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

Term-End Practical Examination

00360

December, 2017

MMTE-005(P) : CODING THEORY

Time : $1\frac{1}{2}$ Hours *Maximum Marks : 40*

Note : *(i) This question paper has two questions worth 30 marks.*

(ii) Remaining 10 marks are for the viva-voce.

1. Write a program to find the greatest common divisor of any two polynomials in $\mathbf{F}_3[x]$. Using it, find the $\gcd(x^5 - x^4 + x + 1, x^3 + x)$. *15*

2. Write a 'C' program for computing the 8-bit CRC, with CRC polynomial $x^3 + x^2 + 1$.

Compute the CRC for the following message using the above program : *15*

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