



ARSD College, University of Delhi

Lesson Plan

Course Name : B.Sc.(H) – Practical						
Semester	Course Code	Course Title	Lecture (L)	Tutorial (T)	Practical (P)	Credit (C)
IV	32345402	GE – Information Security and Cyber laws	4	0	4	6
Teacher/Instructor(s)		Mr. Dharmendra Singh				
Session		2021-22				

Course Objective:

This course introduces the students to the concepts of information security and different type of attacks in the cyber space. The course also introduces countermeasures to mitigate attacks and different existing cyber laws.

Course Learning Outcomes:

On successful completion of this course, a student will be able to:

1. Analyze the network by using various tools.
2. Perform password cracking & their strength checking by using available tools.
3. Writing script to perform encryption/decryption.
4. Use of steganography tools.
5. Protecting different type of documents.

List of Experiments:

Details of the Lab Course		
Session	Name of Experiment	Contact Hours

1	Demonstrate the use of Network tools: ping, ipconfig, ifconfig, tracert, arp, netstat, whois	8
2	Use of Password cracking tools : John the Ripper, Ophcrack. Verify the strength of passwords using these tools.	8
3	Perform encryption and decryption of Caesar cipher. Write a script for performing these operations.	4
4	Perform encryption and decryption of a Rail fence cipher. Write a script for performing these operations.	4
5	Use nmap/zenmap to analyse a remote machine.	8
6	Use Burp proxy to capture and modify the message.	8
7	Demonstrate sending of a protected word document.	4
8	Demonstrate sending of a digitally signed document.	4
9	Demonstrate sending of a protected worksheet.	4
10	Demonstrate use of steganography tools.	4
11	Demonstrate use of gpg utility for signing and encrypting purposes.	4
	Total	60

Evaluation Scheme:

No.	Component	Duration	Marks
1.	End Semester Examination	4 hrs	50

Suggested Books:

Sl. No.	Name of Authors/Books/Publishers	Year of Publication/Reprint
1.	Manual of respected software/tools that are in use.	e-source
Mode of Evaluation:		End Semester Exam