Examples – Keyword Ciphers & Frequency Analysis

1. The following cipher alphabet was constructed using a keyword columnar transposition scheme. What was the keyword used?

B   C   L   V   A   D   M   W   I   E   P   X   N   F   Q   Y   G   H   R   Z   T   J   S   O   K   U

2. Decipher the following message, and determine what kind of substitution cipher was used.

YMJDY MTZLM YNYYT GJZSG WJFPF GQJFS ISTYB NYMTZ YLTTI WJFXT SJSNL RFXHT RUQJC NYDBF XGJBN

QIJWN SLYDU NSLNS FQJYY JWTKU QFNSL JWRFS NSYTY MJRFH MNSJX JSYJQ JHYWN HFQNR UZQXJ

XYMWT ZLMFX JWNJX TKWTY FYNSL BMJJQ XJQJH YWNHF QHTSY FHYXF SIBNW JXYTU WTIZH JYMJJ

SHNUM JWJIQ JYYJW BMNHM QNYZU TSFUF SJQFG TAJYM JPJDG TFWIG DYDUN SLYMJ WJXZQ YNSLH

TIJNS YTMNX TBSRF HMNSJ YMJWJ HNUNJ SYXFB YMJIJ HNUMJ WJIRJ XXFLJ QNLMY ZUQJY YJWGD

QJYYJ WYMJW TYTWX FSIBJ XYTK YMJRF HMNSJ HTZQI GJHTS KNLZW JINSR FSDRF SDINK KJWJS

YBFDX YMJTI IXFLF NSXYF SDTSJ BMTIN ISTYP STBYM JXJYY NSLXG QJYYT GWJFP JSNLR FBJWJ

FXYFL LJWNS LTSJM ZSIWJ IFSIK NKYDR NQQNT SRNQQ NTSRN QQNTS YTTSJ

3. Decipher the following message, and determine what kind of substitution cipher was used.

DJQCT JKNQC TNJON DQDPC DPHTP QCTST HQDSQ NDOTP GJKWJ RPQCT LDSQP SKTXD PQTEA KNSTJ

QUNDT PRHKJ BPDET HDQTN RQTSU HQUNT PPUSC RPQCT NKIRJ PQCTD NDPCR JEQCT RJBHK PRXKJ

PQCTY WTNTQ CTKEE PKSDT QYKUQ DJQCR QQCTY EDEJQ HTRVT RJYWN DQQTJ NTSKN EPRYP NKOHT

TKAQC TUJDV TNPDQ YKATX TQTND JTJBH RJEPR VTAKN PKITI YPQTN DKUPH KKGDJ BPTQP KAPYI

OKHPK JPQKJ TPRJE FTWTH PHTTR JECDP SKWKN GTNPJ KWSHR DIQCR QQCTP YIOKH PRNTW NDQQT

JHRJB URBTL TNCRL PQCTL DSQPW TNTJK QDHHD QTNRQ TRAQT NRHHH TTPQT RIRQQ RSGTE QCTLN

KOHTI WDQCI RQCWN DQQTJ HRJBU RBTPR NTEDP QDJBU DPCRO HTANK INRJE KIPTM UTJST PKAPY

IOKHP OTSRU PTQCT YSKJQ RDJPK ITPQR QDPQD SRHLN TEDSQ RODHD QYQCT LRLTN PCKWP QCRQQ

CTLDS QDPCP YIOKH PRNTS CRNRS QTNPK ARHTX DSKBN RLCDS WNDQQ TJHRJ BURBT HTTPR YPRPK

LLKPT EQKQC TIKPQ BTJTN RHAKN IKAWN DQDJB WCDSC DJSHU ETPQC DJBPH DGTQC TJKJV TNORH

DJPQN USQDK JPKJY KUNDG TRAHR QLRSG P