

22672

**M.Tech. 3rd Semester (CSE) CBCS Scheme
Examination, December-2017**

NETWORK SECURITY

Paper-16CSE23C2

Time allowed : 3 hours] [Maximum marks : 100

Note : Attempt five questions selecting one question from each unit and question no. 1 is compulsory.

1. Write a short note on the following :
 - (a) What is steganography? 5
 - (b) Explain the avalanche effect. 5
 - (c) Discuss electronic money. 5
 - (d) What is Honeypot? Briefly explain. 5

Unit-I

2. What is OSI Security architecture? How this architecture focuses on security attacks, security mechanism and security services? 20
3. (a) Explain the network security model in detail. 10
(b) What is symmetric cipher model? Explain with diagram. 10

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Unit-II

4. (a) What is Public key cryptography ? Explain the process of Data Encryption standard with their algorithm. 10
- (b) What is the difference between diffusion and confusion ? 10
5. (a) What is the difference between Elliptic curve arithmetic and RSA ? How Elliptic curve arithmetic is better than RSA ? 10
- (b) What is Diffie-Hellman Key Exchange ? Explain with the algorithm. 10

Unit-III

6. (a) Describe the concept of Internet protocol security. Explain various applications of IPsec. 12
- (b) How Transport layer security is achieved ? 8
7. (a) How Secure Socket Layer play an important role in Internet security ? Explain briefly. 10
- (b) What is the difference between Socket secure layer (SSL) and secure electronic transactions (SET) ? 10

Unit-IV

8. (a) What is intrusion detection system ? Explain various approaches to intrusion detection ? 10
- (b) How firewall plays important role in system security ? Explain various types of firewalls. 10
9. Write a short note on : 20
- (a) Practical implementation of cryptography and security.
- (b) Discuss various firewall design principles.