

Roll No. ....

Total Pages : 2

**BT-8/M-24**

**48249**

## **CYBER SECURITY**

Paper-OE-CS-402A

Time Allowed : 3 Hours]

[Maximum Marks : 75

**Note** : Attempt **five** questions in all, selecting at least **one** question from each Unit. All questions carry equal marks.

### **UNIT-I**

1. (a) What is Cyber Extortion? Briefly discuss Sophisticated Cyber Extortion techniques. Write best practices to reduce the risk of Cyber Extortion. 8
- (b) What is the Scope and Nature of Cyber-crimes? Explain different types of Cyber Crimes. 7
2. Discuss the following:  
(a) Explore the strength of Data Encryption Standard (DES). Differentiate between Differential and Linear Crypt Analysis of DES. 8
- (b) Discuss the principles of Block Cipher. Discuss several operations of Block Cipher. 7

### **UNIT-II**

3. (a) Explain Pretty Good Privacy (PGP) & S/MIME. 8
- (b) What is Secure Hash Algorithm (SHA)? Why SHA algorithm is used for? 7



4. (a) Write about Digital Signature Standards (DSS). Discuss proof of digital signature algorithm. 8
- (b) Differentiate between Kerberos and X.509. Discuss the main components of Kerberos. How does it work ? 7

### UNIT-III

5. (a) Differentiate between Active and Passive Attacks. Discuss the different ways to Prevent Cyber Crime. 8
- (b) Explain about Network based Intrusion detection system. 7
6. (a) Explain Secure Electronic Transaction (SET) 8
- (b) Define Firewall and describe three types of Firewall. 7

### UNIT-IV

7. What is Digital Forensic? Explain the types of Digital Forensic discuss the challenges faced by Digital Forensic. 15
8. (a) Write notes on the following : 8
- (i) Digital Signatures and the Indian IT act.
- (ii) Architecture of IP Security.
- (b) Why do we need Cyber Laws? Discuss the legal perspective of Cyber Crimes and Cyber Security. 7