Rubric for Database Management Systems Assignment

General Criteria for All Questions:
- Clarity of Explanation (0-2 points): Clear and concise responses.
- Completeness (0-3 points): Address all parts of each question comprehensively.
- Accuracy (0-3 points): Correctness of the information provided.
- Examples (0-2 points): Inclusion of relevant examples to illustrate points.

Specific Criteria for Each Question:

1. ACID Properties
- Atomicity (0-2 points): Correct explanation and importance.
- Consistency (0-2 points): Correct explanation and importance.
- Isolation (0-2 points): Correct explanation and importance.
- Durability (0-2 points): Correct explanation and importance.

Total for Question 1: 0-10 points

2. SQL vs. NoSQL Databases
- Data Models (0-2 points): Accurately describes the data models supported by each.
- Scalability (0-3 points): Discussion on how each type scales and the implications.
- Use Cases (0-3 points): Clearly identified and relevant use cases for each type.

Total for Question 2: 0-10 points

3. Normalization and Normal Forms
- Concept of Normalization (0-3 points): Explanation and importance.
- First Normal Form (0-2 points): Description and example.
- Second Normal Form (0-2 points): Description and example.
- Third Normal Form (0-2 points): Description and example.

Total for Question 3: 0-10 points

4. Entity-Relationship (ER) Model
- Components Description (Entities, Attributes, Relationships) (0-5 points): Accurate and complete description of each component.
- Utility in Database Design (0-5 points): Explanation of how ER models aid in design.

Total for Question 4: 0-10 points

5. Indexing in Databases
- Concept of Indexing (0-2 points): Explanation of what indexing is and its purpose.

- Types of Indexes (0-6 points): Detailed description and distinctions between primary, secondary, and clustered indexes.
- Impact on Performance (0-2 points): Discussion on how indexing affects database performance.

Total for Question 5: 0-10 points

Total Possible Points: 50

Notes:
- Each question is equally weighted, with a maximum of 10 points.
- Partial points can be awarded in each category based on the depth and precision of the answer.
- Inclusion of relevant, real-world examples where applicable is highly encouraged and contributes to the examples score.

This rubric allows for comprehensive feedback on the student's understanding and application of key database management concepts. It also helps in ensuring consistency in grading across different evaluators.