

CHAPTER 2 ASSIGNMENT

DATE:22/7/2024

NOTE: SOLVE THIS ASSIGNMENT AND SUBMIT ON 26/7/2024

1. Find the cipher text for following plain text and key using columnar technique:

PT: The German army surprise the allies with a swift attack

Key: describe

2. Find the cipher text for following plain text and key using playfair cipher:

PT: Playfair cipher has a great advantage over monoalphabetic cipher

Key: DIPLOMA

3. Find the cipher text for following plain text and key using rail fence technique:

PT: Aim for sun may be you hit the star

Key: 3

4. Find the cipher text for following plain text and key using rail fence technique:

PT: There are no regrets in life.

Key: Be positive.

5. Find the cipher text for following plain text and key using hill cipher:

$$\text{PT: } \begin{pmatrix} 2 \\ 3 \\ 4 \end{pmatrix}$$

$$\text{Key: } \begin{pmatrix} 1 & 0 & 2 \\ 2 & 3 & 0 \\ 4 & 0 & 1 \end{pmatrix}$$

6. Find the cipher text for following plain text and key using columnar technique:

PT: Punctuality is essential.

Key: earth

7. Find the cipher text for following plain text and key using hill cipher:

$$\text{PT: } [11 \quad 20 \quad 9]$$

$$\text{Key: } \begin{bmatrix} 1 & 2 & 3 \\ 2 & 3 & 4 \\ 3 & 4 & 5 \end{bmatrix}$$