

CYBERSECURITY BASICS

CIA Triad:

Confidentiality: Protecting data from unauthorized access using encryption and access controls.

Integrity: Ensuring data is not altered using hashing and checksums.

Availability: Ensuring systems are accessible using backups and redundancy.

Threat Types:

Phishing: Fake communications to steal credentials.

Malware: Malicious software like viruses and trojans.

DDoS: Flooding systems to cause downtime.

SQL Injection: Manipulating database queries.

Brute Force: Guessing credentials repeatedly.

Ransomware: Encrypting data for ransom.

Attack Vectors:

Social Engineering, Wireless Attacks, Insider Threats.