Authority Of India, Penalties And Compensation, Appellate Tribunal, Finance, Accounts And Audit, Offences, Miscellaneous (12 hours)

#### **UNIT III**

General Data Protection Regulation(GDPR), 2018 of European Union: General provisions, Principles, Rights of the data subject, Controller and processor, Transfers of personal data to third countries or international organisations, Independent supervisory authorities, Cooperation and consistency, Remedies, liability and penalties, Provisions relating to specific processing situations, Delegated acts and implementing acts, Final provisions. (12 hours)

#### **Text Books:**

- (1). "The Information Technology Act", 2000
- (2). "The Personal Data Protection Bill", 2019
- (3). "General Data Protection Regulation(GDPR)"- Official Journal of the European Union, 2016, <a href="https://gdpr-info.eu/">https://gdpr-info.eu/</a>
- (4). "The Information Technology ACT", 2008
- (5). "A Free and Fair Digital Economy, Protecting Privacy, Empowering Indians"- Expert Committee Report under the Chairmanship of Justice B.N. Srikrishna, 2018
- (6). "Computer Forensics and Cyber Crime An Introduction"- Marjie T. Britz, Pearson, Third Edition, 2013

## CSCS 507 : eCommerce Site Security

**CO1**: To assess the vulnerabilities available in a eCommerce website, with a written consent from the owner of the website.

**CO2:** To master various tools available for the eCommerce web penetration testing and to make sure that the reports are generated as per the legal requirements.

CO3: To understand all the strategic steps necessary to perform the web penetration testing

professionally and to be legally compliant, and in turn feed back the site design team with the necessary inputs for updation.

**CO4:** To encourage the students to take up eCommerce site design as a profession and make a living out of it.

### **UNIT I**

**Applying Security Principles to E-Business:** Security as a Foundation, Applying Principles to Existing Sites, How to Justify a Security Budget, **DDoS Attacks:** Intent, Tools, and Defense, DDoS Attack, Reasons for E-Commerce Sites becoming the Prime Targets for DDoS, Motivations for an an Attacker to damage ecommerce sites, Some of the Tools used by attackers to Perform DDoS Attacks, **Secure Web Site Design:** Choosing a Web Server, The Basics of Secure Site Design, Guidelines for Java, JavaScript, and Active X, Designing and Implementing Security Policies.

(12 hours)

### UNIT II

Implementing a Secure E-Commerce Web Site: Implementing Security Zones, Understanding Firewalls, Implementing Intrusion Detection, Managing and Monitoring the Systems, Pros and Cons of Outsourcing Your Site, Securing Financial Transactions: Understanding Internet-Based Payment Card Systems, Options in Commercial Payment Solutions, Examining E-Commerce Cryptography, Hacking Your Own Site: Anticipating Various Types of Attacks, Performing a Risk Analysis on Your Site, Testing Your Own Site for Vulnerabilities, Disaster Recovery Planning: The Best Defense.

(12 hours )

# **UNIT III**

Handling Large Volumes of Network Traffic: Determining the Load on Your Site, Managing Bandwidth Needs, Introduction to Load Balancing, Incident Response, Forensics and the Law: Importance of Incident Response Policy, Establishing an Incident Response Team, Establishing an Incident Response Process, Introduction to Forensic Computing, Tracking Incidents

(12 hours)