

Cyber security Fundamentals – Confidentiality: Confidentiality is about preventing the disclosure of data to unauthorized parties. It occurs when an attacker is masquerading as a trustworthy entity in electronic communication. Whereby a data is introduced into a DNS resolver's cache causing the name server to return an incorrect IP address, diverting traffic to the attackers computer or any other computer. Often confidentiality is compromised by cracking poorly encrypted data, Man-in-the-middle (MITM) attacks, disclosing sensitive data. Cyber-attacks can be classified into the following categories: 1) Web-based attacks 2) System-based attacks

**Web-based attacks** These are the attacks which occur on a website or web applications. This attack generates a large number of guesses and validates them to obtain actual data like user password and personal identification number.

**Data redundancy** Types of Cyber Attacks A cyber-attack is an exploitation of computer systems and networks. It uses malicious code to alter computer code, logic or data and lead to cybercrimes, such as information and identity theft.

**Injection attacks** It is the attack in which some data will be injected into a web application to manipulate the application and fetch the required information. Example– SQL Injection, code Injection, log Injection, XML Injection etc.

2.3.4.5.