Student Name: University Roll No.:	Printed Pages:1
School of Engineering First Theory Sessional Examination Odd Semester (AS: 2024-25) B. Tech: CSE, CSE(CCML) [Year:4] [Semester :VII]	
Course Title: Network Security and Cryptography Course Code: BCS 3702	Max Marks: 30 Time: 1*hrs*

	SECTION 'A' Q.N.1. Attempt all parts of the following:	CO	Marks
a)	What are the three aspects of security?	CO1	1
b)	What do you mean by Cryptanalysis?	CO2	1
c)	Define Security service	CO1	1
d)	What are the operations used in AES?	CO1	1
e)	What is diffusion?	CO1	1
	SECTION 'B' **Q.N.2. Attempt any two parts of the following:**	**CO**	**Marks**
a)	What is the difference between a monoalphabetic cipher and polyalphabetic cipher. Explain with examples.	CO1	7.5
b)	What is the difference between public key and private key cryptosystem?	CO2	7.5
c)	Determine the GCD(24140,16762) using the Euclidean algorithm.	CO1	7.5
	SECTION 'C' **Q.N.3. Attempt any one parts of the following:**	**CO**	**Marks**
a)	Explain transposition technique. Convert plain text to Cipher text using Rail Fence technique "COMPUTER NGiNEERING".	CO1	10
b)	What is Steganography? Explain its features.	CO1	10
c)	Draw the block diagram of the DES algorithm and also explain it.	CO3	10

Table 1: Mapping between COs and questions

COs	Questions Numbers	Total Marks
CO1	1.a, 1.c,1.d, 1.e, 2.a, 2.c, 3.a, 3.b	39
CO2	1.b,2.b,	8.5
CO3	3.c	10

10.10.2024