ETHICAL HACKING

Pre-Requisites: Information Security.

Course Outcomes: By the end of the course students will

CO1: Learn various hacking methods.

CO2: Perform system security vulnerability testing.

CO3: Perform system vulnerability exploit attacks.

CO4: Produce a security assessment report

CO5: Learn various issues related to hacking.

UNIT I (10-Lectures)

Hacking Windows: BIOS Passwords, Windows Login Passwords, Changing Windows Visuals, Cleaning Your Tracks, Internet Explorer Users, Cookies, URL Address Bar, Netscape Communicator, Cookies, URL History, The Registry, Baby Sitter Programs.

UNIT II (10-Lectures)

Advanced Windows Hacking: Editing your Operating Systems by editing Explorer.exe, The Registry, The Registry Editor, Description of .reg file, Command Line Registry Arguments, Other System Files, Some Windows & DOS Tricks, Customize DOS, Clearing the CMOS without opening your PC, The Untold Windows Tips and Tricks Manual, Exiting Windows the Cool and Quick Way, Ban Shutdowns: A Trick to Play, Disabling Display of Drives in My Computer, Take Over the Screen Saver, Pop a Banner each time Windows Boots, Change the Default Locations, Secure your Desktop Icons and Settings.

UNIT III (10-Lectures)

Getting Past the Password: Passwords: An Introduction, Password Cracking, Cracking the Windows Login Password, The Glide Code, Windows Screen Saver Password, XOR, Internet Connection Password,

Sam Attacks, Cracking Unix Password Files, HTTP Basic Authentication, BIOS Passwords, Cracking Other Passwords.

UNIT IV (10-Lectures)

The Perl Manual: Perl: The Basics, Scalars, Interacting with User by getting Input, Chomp() and Chop(), Operators, Binary Arithmetic Operators, The Exponentiation Operator(**), The Unary Arithmetic Operators, Other General Operators, Conditional Statements, Assignment Operators. The?: Operator, Loops, The While Loop, The For Loop, Arrays, THE FOR EACH LOOP: Moving through an Array, Functions Associated with Arrays, Push() and Pop(), Unshift() and Shift(), Splice(), Default Variables, \$_, @ARGV, Input Output, Opening Files for Reading, Another Special Variables.

UNIT V (10-Lectures)

How does a Virus Work? What is a Virus?, Boot Sector Viruses (MBR or Master Boot Record), File or Program Viruses, Multipartite Viruses, Stealth Viruses, Polymorphic Viruses, Macro Viruses, Blocking Direct Disk Access, Recognizing Master Boot Record (MBR) Modifications, Identifying Unknown Device Drivers, How do I make my own Virus?, Macro Viruses, Using Assembly to Create your own Virus, How to Modify a Virus so Scan won't Catch it, How to Create New Virus Strains, Simple Encryption Methods.

TEXT BOOKS:

- 1. Patrick Engbreston, "The Basics of Hacking and Penetration Testing: Ethical Hacking and Penetration Testing Made Easy", 1st Edition, Syngress publication, 2011.
- 2. Ankit Fadia, "Unofficial Guide to Ethical Hacking", 3rd Edition, McMillan India Ltd, 2006.

REFERENCES:

1. Simpson/backman/corley, "Hands On Ethical Hacking & Network Defense International", 2nd Edition, Cengageint, 2011