Assessing IT Risks: Strengthening Cybersecurity

Part 1: Office Roleplay Dialogue

Scenario: An IT Technician, Daniel, is working with his colleague, Lisa, to conduct an IT risk assessment for their company's network security.

Lisa: Hey Daniel, the security team asked us to conduct an IT risk assessment. Where should we start?

Daniel: We should begin with **threat modeling**. This helps us identify potential security threats by analyzing how attackers might try to exploit our systems.

Lisa: That makes sense. After identifying threats, how do we check for weaknesses?

Daniel: We perform **vulnerability scanning** to detect security gaps in our network. This helps us find outdated software, weak passwords, or misconfigured systems.

Lisa: What if we want to test how secure our system really is?

Daniel: Then we conduct **penetration testing**. This simulates a cyberattack to see if an attacker could exploit our vulnerabilities. It's a great way to evaluate our defenses.

Lisa: That sounds useful. But how do we prevent these vulnerabilities from becoming real problems?

Daniel: We follow **security patch management**, which involves regularly updating software to fix security flaws. Many attacks happen because companies fail to install patches in time.

Lisa: That's a good point. Is there anything else we should do to minimize risk?

Daniel: Yes, we apply **risk mitigation** strategies, such as implementing multi-factor authentication and restricting access to sensitive data. The goal is to reduce the impact of any security breaches.

Lisa: Got it. I'll document our findings and make recommendations for improvements.

Daniel: Sounds like a plan! Let's make sure our systems stay secure.

Part 2: Comprehension Questions

1. What is the purpose of threat modeling?

- (A) To analyze and identify potential security threats
- (B) To install new firewalls
- (C) To track employee internet usage
- (D) To improve the speed of company computers

2. What does vulnerability scanning help with?

- (A) Encrypting email communications
- (B) Managing employee login schedules
- (C) Updating printer drivers
- (D) Detecting weaknesses in a network

3. How does penetration testing improve cybersecurity?

- (A) By monitoring Wi-Fi signal strength
- (B) By simulating a cyberattack to test for weaknesses
- (C) By deleting unnecessary files from servers
- (D) By blocking all external network connections

4. What is the goal of risk mitigation?

- (A) To increase website loading speed
- (B) To provide free software for employees
- (C) To reduce the impact of security threats
- (D) To prevent employees from using personal devices at work

Part 3: Key Vocabulary Definitions in Japanese

- 1. Threat Modeling (脅威モデリング) サイバー攻撃の可能性を分 析し、システムの脆弱性を特定する手法。
- 2. Vulnerability Scanning (脆弱性スキャン)-ネットワークやソフ

トウェアのセキュリティ上の弱点を自動で検出するプロセス。

3. Penetration Testing (侵入テスト) – 実際の攻撃をシミュレーシ

ョンして、システムのセキュリティをテストする方法。

4. Security Patch Management (セキュリティパッチ管理) – ソフ

トウェアの脆弱性を修正するために、定期的にパッチを適用す る管理プロセス。

5. Risk Mitigation (リスク軽減) – セキュリティ脅威の影響を最小

限に抑えるための対策を講じること。

Part 4: Questions & Correct Answers

1. What is the purpose of threat modeling?

(A) To analyze and identify potential security threats

2. What does vulnerability scanning help with?

(D) Detecting weaknesses in a network

3. How does penetration testing improve cybersecurity?

(B) By simulating a cyberattack to test for weaknesses

4. What is the goal of risk mitigation?

(C) To reduce the impact of security threats