

Security Assignment

Instruction:

- **Use any reference materials and discuss on the following concepts in detail.**
- **Every member in the group should have equal participation.**
- **We will have presentation on your work and I will select presenter randomly.**
- **The number of members per group is not more than 5.**

Question Number. 1.

- What is biometric encryption and list types of biometric encryption techniques and discuss them in detail.

Question Number. 2.

- Discuss the following cipher techniques in detail with example.
 - A. Playfair cipher
 - B. Hill cipher

Question Number 3.

- What is Data Encryption Standard (DES)?
- Discuss the steps in detail.

Question Number 4

- Discuss the following cipher techniques in detail with example.
 - A. Rotor cipher
 - B. Enigma machine

Question Number 5

- Public key cryptography principles and algorithms

Question Number 6.

- Diffie-Hellman key exchange algorithm
- The RSA algorithm
 - Description of the algorithm
 - The security of RSA

Question Number 7.

- Message Authentication Approaches and Digital Signature

Question Number 8

- **Advanced Encryption Standard (AES)**
 - AES structure: general and detail structure
 - AES transformation functions