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| 1. | Fred finds out that many of his users are complaining that data is lost. He does some research and finds out that his transactions are using the lowest isolation level. What level are his transactions using? |
| A | READ COMMITTED |
| B | READ UNCOMMITTED |
| C | REPEATABLE READ |
| D | SERIALIZABLE |

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| 2. | Margaret creates a transaction within a transaction. Her first (outermost) transaction rolls back data and the second (innermost) transaction commits data. What will be the outcome? |
| A | Both transactions are committed. |
| B | Only the first (outermost) transaction is committed. |
| C | Both transactions are rolled back. |
| D | Only the second (innermost) transaction is committed. |

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| 3. | If the SET IMPLICIT\_TRANSACTIONS option is NOT set to ON, what will happen? |
| A | The database will not support implicit transactions. |
| B | The database will support explicit transactions only. |
| C | The database will support auto-commit transactions. |
| D | The database will not support transactions. |

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| 4. | Which isolation level has the highest risk of blocking? |
| A | READ COMMITTED |
| B | READ UNCOMMITTED |
| C | REPEATABLE READ |
| D | SERIALIZABLE |

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| 5. | John has a transaction that attempts to select data from a table. The query takes a very long time. What is the MOST LIKELY reason why this would happen? |
| A | A shared lock was already present. |
| B | An exclusive lock was already present. |
| C | A schema lock was already present. |

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| 6. | Louise selects the value of the @@trancount variable and finds out that it contains the value of 2. What does this indicate? |
| That there are currently 2 transactions that are not finished | |

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| 7. | Suppose you begin a transaction. You forget to place a ROLLBACK TRAN in your Transact-SQL procedure, but you did place a COMMIT TRAN in your procedure. What will happen if one of the Transact-SQL statements receives a constraint violation error? |
| A | The statement commits anyway. |
| B | The statements that did not produce an error will be committed. |
| C | The transaction is rolled back. |
| D | An error is produced because the system does not know which path to take to resolve the problem. |

Please fill with Y/N the corresponding concurrency issue that each isolation level is susceptible to:

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| **Isolation Level** | **Dirty read** | **Nonrepeatable read** | **Phantom read** |
| Read uncommitted | YES | YES | YES |
| Read committed | NO | YES | NO |
| Repeatable read | NO | NO | NO |
| Serializable | NO | NO | NO |