# Siddaganga Institute of Technology, Tumkur-572103

Department of Computer Science and Engineering

**CRYPTOGRAPHY AND NETWORK SECURITY LAB (7CSL02)**

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| Student Name: | | | USN: | Batch No: | | Date: | |
| **Evaluation:** | | | | | | | |
| **Write Up (10 marks)** | **Clarity in concepts (10 marks)** | **Implementation and execution of the algorithms (10 marks)** | | | **Viva (05 marks)** | | **Total (35 marks)** |
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| Sl.No | Name of the Faculty In-Charge | | | | | | Signature |
| 1. |  | | | | | |  |
| 2. |  | | | | | |  |
| **Question No: 4**  Write a program to perform encryption and decryption using transposition technique with column permutation given as key. | | | | | | | |
| **Transposition technique:**  Write the message in a rectangle, row by row, and read the message off, column by column, but permute the order of the columns. The order of the columns then becomes the key to the algorithm.  Example:  Key: 4 3 1 2 5 6 7  Plain text: a t t a c k p  o s t p o n e  d u n t i l t  w o a m x y z  Cipher text: TTNAAPTMTSUOAODWCOIXKNLYPETZ  Let us consider the key is 4312567. To encrypt, start with the column that is labeled 1, in this case column 3. Write down all the letters in that column. Proceed to column 4, which is labeled 2, then column 2, then column 1, then columns 5, 6, and 7. | | | | | | | |