

1st Assignment

**SUBJECT: CRYPTOGRAPHY AND NETWORK SECURITY
(MCSE4-206)**

Q 1: Describe, in the brief following security services...

(a) Confidentiality. (b) Traffic confidentiality. (c) Access control. (d) Data Integrity. (e) Non-Repudiation.

Q 2: What is a transpose cipher? Illustrate an example. What is steganography?

Question-8 Solve with the hill cipher.

Plain text: "POH"

Key: GYBNQKURP

Q 3: Briefly define a Group, Ring and field. If every element of group G is its own inverse then group Gs commutative. Prove

Q 4: Describe the Fermat and Euler's Theorem? What is Euler Totient and describe also its limitations.