**Scenario 1: Requirement Gathering and Analysis Phase**

**Description:**

A software development team is tasked with creating a web-based library management system. During the requirement gathering phase, they conducted interviews with stakeholders, reviewed the current manual processes, and identified the need for features such as book search, user profiles, and automated notifications for due dates. However, halfway through the development phase, stakeholders requested additional features, which disrupted the project timeline.

**Questions:**

1. What strategies can the team implement to manage evolving requirements effectively?
2. How could proper documentation during the analysis phase have minimized disruptions?
3. What role does stakeholder engagement play in finalizing requirements?

**(b)** **Scenario 2: Design and Prototyping Phase**

**Description:**  
In developing a mobile app for fitness tracking, the design team created an initial wireframe for user navigation and features like step counting, calorie tracking, and workout logs. The client rejected the prototype, citing that it lacked user-friendliness and failed to address the target audience's preferences.

**Questions:**

1. What tools or techniques can improve the design process to align with user expectations?
2. How could early user testing during prototyping mitigate such issues?
3. What are the benefits of iterative design in SDLC?

**(c)** **Scenario 3: Testing and Deployment Phase**

**Description:**  
A team is deploying an e-commerce platform. During system testing, several bugs were identified, including payment gateway failures and incorrect inventory updates. Due to tight deadlines, some bugs were deprioritized and left unresolved before the product launch, leading to user complaints and loss of sales.

**Questions:**

1. How should the team prioritize bug fixes to ensure critical functionality is not compromised?
2. What are the risks of launching a product with known issues?
3. How can post-deployment maintenance be planned to address unresolved bugs?