No. of Printed Pages: 1 MMTE-005(P)(Set-I)

M. SC. (MATHEMATICS WITH APPLICATIONS IN COMPUTER SCIENCE) [M. SC. (MACS)] Term-End Practical Examination

December, 2024

MMTE-005(P)(Set-I): CODING THEORY

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

Note: (i) The question paper has two questions worth 15 marks each.

- (ii) Attempt both of them.
- (iii) The remaining 10 marks are for the viva-voce.
- 1. Write a C program for computing the CRC with CRC polynomial $x^{12} + x^{11} + x^3 + x^2 + x + 1$. Assume that message length is 8 bit. 15
- 2. Write a program to find the sum and product elements in the finite field $\frac{F[x]}{\left\langle x^5 + x^3 + 1 \right\rangle}$.

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