

Essay: Cyber Security in Financial Sector

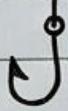
Introduction:

- Cyber security ka matlab hai financial systems, customer data, aur paisa ko online attacks se bachana.
- Aajkal sab kuch digital ho gaya hai (online banking, UPI), isliye yeh topic bahut important hai.
- Financial sector hackers ka prime target hai kyunki wahan bahut sara paisa aur sensitive data hota hai.

Importance (Kyun Zaroori Hai?):-

- ★ Protection of Customer Data: Personal details (naam, address) aur financial info ko chori hone se rokna.
- ★ Preventing Financial Loss: Banks aur customers ke paise safe rakhna.
- ★ Maintaining Trust: Agar data safe nahi, toh customer ka bharosa toot jayega. Trust is everything!
- ★ Regulatory Compliance: RBI aur govt. ke strict rules follow karna zaroori hai.

Major Threats & Challenges (Khatre aur Chunautiyan):-

- Phishing Attacks: Fake emails ya messages bhejkar password/OTP maangna. 
- Malware & Ransomware: Malicious software jo system lock kar deta hai, fir paise (ransom) maangta hai.
- Insider Threats: Kabhi-kabhi bank employees hi data leak kar dete hain (jaanbujhkar ya galti se).
- Legacy Systems: Purane computer systems jo naye attacks ke liye vulnerable hote hain.
- Human Error: Employees ya customers ka weak password use karna ya phishing link par click kar dena. Lack of awareness.



Measures/Solutions (Upay):-

- Strong Authentication: Sirf password nahi, Multi-Factor Authentication (MFA) / OTP ka use karna zaroori hai.
- Employee Training: Staff ko phishing pehchanne ki regular training dena. 'Think before you click' policy.
- Use of Advanced Tech: AI aur Machine Learning (ML) ka use karke fraud patterns ko jaldi detect karna.
- Data Encryption: Sensitive data ko code mein convert karna taaki chori hone par bhi useless rahe.
- Regular Audits: Security systems ki samay-samay par testing (VAPT) karna.

Conclusion:

Financial sector mein cyber security ek continuous process hai, koi one-time fix nahi. Banks, government aur customers, sabko mil kar satark (alert) rehna padega. 'Security is not a product, but a process.' Hamesha ek kadam aage rehna zaroori hai.