CYBER SECURITY

Objective: Student will acquire knowledge about the legal framework in context of cyber crime in India, acquire knowledge about the various organizations dealing with the cyber law , Acquire detailed know how about the security breaches that may be exploited.

Credits: 0X   **L–T–P: 2–0–0**

Module No.	Content	Teaching Hours
I	**Cyber Crime Introduction :** Cyber Crimes and Jurisprudence of Cyber Law, What is cyber law and IPRs, Need for cyber law, Evolution of key terms and concepts, Introduction of IT Act, Introduction Conventional Crime ,Cyber Crime, Reasons for Cyber Crime, Classification of Conventional and Cyber Crime, Difference between Conventional and Unconventional Cyber Crime, Cyber Criminal Mode and Manner of Committing Cyber Crime, Computer crime prevention measures	8
II	Application security (Database, E-mail and Internet), Data Security Considerations-Backups, Archival Storage and Disposal of Data, Security Technology-Firewall and VPNs, Intrusion Detection System, Access Control. **Security Threats** -Viruses, Worms, Trojan Horse, Bombs(logic, time, event), Trapdoors, Spoofs, E-mail viruses, Macro viruses, Malicious Software, Network and Denial of Services Attack, Threats on mobile devices, Security Threats to E-Commerce- Electronic Payment System, e- Cash, Credit/Debit Cards. Digital Signature, public Key Cryptography.	8
III	**Information Security Standards and IPRs**: Cyber Laws in India; IT Act 2000 provisions, Software License, Concept of Copyright and Patent in Cyberspace, Copyright in the Digital Medium, Copyright in Computer Programmes, Copyright and WIPO Treaties, Concept of Patent Right, Relevant provisions of Patent Act 1970	8

Text Books:

- CYBER SECURITY: UNDERSTANDING CYBER CRIMES, COMPUTER FORENSICS AND LEGAL PERSPECTIVES by NINA GODBOLE, SUNIT BELAPURE, WILEY, 1st Edition, (2011)

- Charles P. Pfleeger, Shari Lawerance Pfleeger, "Analysing Computer Security ", Pearson Education India.

- Dr. Surya Prakash Tripathi, Ritendra Goyal, Praveen kumar Shukla ,"Introduction to Information Security and Cyber Law" Willey Dreamtech Press.