

6.10: Study Questions

? Study Question 6.10.1

Briefly define the three components of the information security triad.

Answer

Confidentiality, integrity, and availability.

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Explain what authentication means.

Answer

Confirming the identity of a user through something they know, have, or are before allowing access.

? Study Question 6.10.3

Give two examples of a complex password.

Answer

Passwords with 8+ characters, uppercase/lowercase letters, numbers, and special characters.

? Study Question 6.10.4

Give three examples of threat actors.

Answer

Hacktivists, cyber criminals, nation-states.

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Name two motivations of hacktivists to commit cybercrime.

Answer

Politics, social causes.

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List five ways to defend against cyber attacks.

Answer

Firewalls, encryption, access controls, security policies, awareness training.

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List three examples of PII.

Answer

Social Security Number, driver's license, bank account numbers.

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Briefly explain the role of SOC.

Answer

Security operations center monitors threats, analyzes events, and responds to incidents.

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Explain the purpose of security policies.

Answer

Provide rules and guidelines for employee security practices.

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Explain how information availability related to a successful organization.

Answer

High availability of systems and data is required for most business operations.

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What are some ways mobile devices and remote work create security challenges for businesses?

Answer

Mobile devices can expose data if lost/stolen. Remote work requires secure remote access tools.

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What is social engineering and what are some examples?

Answer

Tricking people to release info or compromise security. Phishing, pretexting.

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Why is training employees on security best practices important?

Answer

Employees cause many breaches via errors or social engineering.

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What are some regulations like GDPR that businesses must comply with regarding data security and privacy?

Answer

GDPR, HIPAA, PCI DSS, CCPA.

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What was the impact of the GDPR regulation on Google and other US companies?

Answer

Google fined \$57M. Cost US companies millions to implement.

Exercises

1. Research and analyze cybersecurity incidents to come up with scenarios of how organizations can prevent an attack.
2. Discuss some IoT (Internet of Things) application vulnerabilities with non-techie and techie technology users, then compare and contrast their different perspectives and reactions to IoT vulnerabilities.
3. Describe one multi-factor authentication method that you have experienced and discuss the pros and cons of using multi-factor authentication.
4. Identify the password policy at your place of employment or study. Assess if it is a good policy or not. Explain.
5. Take inventory of possible security threats that your home devices may be exposed to. List them and discuss their potential effects and what you plan to do about them.
6. Recall when you last back up your data. Discuss the method you use. Define a backup policy for your home devices.
7. Research the career of a SOC professional. Report what certificate training it requires to become SOC professionals, what the demand is for this career, and their salary range.
8. Describe a time you experienced a possible security threat or breach. How did you respond and what was the outcome?
9. What security best practices have you implemented for mobile devices you use for work or home?
10. Share an example of a company that you feel demonstrates a strong security culture. What makes their security culture effective?

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