MMTE-005(P)

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

Term-End Practical Examination

June, 2018

00406

MMTE-005(P) : CODING THEORY

Time : 1½ Hours   *Maximum Marks : 40*

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

(ii)   *The remaining 10 marks are for the viva-voce.*

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

Compute the CRC for the message

110100111011100

using the program above. Assume that the messages are 3-bits long.   *15*

2. Write a 'C' program to find the sum and product of two elements in the field $\mathbf{F_3}$.

Using this program, find the sum and product of $x^6 + 2x^4 + 1$ and $x^4 + x^3 + 2x + 2$.   *15*

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