

## BHARATIYA VIDYA BHAVAN'S

## SARDAR PATEL INSTITUTE OF TECHNOLOGY

MUNSHI NAGAR, ANDHERI (WEST), MUMBAI - 400 058, India (Autonomous College Affiliated to University of Mumbai)

## **Mid-Semester Examination**

Duration: 1Hr.

Date: 10/10/2023

Time: 2 to 3 pm

Semester: I

Max. Marks: 30

Class: M.Tech. Computers

Course Code: CS502

Subject: Information and System Security

Instructions: (1) All questions are compulsory.

(2) Use of scientific calculator is allowed.

(3) Assume any necessary data but justify the same.

Q. No.	Questions	Max Marks	СО	BL
Q.1 a	Ankita has been asked by her supervisor to give a presentation regarding reasons why security attacks continue to be successful. She has decided to focus on the issue of widespread vulnerabilities. Which of the following would Ankita NOT include in her presentation and why?  a. Large number of vulnerabilities  b. End-of-life systems  c. Lack of vendor support  d. Misconfigurations	02	CO1	L4
	(OR)			
	Ansh received a message from one of his tech support employees. In violation of company policy, a user had downloaded a free program to receive weather reports, but the program had also installed malware on the computer that gave the threat actor unrestricted access to the computer. What type of malware had been downloaded?  a. Virus  b. Ransomware  c. RAT  d. Trojan	02	COI	L# <sub>f</sub>
Q. 1 b	<ul> <li>Name the threat actors based on statements given below and provide a briefing about them:</li> <li>a) A group that is strongly motivated for the sake of their principles or beliefs.</li> <li>b) A group that is hired by for launching computer attacks against their foes.</li> <li>c) A group that attack's a nation's network and computer infrastructure to cause disruption and panic among citizens.</li> </ul>	06	COI	L\$ <sub>7</sub>

Q.2 a	What is:  a) Confidentiality b) Availability c) Integrity Provide briefing about the same with relevant example.	06	CO1	L2
Q.2 b	Parth wants to send message "HELLO" to vivek and uses key "4" to encrypt the message. Use Mono-Alphabetic and Poly-Alphabetic algorithm and show the encryption and decryption process between parth and vivek	16	CO3	L4