Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, May 2021

Course: Cryptography and Network Security **Semester: VI**
Program: B. Tech. CSE-LLB-SPZ-CL/IPR **Time 03 hrs.**
Course Code: CSEG 4001 **Max. Marks: 100**

SECTION A

1. **Each Question will carry 5 Marks**
2. **Instruction: Complete the statement / Select the correct answer(s)**

S. No.	**Question**	**CO**
Q 1	Which of the following is not a block cipher technique? A. AES B. DES C. Caesar cipher D. None of these	**CO1**
Q2	_____is a form of cryptosystem in which encryption and decryption are performed using the same key.	**CO2**
Q3	A cryptanalyst is person who make cipher stronger. (True/False).	**CO3**
Q4	Vigenere cipher is an example of: A. Polyalphabetic cipher B. Caesar cipher C. Mono alphabetic cipher D. Transpositional	**CO2**
Q5	Masquerade attack is another name of _____. a. Virus attack b. DOS attack c. Spoofing d. Trojan Horse	**CO1**
Q6	How does the encryption process actually take place?	**CO3**

SECTION B

1. **Each question will carry 10 marks**
2. **Instruction: Write short / brief notes**

Q 7	What are the key differences between asymmetric and symmetric cryptography?	**CO1**
Q 8	What are the specific components of the Public Key Infrastructure (PKI)?	**CO4**
Q 9	What are the security vulnerabilities of hashing functions?	**CO2**

Q 10	Why having an intrusion detection system is essential for network security.	**CO3**
Q 11	Explain in brief about block cipher? What is cipher block chaining and how does it work? OR Discuss the kinds of threats exist for a cryptographic system?	**CO2**
	Section C 1. **Each Question carries 20 Marks.** 2. **Instruction: Write long answer.**	
Q12	What are the requirements for digital signature? Briefly explain direct digital signature and arbitrated digital signatures. OR Write the digital signature algorithm.Also explain the signing and verifying functions of digital signature algorithm.	**CO4**