Cyber Security

ASSIGNMENT-1

Introduction to Cyber Security

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1. This attack is used to infuse malicious code in a website's comment section. What is the attack called? Explain this attack.

Cross-site scripting (XSS) attacks can be used to infuse malicious code in a website's comment section. These attacks use third-party web resources to run scripts in the victim's web browser or scriptable application. The attacker injects a payload with malicious JavaScript into a website's database. When the victim requests a page from the website, the page with attacker's payload as part of the HTML body, to the victim's browser.

2. This is used in operating systems to prevent uninvited network traffic. Explain its functionality.

Firewalls are used to provide protection against outside cyber attacks by shielding the computer or network from malicious and uninvited network traffic. They can also prevent malicious software from accessing a computer or network via the internet. Firewalls can also be configured to block data from certain locations, applications or ports.

3. Identify the type of cyber attacks using the given descriptions :

- The attempt to steal sensitive information such as credit card and bank account.
  Phishing is used to steal sensitive information such as credit card and bank account.

- On insecure public Wi-Fi in a cafe / club, a person inserts himself between a visitor's android phone and the network. Without knowing, the visitor saved his passwords while using that wifi and passes all information through the attacker.
  Man-in-the-middle (MitM) attack.

- A person was using an application. A hacker modifies and interferes with the application's logic by writing some Structured Query Language.
  SQL Attack

4. RBI launches a portal to check illegal money collection. The public can obtain information regarding entities that accept deposits and lodge complaints. Name the portal and its official link.
   RBI launched 'Sachet' portal to check illegal money collection.
   Its official link : https://sachet.rbi.org.in

5. Can patching prevent ransomware and malware attacks completely? Why or why not?
   A patch is a piece of code that improves a program which is already installed on our system. But, similar

to many other prevention techniques, patching does not prevent ransomware and malware attacks completely. Modern malware is extremely sophisticated, unpredictable and built to evade detection.
According to a latest study, new variants of malware are released into the world every single day and new threats are being created non-stop. It takes time for these new threats to be discovered by security experts and make patches. Hence, patching is not completely effective.