UNIT - I

Syllabus :

1.1 Cybercrime, Categories of Cybercrime (Cybercrime against people, Cybercrime Against property, Cybercrime Against Government), Types of cybercrime (Violent- Cyber terrorism, Assault by Threat, Cyberstalking, Child Pornography, Non-violent - Cybertrespass, Cyber Theft, Cyberfraud, Destructive Cybercrimes), Computers' role in crimes

1.2 Hacking, Life cycle of Hacking, Types of Hackers (White Hat hackers, Black Hat hackers, Grey Hat hackers), Hacking techniques, Passive and Active Attacks, Social Engineering, Attacks vs Vulnerabilities, Prevention of Cybercrime.

UNIT II

Syllabus :

2.1 Objectives of digital forensics, Process of digital forensics, Types of digital forensics, Challenges faced by digital forensics

2.2 Introduction to Incident - Computer Security Incident, Goals of Incident Response, CSIRT, Incident Response Methodology, Phase after detection of an incident

UNIT III

Syllabus :

3.1 Digital evidence, Admissibility of evidence, Challenges in evidence handling, collecting digital evidence, Preserving digital evidence, Documenting evidence

3.2 Necessity of forensic duplication, Forensic duplicates as admissible evidence, Forensic image formats, Forensic duplication techniques, Disk imaging, Analysis of forensic images using FTK Imager

UNIT -IV

Syllabus :

4.1 Live/volatile data collection from Windows and Unix Systems

4.2 Investigating Windows systems, Investigating UNIX systems, Investigating applications, Web browsers, Email tracing

4.3 Recovering digital evidence, Acquiring, Analyzing and duplicating data: dd, dcfldd, foremost, scalpel

UNIT V

Syllabus :

5.1 Introduction to intrusion detection systems, Types of IDS, Understanding network intrusion and attacks

5.2 Analyzing network traffic, collecting network based evidence, Evidence handling. Investigating routers

UNIT -VI

Syllabus : Constitutional law, Criminal law, Civil law, Levels of law: Local laws, State laws, Federal laws, International laws. Levels of culpability: Intent, Knowledge, Recklessness, Negligence. CFAA, DMCA, CAN Spam

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