DEPARTMENT OF MATHEMATICS

CERTIFICATE PROGRAMME IN CRYPTOGRAPHY

COORDINATOR: NOWFIRATH V M

YEAR: 2021-2022

DURATION: 30 HOURS

CURRICULUM

INTRODUCTION

Cryptography is the branch of Mathematics that deals with the transformation of data.

AIM

To introduce the fundamental concepts and algorithms in cryptography .

OBJECTIVES

MODULE I : To get general introduction to Cryptography

MODULE II : To understand Symmetric Key Cryptography

MODULE III: To get an idea about Asymmetric key Cryptography and Hash functions

SYLLABUS

MODULE 1   (10 HOURS)

      An introduction to Cryptography, Objectives ,Basic terminologies, Types, Applications .

MODULE 2   (10 HOURS)

      Symmetric key Cryptography, Techniques, Substitution Cipher Techniques, Transposition Techniques , DES , AES .

MODULE 3   (10 HOURS)

Asymmetric key Cryptography, RSA , Hash Functions , MDS ,SHA , Applications of Hash functions .

ASSESMENT PROCEDURE : MULTIPLE CHOICE QUESTION PAPER

TOTAL NUMBER OF STUDENTS ATTENDED : 48