

VI/SEM/CSE/IT/2016 (S)
New

CRYPTOGRAPHY AND NETWORK SECURITY

Sub Code-CST-603

Full Marks : 70

Time : 3 hours

Answer any five questions

The figures in the right-hand margin indicate marks

1. (a) Define Digital Signature. 2
(b) Explain PKIA Model. 5
(c) Define Firewall. Explain different types of Firewalls. 7
2. (a) Distinguish between Plain text and Cipher text. 2
(b) Explain what are the key principles of security. 5
(c) Describe symmetric and asymmetric key cryptography. 7
3. (a) What do you mean by IP Security ? 2
(b) Describe SSL and explain how it works. 5

(Turn Over)

- (c) What is a Digital Certificate ? Explain the procedure for creation of DC. 7
4. (a) Define Virus. Name two virus. 2
- (b) What do you mean by DES ? Explain how does DES works. 5
- (c) Describe different types of attack to a comp. system. 7
5. (a) Define Password. 2
- (b) What are different key aspects of algorithm ? Explain different algorithm modes. 5
- (c) Define Biometric Authentication. Explain its working principle. 7
6. (a) Distinguish between encryption and decryption. 2
- (b) Explain the differences between substitution and transposition techniques. 5
- (c) What are different types of header files inside TCP server ? Explain it. 7

(3)

7. Write short notes on any *four* :

3.5 × 4

(a) Smart Card

(b) VPN

(c) Digital Signature

(d) TCP/IP

(e) SHTTP

(f) Authentication Token.
