Information Technology [Chapter 2 Mid Questions]

2 Marks

1. Describe Steganography in brief.
2. Find Cipher Text for following Plain text and key
   - Plain Text :- All the best
     Key :- 11
3. Find Cipher Text for following Plain text and key using Ceaser Cipher
   - Plain Text :- Cryptography
     Key :- 5
4. Write down difference between Steganography and Cryptography.
5. Write down difference between Encryption and Steganography.
6. Find Ceaser Cipher.
   - Plain Text :- We are discovered
     Key :- 13

   - Plain Text :- Security
     Key :- 7

   - Plain Text :- Information
     Key :- 9

   - Plain Text :- Technology
     Key :- 2

   - Plain Text :- Information Security
     Key :- 5
7. Differentiate Substitution Technique and Transposition Technique.

5 Marks

1. Enlist and Explain Ingredients of a Symmetric Cipher model.
2. What is symmetric encryption ? Describe key terms used in symmetric encryption.
3. Explain symmetric cipher model with a suitable Diagram.
   1 2 3 same answer…..
4. Enlist Transposition Technique and explain any one with suitable diagram.
5. Enlist Substitution Technique and explain any one with suitable diagram.

6. Find the cipher text for following plain text and key using Playfair cipher.
- Plain Text :- Playfair cipher has a great advantage over monoalphabetic cipher.
- Key :- Umbrella
7. Find the ciphertext for following Plaintext and key using railfence technique.
- Plain Text:- sometime later become never
   Key :-4
8. Find the ciphertext for following plaintext and key using polyalphabetic cipher.
- Plain Text :- One time pad use random keys
   Key :- Accept

9. Find the ciphertext for following plaintext and key using columnar cipher.
- Plain Text :-Early to bad and early to rise
   Key :-World

10. Find hill cipher
- Plain Text:- [29 7   2]
   Key :-   [2   9 8]
              [0   5 7]
              [4   6 3]
11. Find Columnar cipher
- Plain Text :- Do not talk until you are proud
   Key :- Worth
12. Find Playfair cipher
- Plain Text :- Hill cipher is a multi letter cipher
   Key :- Cryptography
13. Find Polyalphabetic cipher
- Plaintext :- Plaintext can be hidden in two ways
   Key :- Afford
14. Find Railfence cipher
- Plain Text :- Work for it more than you hope for it
   Key :- 7

15. Find hill cipher

- Plain Text :- [11   20   9]

  Key :-   [1   2   3]

  [2   3   4]

  [3   4   5]

16. Explain Steganography in detail.