Unit I

1. What do you understand by Cryptography? What is the difference between symmetric and asymmetric cryptography? Discuss.

2. Write short notes on the following:
   (a) Digital Signature
   (b) Substitution Cipher.

Unit II

4. What do you understand by Bohr bugs and Heisen bugs? How are these different? Explain using suitable examples.

Unit III

5. (a) What do you understand by Trojan horse? How are these different from computer viruses? Explain.

(b) What is Network Security? Explain various types of attacks in detail? How can we overcome these attacks?

6. (a) Write a detailed note on Kerberos protocol? What are its drawbacks and limitations? Explain.

(b) What is botnet? Write a detailed note on the mechanism of Distributed Denial of Service (DDoS) attack.

Unit IV

7. (a) Explain Protocol vulnerabilities? Write a note on TCP/IP protocol vulnerability?
(b) What do you understand by Denial of Service (DoS) attacks? How are these carried out? Discuss.

8. (a) What is Intrusion Detection System?

(b) What is Firewall? How is it useful in providing network security?