Scenario-Based Essay Question:

Question:
An organization wants to improve its customer **complaint management system**. Initially, they planned to **upgrade the existing system**. However, after analysing the system, they realize that the current process has **too many flaws and cannot meet future customer expectations** even after improvements.
As a Six Sigma project leader, explain:

- Which methodology (DMAIC or DMADV) should be selected?
- Justify your choice with clear reasons.
- Describe the phases that your team would follow to complete the project successfully.

Answer:

When an organization identifies that its existing customer complaint management system has too many flaws and upgrading it through improvements will not meet future customer expectations, the correct approach is to use the **DMADV methodology** (Define, Measure, Analyze, Design, Verify).

Justification for Choosing DMADV:

- **DMAIC** is suitable for **improving existing processes** when basic structure is working.
- **DMADV** is chosen when a **new process** must be **designed from scratch** because the old process is too weak or outdated.
- In this case, the current system cannot be fixed properly even after improvements, so designing a **new customer complaint system** is the best solution.

Phases to be Followed:

1. **Define:**
    - Clearly define the problem: the old complaint system is outdated and ineffective.
    - Set project goals: build a new system that is faster, more customer-friendly, and aligned with modern business needs.
    - Collect customer requirements through surveys and interviews.
2. **Measure:**
    - Gather data on current complaint types, response times, customer satisfaction ratings, and system failures.
    - Validate assumptions — check if delays are due to poor routing, lack of automation, or other reasons.
3. **Analyze:**
    - Analyze the collected data to identify what features the new system must have.
    - Study best practices from leading companies with good complaint handling.
    - Find root causes why the old system failed (e.g., slow escalation, manual errors).
4. **Design:**
    - Create a detailed design for the new system, including process flow diagrams, user experience (UX) plans, and automation needs.
    - Develop prototypes of the system modules, like customer login, complaint registration, tracking, and feedback.
5. **Verify:**

- Test the new system with real users (pilot testing).
- Measure its performance against the goals set in the Define phase.
- Make sure customer complaints are resolved faster and satisfaction is improved.

Conclusion:

By using the **DMADV methodology**, the organization can design a **new, efficient, and customer-focused complaint management system** that meets both current and future needs.
This approach ensures higher customer satisfaction, fewer defects, and better business performance.