


Name:			
Enrolment No:			
<b>UPES</b> <b>End Semester Examination, December 2023</b>			
<b>Course: Cyber Security and Ethics</b> <b>Program: M. Tech</b> <b>Course Code: CSCS7002P</b> <b>Instructions: Attempt all Questions</b>		<b>Semester: I</b> <b>Time : 03 hrs.</b> <b>Max. Marks: 100</b>	
<b>SECTION A</b> <b>(5Qx4M=20Marks)</b>			
S. No.		Marks	CO
Q 1	Discuss the primary goals of information security. How do they relate to the CIA triad?	4	CO1
Q 2	Explain the concept of threat intelligence and its role in proactive cybersecurity measures.	4	CO1
Q 3	Define a "trapdoor" in the context of computer security. How can organizations protect against trapdoors in their systems	4	CO2
Q 4	Explain the concept of information security governance.	4	CO2
Q 5	What is the difference between a block cipher and a stream cipher?	4	CO3
<b>SECTION B</b> <b>(4Qx10M= 40 Marks)</b>			
Q 6	What is the role of information systems in decision-making processes within an organization? Provide examples of how information systems can enhance decision-making.	10	CO1
Q 7	Explain the security challenges associated with electronic payment systems in e-commerce. What measures can e-commerce platforms implement to enhance payment security?	10	CO5
Q 8	We consider a Caesar cipher and assume that the plaintext message is in English. Decrypt the following cipher text by giving a brief explanation: KNXMNSLKW JXMBF Y JW GJSIXF IRNY XB TW IKNXMW F SIT AJWMJQRNSLF SDIF D What can be the main drawback of the substitution cipher given above?	10	CO2
Q 9	Discuss the ethical considerations related to privacy and anonymity in cyberspace. Provide examples of situations where privacy and anonymity are relevant.	10	CO5
<b>SECTION-C</b> <b>(2Qx20M=40 Marks)</b>			
Q 10	XYZ Corporation is a global company with operations in multiple countries. They have a comprehensive set of security policies, including	20	CO4

	<p>WWW policies, email security policies, and corporate policies. They also need to comply with various information security standards, such as ISO, and are subject to Indian laws, including the IT Act, Copyright Act, and Patent Law.</p> <p>a. XYZ Corporation's WWW policy governs the use of the internet by its employees. Suppose an employee is found to have violated the policy by accessing unauthorized websites. What steps should the company take to enforce the policy and ensure compliance while respecting employee privacy and rights?</p> <p>b. XYZ Corporation is planning to review and update its security policies. Describe the policy review process that the company should follow. How can they ensure that the policies are up to date and aligned with changing security threats and business</p>		
Q 11	<p>Explain the differences and similarities between DES and AES, including the key lengths, block sizes, and encryption processes, and discuss their relative strengths and weaknesses in the context of modern cryptography.</p> <p>OR</p> <p>Explain the components of an information system. In what ways do they cooperate to advance the objectives of an organization?</p>	20	CO3 CO2