

Name:

Enrolment No:



UPES

End Semester Examination, December 2023

Course: Introduction to Cyber Security

Program: BCA

Course Code: CSSF2010P

Semester: Vth

Time: 03 hrs.

Max. Marks: 100

Instructions: Attempt All Questions.

**SECTION A
(5Qx4M=20Marks)**

S. No.		Marks	CO
Q 1	Describe repudiation? How it can be prevented in real life?	4	CO2
Q 2	Briefly write the categories of attack.	4	CO2
Q 3	Write short notes on malware analysis?	4	CO1
Q 4	Explain the concept of the intrusion detection system.	4	CO2
Q 5	Describe Trojan Horse. What is principle behind it?	4	CO3

**SECTION B
(4Qx10M= 40 Marks)**

Q 6	Write down the difference between Asymmetric key cryptography and Symmetric key cryptography.	10	CO1
Q 7	What is Digital Signature?	10	CO2
Q 8	Differentiate between: i. Authentication and Authorization. ii. Known Plain Text Attack and Chosen Plain Text Attack.	10(5+5)	CO3
Q 9	Attempt any one from the following. a) What is the difference between Block Cipher and Stream Cipher? What are the different modes of block cipher operation? Explain any one of them. b) Describe the procedure of Digital Signature with diagram.	10(5+5)	CO1

**SECTION-C
(2Qx20M=40 Marks)**

Q 10	i. Write RSA Algorithm. If $N=187$ and the Encryption Key $E = 17$ find out the corresponding private key. ii. Use Playfair Cipher with key COMPUTER to encrypt the message "CRYPTOGRAPHY".	20(10+10)	CO4
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