NF-146

December-2015

5th Year M.Sc. (CA & IT)

Cryptography

Time : 3 Hours]   **[Max. Marks : 100**

1. Answer any **Five** in detail :   **20**
    1. Explain any four principles of security in detail.
    2. Explain following terms :
        i. Virus
        ii. Cookies
    3. Encrypt the text "CRYPTOGRAPHY EXAMINATION" with the keyword "PLAYFAIR EXAMPLE" using playfair cipher.
    4. Explain Diffie-Hillman Key Exchange/Agreement Algorithm with example.
    5. Explain DES with diagram.
    6. Explain Cipher Block Chaining Mode and Counter Mode in detail.

2. Answer any **Four** in detail.   **20**
    1. Explain RSA with example.
    2. Explain following terms :
        i. Cross-Certification
        ii. Certificate Revocation
    3. Explain MD5 in detail and differentiate MD5 and SHA1.
    4. Explain Digital Certificate along with its types.
    5. Explain Password Based Encryption Standard and Cryptographic Token Interface Standard in detail.

3. Answer the following in detail.   **20**
    1. Explain SSL in detail and differentiate between SSL and TLS.
    2. Explain SET in detail.
    3. Explain how PGP works and also explain Key Rings.
    4. Explain Wireless Application Layer Security.

4. Answer the following in detail.   **20**
    1. Explain Authentication Tokens and its Types.
    2. Explain Kerberos in detail.
    3. Explain Security in Cloud Computing.
    4. Explain JAVA Cryptographic Framework.

5. Answer the following in detail.   **20**
    1. Explain Firewall and its types along with its limitations.
    2. Explain VPN in detail.
    3. Explain TCP segment format.
    4. Explain following terms :
        i. Network Address Translation
        ii. IPSec

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