Routine Database Maintenance for Smooth Operation

Part 1: Office Roleplay Dialogue

Scenario: A Database Administrator, Haruto, is discussing database **maintenance** tasks with his colleague, Emma, to ensure the system runs efficiently.

Emma: Hey Haruto, have you finished the scheduled database **maintenance** for this week?

Haruto: Almost! I've applied a **patch** to fix some minor security vulnerabilities.

Emma: That's good. What about the software **update**? Are we upgrading to the latest database version?

Haruto: Yes, but we need to test the **update** in a staging environment first to make sure it doesn't cause any issues.

Emma: Makes sense. Are we keeping track of all changes for **versioning** purposes?

Haruto: Absolutely. Each change is logged so we can easily roll back if necessary.

Emma: Great! I also heard we have a system **migration** coming up. Are we moving to a new database server?

Haruto: Yes, we're migrating to a cloud-based system for better scalability and performance.

Emma: That's a big step! Will there be any downtime during the **migration**?

Haruto: We're planning it during off-hours to minimize disruption, and we'll have a backup ready just in case.

Emma: Sounds like a solid plan. Let me know if you need help with testing after the upgrade.

Haruto: Thanks, Emma! I'll check everything again after the **patch** is applied and let you know.

Part 2: Comprehension Questions

1. What has Haruto recently applied to fix security vulnerabilities?
(A) A new password policy
(B) A firewall rule
(C) A patch
(D) A server restart

2. Why does Haruto want to test the update in a staging environment?
(A) To ensure it doesn't cause issues
(B) To increase storage space
(C) To reduce database size
(D) To remove unnecessary files

3. What is versioning used for in database maintenance?
(A) To reduce network traffic
(B) To delete old database entries
(C) To speed up queries
(D) To keep track of changes and allow rollbacks

4. Why is Haruto performing a migration?

(A) To change the company's website design

(B) To move the database to a cloud-based system

(C) To remove duplicate files

(D) To install new desktop software

Part 3: Key Vocabulary Definitions in Japanese

1. **Maintenance (メンテナンス)** – システムやデータベースを正常に動作させるための定期的な保守作業。

2. **Patch (パッチ)** – セキュリティの脆弱性やバグを修正するためのソフトウェア更新。

3. **Update (アップデート)** – システムやソフトウェアの新しいバージョンへの更新。

4. **Versioning (バージョニング)** – 変更履歴を記録し、必要に応じて元のバージョンに戻せるようにする管理手法。

5. **Migration (移行)** – データベースやシステムを別の環境に移動するプロセス。

Part 4: Questions & Correct Answers

1. **What has Haruto recently applied to fix security vulnerabilities?**

   ✅ (C) A patch

2. **Why does Haruto want to test the update in a staging environment?**

   ✅ (A) To ensure it doesn't cause issues

3. **What is versioning used for in database maintenance?**

   ✅ (D) To keep track of changes and allow rollbacks

4. **Why is Haruto performing a migration?**

   ✅ (B) To move the database to a cloud-based system