

University of Pune

Pattern 2013

Class:- M.C.A(Commerce) Sem-IV

Subject:- Cyber Law and Information Security (407)

**Objective:-**

1. To learn different cyber laws
2. To know Information Security Techniques

Chapter No	Topic	No of lectures	Ref. Book
Chapter 1	<b>Chapter 1: Intellectual Property Laws</b> -Copyright -Patents -Registered design -Design right -Trade marks	4	1
Chapter 2	<b>Chapter 2: New Technology and Copyright</b> -Copyright protection for computer programs -Literal and Non-Literal copying of computer program -Copyright and electronic publishing	3	1
Chapter 3	<b>Chapter 3: Cyber Law and IT Act</b> -Fundamentals of cyber law -Introduction to Indian cyber law -Information Technology Act 2000 -Digital Signature. -Electronic Governance. -Attribution, Acknowledgement and Dispatch of Electronic Records. -Secure electronic Records and Secure Digital Signatures. At least two case studies. -Regulation of certifying Authorities. At least two case studies. -Duties of Subscribers. At least two case studies.	8	1,5
Chapter 4	<b>Chapter 4: Introduction to Information Security</b> -History of Information Systems and	4	3, 4

	its Importance -Changing Nature of Information Systems -Basic Principles of Information Security, Confidentiality, Integrity and Availability		
Chapter 5	<b>Chapter 5: Classical Encryption Techniques</b> -Symmetric Cipher Model -Substitution Techniques -Transposition Techniques -Rotor Machines -Steganography	10	2
Chapter 6	<b>Chapter 6: Public Key Cryptography and RSA</b> - Principles of public key cryptosystems - The RSA algorithm	6	2
Chapter 7	<b>Chapter 7: IP and Web Security</b> -IP security overview -IP security architecture -Authentication Header -Encapsulating Security -Web security consideration -Secure socket layer and Transport layer security -Secure electronic transaction	8	2
Chapter 8	<b>Chapter 8: Firewalls</b> - Firewall design principles - Trusted system	2	2

### Reference Books:

- 1) Cyber Laws- Krishna Kumar Dominant Publishers And Distributors
- 2) Cryptography and Network Security –William Stallings, Pearson Education.
- 3) Information Systems Security- Godbole, Willey Publication
- 4) Information Security- Merkov, Breithaupt , Pearson Education
- 5) Cyber Law in India — Dr. Farooq Ahmad (Published By- Pioneer Books)