**1. Identification of Key Concepts and Major Principles (30 Points)**

This section assesses how well the student identifies the relevant concepts and principles in solving the problem.

* **High (27-30 Points):**  
  The student accurately identifies and names all relevant concepts and principles, demonstrating a comprehensive understanding of the problem.
* **Medium (19-26 Points):**  
  Most relevant concepts are identified, but there are minor inaccuracies or omissions in the identification of principles.
* **Low (10-18 Points):**  
  The student identifies some concepts, but there are significant errors or omissions in recognizing the relevant principles.
* **Very Low (0-9 Points):**  
  The student fails to identify the relevant concepts and principles, or they are identified incorrectly.

**2. Explanation of Conceptual Relationships and Procedures (30 Points)**

This section evaluates the student's ability to explain how the identified concepts interact and the procedures used to apply them.

* **High (27-30 Points):**  
  The student provides a clear and detailed explanation of the relationships between concepts and the procedures for applying them, with no major omissions.
* **Medium (19-26 Points):**  
  The explanation generally covers relationships and procedures but lacks detail or clarity in some areas.
* **Low (10-18 Points):**  
  The explanation is basic or incomplete, with significant gaps in describing relationships and procedures.
* **Very Low (0-9 Points):**  
  Little to no explanation of how concepts are related, or incorrect procedures are described.

**3. Application of Concepts to Justify the Solution and Evaluate Alternatives (30 Points)**

This section focuses on how well the student applies concepts to justify their answer and evaluates alternative solutions.

* **High (27-30 Points):**  
  The student applies concepts logically and accurately to justify the selected answer and thoroughly explains why alternative solutions are not suitable.
* **Medium (19-26 Points):**  
  The justification is mostly correct but may include minor logical gaps or errors, with limited evaluation of alternative solutions.
* **Low (10-18 Points):**  
  The justification is flawed or incomplete, with incorrect application of concepts and little consideration of alternatives.
* **Very Low (0-9 Points):**  
  No meaningful justification is provided, and alternatives are not evaluated.

**4. Critical Analysis and Synthesis (10 Points)**

This section assesses the student’s ability to critically analyze the problem and synthesize information into a coherent conclusion.

* **High (9-10 Points):**  
  The student demonstrates a strong ability to critically analyze the problem, synthesizing information into an insightful and coherent conclusion.
* **Medium (6-8 Points):**  
  The student shows some analytical ability but may lack depth or insight in their synthesis.
* **Low (3-5 Points):**  
  The analysis is shallow or incomplete, with minimal synthesis of information.
* **Very Low (0-2 Points):**  
  The student shows no meaningful analysis or synthesis of information.