

**M.Sc. (MATHEMATICS WITH APPLICATIONS
IN COMPUTER SCIENCE)**

Term-End Examination

December, 2011

MMTE-006 (P) : CRYPTOGRAPHY PRACTICALS

Time : 1½ hours

Maximum Marks : 40

*Note : There are two questions in this paper totalling 30 marks.
Answer both of them. Remaining 10 marks are for
the viva-voce.*

1. Write a programme for encrypting or decrypting text using affine cipher. Use it to decrypt the following text which was encrypted using affine cipher with key (7,3). 20

BHGAG AFZFB XSYZZ AFTSF FGFYE SHQRF
UDZHC HVNSD THQDJ DQXMA HTASD QVDQU
HJEXS GDQRF BAXBD ZGAFM HSZGG XDSSH
UFDGA FSSFR FEGHX QDQQD EDUCX UQDAD
YADYD RXNTA MXSZX JFYDP ZZAFB DZDZZ
AFZDH YZNMM FSHQT MSXJC DTSHE EFTSH
EEFKF HQTGA FQDQF BBXSY HQZGE FGFSZ
KNSTN ZFYXQ CPKPG AFFCH GF

2. Write a programme in GP for finding a random irreducible polynomial of degree 20. 10
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