

Intorduction to Cyber security

1. What is the meaning of Cyber Security?
 - Cyber Security means protecting computers, networks, data, and systems from unauthorized access, attacks, or damage. It ensures online safety, data privacy, and protection from hackers and cyber crimes.
2. What are the main objectives of Cyber Security?-
 - Confidentiality: Protecting sensitive information.
 - Integrity: Preventing unauthorized changes in data.
 - Availability: Ensuring systems and data are accessible when needed.
 - Authentication: Verifying user identity
 - Non-repudiation: Ensuring actions cannot be denied later.
3. What is Offensive and Defensive in Cyber Security?
 - Offensive Security: Actively finding and exploiting weaknesses (ethical hacking, penetration testing)
 - Defensive Security: Protecting systems from attacks (firewalls, antivirus, monitoring).
4. What is Cyberspace and Law?
 - Cyberspace: The virtual environment of computers, networks, and the internet.
 - Cyber Law: The legal framework to deal with cyber crimes, online frauds, data protection, and internet usage.
5. What is Cyber Welfare?
 - Cyber Welfare means ensuring the well-being of internet users by spreading awareness, promoting safe practices, and protecting users from online harm or exploitation.
6. Explain the Types of Hacker-
 - White Hat Hackers: Ethical hackers who find security flaws legally.
 - Black Hat Hackers: Criminal hackers who attack systems illegally.
 - Grey Hat Hackers: Hackers who work in between legal and illegal activities.
 - Script Kiddies: Inexperienced hackers using ready-made tools
 - Hacktivists: Hackers with political or social motives.
7. What is the full form of SOC in Cyber Security?
 - SOC = Security Operations Center. It is a centralized unit that monitors, detects, and responds to cyber threats in real time
8. What are the Challenges of Cyber Security?
 - Increasing cyber crimes- Advanced hacking techniques- Lack of awareness- Data privacy issues- Insider threats- Evolving malware and ransomware- Shortage of skilled professional