disk and loading Operating System

3.	**COMMAND LINE**	18	The command-line commands
		19	File management commands
		20	Working with Nano.
		21	Working with the help(man).
		22	ssh - secure text-based connectivity to other machines. Demonstrate X-Forwarding.
		23	Managing compressed archives with zip and tar
		24	Working with the GNU screen
4	**Basic Administration**	25	How to add users and groups
		26	Working with su
		27	Working with sudo
		28	Changing user password
		29	Printing using CUPS
		30	Installing Software with Yum,yast,Rpm
		31	Installing Webmin
5	**System Admin-I**	32	logfiles. Using tail -f to watch /var/log/messages
		33	Kerberos authentication configuration
		34	Explaining file permissions, including setuid.
		35	Enabling and disabling services
		36	ntp - Setting up time synchronization
		37	Setting DNS service
		38	Changing XFree86 settings in /etc/XFree86/XFree86.conf
6	**Apache & MySql Admin**	39	Apache Webserver
		40	Mysql Database
		41	PHP
		42	Enabling PHP And MySql Services
		43	Working with PHPMyAdmin
		44	Installing Wordpress and Coppermine
7	**Windows Integration**	45	Connecting to your Linux machine from Windows using PuTTY and WinSCP
		46	Working with Wine and SAMBA,rdesktop,smbclient
		47	Working with smbmount,smb4k
8	**Automation**	48	Working with cut,sort,uniq,sed,tail,head,find
		49	Writing a shell script
		50	Scheduling tasks with cron
9	**System Admin –II**	51	Mounting disks
		52	Killing process using the Kill command
		53	Finding the software using freshmeat.net
		54	Using wget to fetch files
		55	Compiling software using configure, make, make install
		56	Fstab
		57	Working with find and du
		58	Single user mode

10	**Networking Tools**	59	Ping
		60	Traceroute
		61	telnet
		62	Nmap
		63	Lsof
		64	Ethereal
11	**Customizing the user environment**	65	Symbolic links
		66	Z shell
		67	Aliases including s types in zsh
		68	Variables
		69	Path
		70	Prompts
		71	Terminal transparency
		72	Adding things to X-Startup

NETWORKING FUNDAMENTALS

10	**Introduction To Networking Concepts**	73	Hardware and Networking
		74	Information Security concepts
		75	Security threats and vulnerables
		76	Cryptography/Encryption
11	**Information Security Concepts**	77	Information Security Overview
		78	Types Of Attacks and how to stop them
		79	Goals for security
		80	E-Commerce Security
		81	Computer Forensics
		82	Steganography
12	**Security Threats and Vulnerabilities**	83	Security threats
		84	Password Cracking
		85	Insecure Network Connections
		86	Malicious Code

		87	Programming Bugs
		88	Cyber Crime And Cyber Terrorism
13	**Cryptography / Encryption**	89	Cryptography/Encryption(Introduction)
		90	Digital Signatures
		91	Public Key Infrastructure
		92	Application of Crytography
		93	Tools And Techniques of Cryptography

NETWORKING ADVANCED

10	**Network Security**	94	Identification and Authorization
		95	Intrusion Detection System
		96	Intrusion Prevention System
		97	Cryptography/Encryption
11	**Server Management And Firewalls**	98	User Management
		99	Overview Of Firewalls
		100	Types of firewalls
		101	DMZ And Firewall Features

SECURITY MANAGEMENT

1	Security Management		Web Browser Security
		102	
		103	Email Security
		104	Physical Security
		105	Mobile security
		106	Cyber Security & Ethical Hacking
		107	Disaster recovery
2	security laws and standards to implement	108	ISO 27001
		109	Cyber Law (Information Technology Act, 2000)
		110	International Standards maintained for Cyber Security
		111	What is security audit and how it is done

SYSTEM AND APPLICATION SECURITY

10	Security Architectures and Models	112	Designing Secure Operating Systems
		113	Controls to enforce security services
		114	Information Security Models
		115	Cryptography/Encryption
11	System Security	116	Desktop Security
		117	email security: PGP and SMIME
		118	Web Security: web authentication, SSL and SET
		119	Database Security

12	**OS Security**	120	OS Security Vulnerabilities, updates and patches
		121	OS integrity checks
		122	Anti-virus software
		123	Configuring the OS for security
		124	OS Security Vulnerabilities, updates and patches
13	**Wireless And Network Security**	125	Wireless Network Components
		126	Securing a wireless network
		127	Tools And Techniques of Cryptography

PROJECT WORK

Sl.No	Contents
1	Client side visit
2	Requirement Gathering
3	Analysis
4	Project Completion
5	Client Side Implementation
6	Project Report Writing