## **Practice Sheet 1**

**Due Date:** Mar 8, 2011

## Q1: Given the Ciphertext;

"Nsgre fhpprffshy cebivfvba bs QFY fghqrag cnpxntr, RIB fghqrag cnpxntr vf orvat vagebqhprq va beqre gb snpvyvgngr fghqragf jvgu zbovyvgl nf jryy va nqqvgvba jvgu ybj pbfg uvtu fcrrq vagrearg. Ol ninvyvat guvf snpvyvgl, fghqragf jvyy or noyr gb npprff vagrearg naljurer veerfcrpgvir bs gurve ybpnyvgl. Va guvf ertneq, UD AHFG erdhverf lbhe srrqonpx nobhg gur cebcbfrq fghqrag cnpxntr juvpu jvyy or ng qvfpbhagrq engrf. UD AHFG jvyy sbezhyngr n srnfvoyr naq pbfg rssrpgvir cyna juvpu jvyy or onfrq ba lbhe srrqonpx. Cyrnfr pyvpx urer gb fryrpg sebz tvira bcgvbaf ol 18 Sro, 2011.Ybbxvat sbejneq sbe lbhe inyhnoyr srrqonpx ng gur rneyvrfg."

It is known that the above ciphertext is encrypted using ROT-13 Cipher, Perform the Cryptanalysis:

Q2: Given the Message and K=6, Encrypt the following Message using Railfence Cipher:

M = "A Quick Brown Fox Jumps Over all the Lazy Dogs"

Q3: The Key for Transposition Cipher is "CRYPTOGRAPHY", Encrypt the following Message;

M = "A Quick Brown Fox Jumps Over all the Lazy Dogs"

## Q4: Given Ciphertext is;

"Xofolavd Umffcbc mk Eobjafe, a um citualomjaf aji umjeloltcji Uaxpte mk Jalomjaf Tjohcveold mk Euocjuce aji Lcurjmfmbd JTEL, oe icioualci Im aihajuojb njmzfcibc aji citualojb elticjie oj euocjuc, aji lcurjmfmbd. Lrc umffcbc rae umxc a fmjb zad oj Irc roelmvd. Lrc epovol mk Irc ojeloltlomj rae jml urajbci mhcv Ircec dcave. Rcvc Irc ktjiaxcjlaf ptvpmec oe Im uraffcjbc elticjie Im vcafogc Ircov robrcel pmlcjloaf. Lrc umffcbc pvmhoice aj cjhovmjxcji zrcvc ojlcffcul aji avl, uravaulcv aji vceofocjuc avc jtvltvci aji urcvoerci. Mtv elticjie qcumxc cyucffcji zvolcve aji umxxtjoualmve. Lrcd avc aqfc Im vcaemj uvolouaffd oj Irc zmvfi mk Cjbojccvojb, Xalrcxaloue, Qteojcee aji Euocjuc zolr Irc aqofold Im vcaur mtl Im aff Idpce mk fcavjcve. Zc aox Im pvmituc bvaitalce zrm vcepmji zolr tjicvelajiojb aji umxpaeeomj Im Irc umxpfcyold mk Irc rtxaj umjiolomje."

It is also known that it is encrypted using the Simple Substitution Cipher, perform Cryptanalysis?