Day 1: Introduction to Cybersecurity & CIA Triad

Date: 23/06/25
Activities:

 The training began with a warm welcome and an overview of the importance of cybersecurity in the modern digital world.

• Introduction to the **basics of cybersecurity**, including key terminologies such as threat, vulnerability, exploit, and risk.

• Discussed the core principles of cybersecurity known as the CIA Triad:

o Confidentiality: Ensuring that data is accessible only to authorized individuals.

o **Integrity**: Assuring that data is not tampered with or altered.

o **Availability**: Ensuring reliable access to information and systems when needed.

**Learning Outcome:** 

• Understood the foundational pillars of information security.

• Gained insight into why cybersecurity is essential for individuals, organizations, and governments.

m Day 2: Cyber Threats and Attacks

Date: 24/06/25
Activities:

• Covered various types of cyber threats, including:

Malware (Viruses, Worms, Trojans)

Ransomware

Phishing

Denial of Service (DoS/DDoS)

Insider threats

 Real-world case studies of recent cyberattacks were discussed to demonstrate how these threats are executed and their impact.

**Learning Outcome:** 

• Learned to differentiate between types of threats and understand how attackers exploit vulnerabilities.

• Gained awareness of social engineering and the importance of user vigilance.

Date: 25/06/2025

## **Activities:**

- Introduction to Wireshark:
  - o Installed and used Wireshark to capture and analyze network packets.
  - o Understood how to inspect network traffic for suspicious activity.
- Discussed the role and working of **Firewalls**:
  - o Types (Hardware, Software, Next-Gen)
  - o Rule creation and packet filtering
- Detailed discussion on TCP/IP model and OSI model:
  - o Compared both models.
  - o Understood the function of each layer and how data travels through a network.

## **Learning Outcome:**

- Gained hands-on experience with a network analysis tool (Wireshark).
- Understood how firewalls provide the first line of defense.
- Learned how the TCP/IP and OSI models form the backbone of computer networking.