Enrollment No.	68
Enrollment No.	00



INDUS UNIVERSITY

Constituent Institutes of Indus University

X- CE0634-001

Semester:	VI	Branch:	CE/CSE/IT
	END SEMESTER E	XAMINATION – May 2	023
Subject Code:	CE0634	Subject Name: Cryptography & Network Security	
Date:	19/08/2023	Time:	2:00 PM TO 5100 PM
Day:	FRIDAY	Total Marks:	100

Instructions:

- 1. Attempt all questions
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

Q.1	A	Define Single Round of DES with Diagram.	10
	В	Encrypt using HILL CIPHER the plaintext="SAFEMESSAGES" using the key 2 8 15	10
		7 4 17 8 13 6	
Q.2	A	List out general categories of schemes for the distribution of public keys.	10
	В	Explain knapsack Algorithm with example.	10
Q.3	A	What is Digital Signature? Give it properties and requirements with details.	10
	В	Explain HMAC in detail.	10
Q.4	A	Explain IPsec Architecture.	10
	В	Explain Secure Socket Layer with its Objectives and Benefits.	10
Q.5		Any Four (05*4=20)	20
	A	What is Kerberos.explain it with all proper steps.	05

В	Differentiate MAC and Hash function.	05
C	Explain Elgamal digital signature Algorithm.	05
D	List out and explain Viruses and related threats.	05
E	Explain Types of Intrusion Detection.	05
F	List out and explain Firewall Design Principles.	05
	C D E	C Explain Elgamal digital signature Algorithm. D List out and explain Viruses and related threats. E Explain Types of Intrusion Detection.