Module 1 CS- Introduction

1. what is 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.

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
- > Shortage of skilled professional