

Roll No.

Printed Pages : 2

BT-6 / M-15

NETWORK MANAGEMENT AND SECURITY

Paper-CSE-306

Time allowed : 3 hours]

[Maximum marks : 100

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

Unit-I

1. Describe the following kind of attacks :

- (a) Attacks threatening Confidentiality.
- (b) Attacks threatening Availability.
- (c) Attacks threatening Integrity.

What kind of mechanisms and techniques can be used to counter these attacks ?

2. (a) Define a cryptographic hash function and explain its use in security.

(b) What security services are provided by digital signature ?

Unit-II

3. (a) Distinguish between Mandatory and Discretionary access control.

(b) What are the goals of Confidentiality model ?

(2)

4. (a) What kind of security policy is dealt by Chinese Wall model ? Compare Bell-La Padula and Chinese Wall Models.
- (b) What are the common security related programming problems ?

Unit-III

5. Describe how PGP and S/MIME can provide security services for E-mail.
6. Describe the following in the context of IPsec :
 - (a) Application of IPsec in transport and tunnel modes.
 - (b) Authentication and Confidentiality through IPsec.

Unit-IV

7. ✓ Describe the vulnerability issues related to the Internet and the Transport layer protocols of TCP/IP model.
8. ✓ Describe the following in the context of Firewalls :
 - (a) Firewall characteristics.
 - (b) Types of Firewalls.