

## **Deccan Education Society's**

# **Brihan Maharashtra College of Commerce** (AUTONOMOUS)

## 845, Shivajinagar, Pune-411004

Subject code - 4601

Semester - VI

Credit - 2

Subject title – Cyber Security (Revised 2017) Objectives:

- 1. To understand various types of Cybercrime
- 2. To understand fundamentals of Cyber security

Unit	Topics				
No.					
1	Introduction to Cyber Crime and Cyber Security				
	<ul> <li>Introduction</li> </ul>				
	Cybercrime and Information Security				
	<ul> <li>Data Privacy and Data Protection</li> </ul>				
	Difference between Data privacy and Data protection				
	Governing laws of Data privacy and Data protection in				
	India and their model laws				
	Challenges posed by Cyber Crime.				
2	Cyber Law and Information Technology Act, 2000				
	Introduction				
	Cybercrime and the Legal Landscape around the World				
	Why Do We Need Cyberlaws: The Indian Context				
	<ul> <li>Information Technology Act, 2000</li> </ul>				
	Amendments and important definitions (Information				
	Technology Act, 2000)				
	<ul> <li>Indian Scheme of offences &amp; punishment</li> </ul>				
	Types of Cybercrimes and contraventions:				
	E-mail Spoofing, Spamming, Salami attack, Internet				
	Time Theft, Web Jacking, Identity theft, Cyberstalking,				
	Hacking, Software Piracy, Computer Network Intrusions,				
	Usenet Newsgroup as the Source of Cybercrimes,				
	Password Sniffing, Credit Card Frauds, Email bombing				
	Contraventions: Sections 43 to 45				

Tools and Methods Used in Cybercrime Phishing **Password Cracking** Keyloggers and Spywares Virus and Worms Trojan Horses and Backdoors DoS and DDoS Attacks **SQL** Injection CIA triad • Digital Signature and Electronic Signature E- commerce under Information Technology Act, 2000 and other important laws

#### **Cyber Law: International Perspective** 3

- EDI: Concept and legal Issues.
- UNCITRAL Model Law.
- Cryptography
- Cryptocurrency and security issues
- Metaverse, Internet of Things and other recent developments in cyberspace and cybersecurity
- EU Convention on Cyber Crime

#### 4 **Intellectual Property in Cyberspace**

- Meaning and types of IPRs
- Copyright issues in cyberspace
- Trademark issues in cyberspace
- Other IPR related issues in cyberspace
- Protection of IPR
- International Law governing IPR

### Suggested Reference Material –

- 1. Information Systems Security Management by Nina S. Godbole (Wiley India Pvt.Ltd.)
- 2. Computer Security: Principles and Practice -William Stallings and Lawrie Brown, 3rd edition, Pearson, 2015.
- 3. Cyber Security Essentials- James Graham Richard Howard Ryan Olson
- 4. Cyber Security Nina Godbole and Sunit Belapure, Wiley