|  |
| --- |
| **True / False** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. A database is a physical storage device for data.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 2 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2. A field is a basic unit of data also referred to as a record.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3. A character is a basic unit of data and can consist of a number, letter, or special symbol.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 2 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4. A collection of fields is a file.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5. A collection of records is a file.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6. A field in the logical design of a database corresponds to a row in the physical table of a relational database.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7. A record in the logical design of a database corresponds to a row in the physical table of a relational database.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8. The Systems Development Life Cycle is a series of steps that can be used to guide the development process for a database management system.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 4 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9. An entity is represented by a column in the Entity-Relationship Model.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 4 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10. Only one type of relationship can be represented in an Entity-Relationship Model.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 5 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11. The following types of relationships can be included in an Entity-Relationship Model: one-to-one, one-to-many, many-to-many.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 5 6 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12. A one-to-many relationship cannot be included in a relational database.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 6 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13. A one-to-many relationship means that an occurrence of a specific entity can only exist once in each table.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 6 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14. Data redundancy is created through a process known as normalization.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 6 7 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15. If a primary key has been identified for the data, then the data is considered to be in first normal form (1NF).​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 7 8 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16. Partial dependency can only exist if the data is uniquely identified by a composite primary key.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17. Transitive dependency can only exist if the data is uniquely identified by a composite primary key.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18. Data is in second normal form (2NF) if it contains no repeating groups and has a primary key to uniquely identify each record.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 9 10 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19. Partial dependency means that at least one of the data values is dependent on only a portion of the primary key.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20. The simplest approach to remove a partial dependency is to use each portion of the primary key to create separate tables.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21. A foreign key uniquely identifies each row in a table.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22. A foreign key appears on the many side of a one-to-many relationship.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23. A bridging table can be used to eliminate a many-to-many relationship in a relational database.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24. A many-to-many relationship cannot exist in a relational database.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25. Two tables can be linked or joined together through a common field.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26. Tables can be linked or joined together through their primary keys.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | False | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | True / False | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27. A column represents a field in the physical database table.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28. Data mining refers to analyzing historical data stored in a database.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 14 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29. The occurrence of data anomalies would indicate an unnormalized database design.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 7 | | *QUESTION TYPE:* | True / False | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30. Structured Query Language (SQL) is generally used to interact with a database.​   |  |  |  | | --- | --- | --- | |  | a. | True | |  | b. | False |  |  |  | | --- | --- | | *ANSWER:* | True | | *POINTS:* | 1 | | *REFERENCES:* | 12 | | *QUESTION TYPE:* | True / False | |

|  |
| --- |
| **Multiple Choice** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31. Which of the following is used to create and maintain the physical database?​   |  |  |  | | --- | --- | --- | |  | a. | ​Data mining | |  | b. | ​Database Management System (DBMS) | |  | c. | ​E-R Model | |  | d. | ​Systems Development Life Cycle (SDLC) |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 2 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 32. Which of the following terms is considered the basic unit of data in a database?​   |  |  |  | | --- | --- | --- | |  | a. | ​character | |  | b. | ​field | |  | c. | ​record | |  | d. | ​file |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 2 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 33. Which of the following terms best describes where a group of characters that represents a customer’s address would be stored in the logical design?​   |  |  |  | | --- | --- | --- | |  | a. | ​record | |  | b. | ​file | |  | c. | ​field | |  | d. | ​database |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 34. ​Which of the following terms represents a collection of fields?​   |  |  |  | | --- | --- | --- | |  | a. | ​field | |  | b. | ​record | |  | c. | ​character | |  | d. | ​file |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 35. A \_\_\_\_ is a group of interrelated files.​   |  |  |  | | --- | --- | --- | |  | a. | ​record | |  | b. | ​character | |  | c. | ​field | |  | d. | ​database |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 36. Which of the following terms refers to a group of related records?​   |  |  |  | | --- | --- | --- | |  | a. | ​database | |  | b. | ​character | |  | c. | ​field | |  | d. | ​file |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 37. A field in the logical design of a database corresponds to a \_\_\_\_ in the physical database.​   |  |  |  | | --- | --- | --- | |  | a. | ​column | |  | b. | ​row | |  | c. | ​table | |  | d. | ​file |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 38. A record in the logical design of a database corresponds to a \_\_\_\_ in the physical database.​   |  |  |  | | --- | --- | --- | |  | a. | ​column | |  | b. | ​row | |  | c. | ​table | |  | d. | ​file |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 39. A \_\_\_\_ is a storage structure designed to hold a collection of data.​   |  |  |  | | --- | --- | --- | |  | a. | ​column | |  | b. | ​row | |  | c. | ​table | |  | d. | ​database |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 40. The multi-step process used when creating a new system is referred to as \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​the Systems Development Life Cycle | |  | b. | ​data mining | |  | c. | ​E-R Modeling | |  | d. | ​SQL |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 4 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 41. A DBMS includes which of the following capabilities?​   |  |  |  | | --- | --- | --- | |  | a. | ​security | |  | b. | ​data dictionary | |  | c. | ​multiuser access | |  | d. | ​all of the above |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 42. Which of the following is not a step in the Systems Development Life Cycle (SDLC)?​   |  |  |  | | --- | --- | --- | |  | a. | ​systems analysis | |  | b. | ​systems investigation | |  | c. | ​systems design | |  | d. | ​all of the above are steps in the SDLC |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | 4 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 43. In which step of the Systems Development Life Cycle (SDLC) are the logical and physical components defined?​   |  |  |  | | --- | --- | --- | |  | a. | ​systems recovery | |  | b. | ​systems analysis | |  | c. | ​systems design | |  | d. | ​systems implementation and review |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | 4 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 44. In which step of the Systems Development Life Cycle (SDLC) is the solution to the identified problem determined and understood?​   |  |  |  | | --- | --- | --- | |  | a. | ​systems investigation | |  | b. | ​systems analysis | |  | c. | ​systems design | |  | d. | ​systems implementation and review |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 4 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 45. In which step of the Systems Development Life Cycle (SDLC) is the system actually used by the end-user on a regular basis?​   |  |  |  | | --- | --- | --- | |  | a. | ​systems investigation | |  | b. | ​systems analysis | |  | c. | ​systems deployment | |  | d. | ​systems implementation and review |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | 4 | | *QUESTION TYPE:* | Multiple Choice | |

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| 46. In an E-R Model a person, place, or thing with characteristics to be stored in the database are referred to as?​   |  |  |  | | --- | --- | --- | |  | a. | ​entity | |  | b. | ​row | |  | c. | ​attribute | |  | d. | ​file |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 4 | | *QUESTION TYPE:* | Multiple Choice | |

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| 47. What type of relationship is depicted in Figure 1?​   |  |  |  | | --- | --- | --- | |  | a. | ​one-to-many | |  | b. | ​many-to-many | |  | c. | ​one-to-all | |  | d. | ​one-to-one |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | 5 | | *QUESTION TYPE:* | Multiple Choice | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 48. Which statement best describes the relationship shown in Figure 1?​   |  |  |  | | --- | --- | --- | |  | a. | ​For every occurrence of A, there can only be one occurrence of B. | |  | b. | ​For every occurrence of A, there can be multiple occurrences of B. | |  | c. | ​There can be multiple occurrences of A and B. | |  | d. | ​For every occurrence of B, there can be multiple occurrences of A. |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 5 | | *QUESTION TYPE:* | Multiple Choice | |

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| 49. What type of relationship is depicted in Figure 2?​   |  |  |  | | --- | --- | --- | |  | a. | ​one-to-many | |  | b. | ​many-to-many | |  | c. | ​one-to-all | |  | d. | ​one-to-one |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 5 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 50. If entity A in Figure 2 represents customers and entity B represents automobiles, which of the following statements is correct?​   |  |  |  | | --- | --- | --- | |  | a. | ​Each customer can only own one car, but each car can be owned by many customers. | |  | b. | ​Each customer can only own one car and each car can only be owned by one customer. | |  | c. | ​Each customer can own many cars and each car can be owned by many customers. | |  | d. | ​Each customer can own many cars, but each car can be owned by only one customer. |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | 5 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 51. Suppose that a patient in a hospital can only be assigned to one room. However, the room may be assigned to more than one patient at a time. This is an example of what type of relationship?​   |  |  |  | | --- | --- | --- | |  | a. | ​one-to-many | |  | b. | ​many-to-many | |  | c. | ​one-to-all | |  | d. | ​one-to-one |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 5 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 52. If a recipe contains several ingredients, and those ingredients can also be used in other recipes, this would be an example of what type of relationship?​   |  |  |  | | --- | --- | --- | |  | a. | ​one-to-many | |  | b. | ​many-to-many | |  | c. | ​one-to-all | |  | d. | ​one-to-one |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 5-6 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 53. The fact that a person can wear different size clothes and that different people can wear the same size clothes is best characterized as a what type of relationship?​   |  |  |  | | --- | --- | --- | |  | a. | ​one-to-many | |  | b. | ​one-to-all | |  | c. | ​many-to-many | |  | d. | ​one-to-one |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 5 6 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 54. If uncontrolled, what can lead to data anomalies?​   |  |  |  | | --- | --- | --- | |  | a. | ​data normalization | |  | b. | ​data correlation | |  | c. | ​data redundancy | |  | d. | ​data suppression |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | 6 7 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 55. Which of the following is used to determine the correct organization for data that is to be stored in a database?​   |  |  |  | | --- | --- | --- | |  | a. | ​E-R model | |  | b. | ​normalization process | |  | c. | ​systems implementation and review | |  | d. | ​systems analysis |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 6 7 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 56. Which of the following may contain transitive dependencies, but not partial dependencies?​   |  |  |  | | --- | --- | --- | |  | a. | ​unnormalized data | |  | b. | ​second normal form (2NF) | |  | c. | ​first normal form (1NF) | |  | d. | ​third normal form (3NF) |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | 9 10 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 57. Which of the following may contain repeating groups of data?​   |  |  |  | | --- | --- | --- | |  | a. | ​unnormalized data | |  | b. | ​first normal form (1NF) | |  | c. | ​second normal form (2NF) | |  | d. | ​third normal form (3NF) |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 7 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 58. Which of the following is used to uniquely identify each record?​   |  |  |  | | --- | --- | --- | |  | a. | ​primary key | |  | b. | ​row | |  | c. | ​partial dependency | |  | d. | ​account number |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 7 8 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 59. Which of the following may contain partial dependencies, but cannot contain repeating groups?​   |  |  |  | | --- | --- | --- | |  | a. | ​unnormalized data | |  | b. | ​first normal form (1NF) | |  | c. | ​second normal form (2NF) | |  | d. | ​third normal form (3NF) |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 8 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 60. Partial dependency exists if what conditions exist?​   |  |  |  | | --- | --- | --- | |  | a. | ​a column is dependent on a portion of the table that is not identified as the primary key | |  | b. | ​a column is dependent only on a portion of a composite primary key | |  | c. | ​the data contains repeating groups | |  | d. | ​the table is not in first normal form (1NF) |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 61. Which of the following does not contain repeating groups, but has a primary key and possibly partial dependencies?​   |  |  |  | | --- | --- | --- | |  | a. | ​unnormalized data | |  | b. | ​first normal form (1NF) | |  | c. | ​second normal form (2NF) | |  | d. | ​third normal form (3NF) |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 8 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 62. Data in first normal form (1NF) does not contain which of the following?​   |  |  |  | | --- | --- | --- | |  | a. | ​primary key | |  | b. | ​repeating groups | |  | c. | ​partial dependencies | |  | d. | ​both a and b |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 8 9 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 63. Which of the following can lead to partial dependencies?​   |  |  |  | | --- | --- | --- | |  | a. | ​composite primary key | |  | b. | ​common fields | |  | c. | ​foreign keys | |  | d. | ​normalization |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 64. Data in second normal form (2NF) may contain which of the following?​   |  |  |  | | --- | --- | --- | |  | a. | ​repeating groups | |  | b. | ​transitive dependencies | |  | c. | ​partial dependencies | |  | d. | ​both a and b |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 65. Data in third normal form (3NF) contains which of the following?​   |  |  |  | | --- | --- | --- | |  | a. | ​repeating groups | |  | b. | ​transitive dependencies | |  | c. | ​partial dependencies | |  | d. | ​none of the above |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 66. If the data has no partial dependencies, repeating groups, or transitive dependencies, and has a composite primary key, the data is in which form?​   |  |  |  | | --- | --- | --- | |  | a. | ​first normal | |  | b. | ​second normal | |  | c. | ​third normal | |  | d. | ​unnormalized |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 67. Which of the following can be used to link the data in two or more tables together?​   |  |  |  | | --- | --- | --- | |  | a. | ​repeating group | |  | b. | ​relationships | |  | c. | ​SDLC | |  | d. | ​common field |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 68. Which of the following usually correlates to a primary key in another table?​   |  |  |  | | --- | --- | --- | |  | a. | ​transitive dependency | |  | b. | ​composite primary key | |  | c. | ​foreign key | |  | d. | ​partial dependency |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 69. A foreign key is usually found on which side of a relationship?​   |  |  |  | | --- | --- | --- | |  | a. | ​one | |  | b. | ​many | |  | c. | ​unnormalized | |  | d. | ​primary entity |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 70. What name is used to denote a common field that exists between two tables, but is also the primary key for one of the tables?​   |  |  |  | | --- | --- | --- | |  | a. | ​duplicate key | |  | b. | ​foreign key | |  | c. | ​composite primary key | |  | d. | ​distinct key |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 71. Which of the following types of relationships cannot exist in a relational database?​   |  |  |  | | --- | --- | --- | |  | a. | ​one-to-many | |  | b. | ​many-to-many | |  | c. | ​one-to-all | |  | d. | ​one-to-one |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 72. What is added to a relational database to eliminate many-to-many relationships?​   |  |  |  | | --- | --- | --- | |  | a. | ​bridging table | |  | b. | ​transitive dependency | |  | c. | ​primary entity | |  | d. | ​secondary entity |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 73. What represents a characteristic or attribute that is being collected about an entity?​   |  |  |  | | --- | --- | --- | |  | a. | ​record | |  | b. | ​row | |  | c. | ​field | |  | d. | ​both a and b |  |  |  | | --- | --- | | *ANSWER:* | c | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 74. Which of the following is an example of an attribute?​   |  |  |  | | --- | --- | --- | |  | a. | ​a person’s hair color | |  | b. | ​the people who live in a particular town | |  | c. | ​the patients in a doctor's office | |  | d. | ​vendors |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 75. A field in the logical design of a database is represented by what in the physical database?​   |  |  |  | | --- | --- | --- | |  | a. | ​column | |  | b. | ​row | |  | c. | ​field | |  | d. | ​row |  |  |  | | --- | --- | | *ANSWER:* | a | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 76. A record in the logical design of a database is represented by what in the physical database?​   |  |  |  | | --- | --- | --- | |  | a. | ​row | |  | b. | ​field | |  | c. | ​record | |  | d. | ​row |  |  |  | | --- | --- | | *ANSWER:* | d | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 77. Data mining refers to \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​discovering new data to include in the database | |  | b. | ​analyzing data already stored in a database | |  | c. | ​selling data to other organizations | |  | d. | ​all of the above |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 14 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 78. Analyzing historical sales data stored in a database is commonly referred to as \_\_\_\_.​   |  |  |  | | --- | --- | --- | |  | a. | ​data storage | |  | b. | ​data mining | |  | c. | ​data manipulation | |  | d. | ​archived data |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 14 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 79. Which of the following committees are responsible for establishing SQL guidelines?​   |  |  |  | | --- | --- | --- | |  | a. | ​ANSI and ASCII | |  | b. | ​ANSI and ISO | |  | c. | ​IEEE and OSI | |  | d. | ​OSI and ASCII |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 13 | | *QUESTION TYPE:* | Multiple Choice | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 80. Which of the following is an interface tool that allows a user to create, edit, and manipulate data in Oracle 12c?​   |  |  |  | | --- | --- | --- | |  | a. | ​SQL | |  | b. | ​SQL\*Plus | |  | c. | ​ASCII | |  | d. | ​Script |  |  |  | | --- | --- | | *ANSWER:* | b | | *POINTS:* | 1 | | *REFERENCES:* | 16 | | *QUESTION TYPE:* | Multiple Choice | |

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| --- |
| **Completion** |

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| 81. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is used to create and maintain the structure of a database.​   |  |  | | --- | --- | | *ANSWER:* | database management system  (DBMS) | | *POINTS:* | 1 | | *REFERENCES:* | 2 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 82. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a storage structure that contains data.​   |  |  | | --- | --- | | *ANSWER:* | database​ | | *POINTS:* | 1 | | *REFERENCES:* | 2 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 83. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a basic unit of data that can consist of a letter, number, or special symbol.​   |  |  | | --- | --- | | *ANSWER:* | character​ | | *POINTS:* | 1 | | *REFERENCES:* | 2 | | *QUESTION TYPE:* | Completion | |

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| 84. A field is a group of related \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.​   |  |  | | --- | --- | | *ANSWER:* | characters​ | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 85. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a group of interrelated files.​   |  |  | | --- | --- | | *ANSWER:* | database​ | | *POINTS:* | 1 | | *REFERENCES:* | 2 | | *QUESTION TYPE:* | Completion | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 86. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a group of related fields.​   |  |  | | --- | --- | | *ANSWER:* | record​ | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 87. A file is composed of a group of related \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.​   |  |  | | --- | --- | | *ANSWER:* | records​ | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 88. A field is referred to as a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the physical database.​   |  |  | | --- | --- | | *ANSWER:* | column​ | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Completion | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 89. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is referred to as a row in the physical database.​   |  |  | | --- | --- | | *ANSWER:* | record​ | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Completion | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 90. A file is referred to as a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in an Oracle 12c database.​   |  |  | | --- | --- | | *ANSWER:* | table​ | | *POINTS:* | 1 | | *REFERENCES:* | 3 | | *QUESTION TYPE:* | Completion | |

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| 91. The steps used to design and develop a database are commonly referred to as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.​   |  |  | | --- | --- | | *ANSWER:* | Systems Development Life Cycle  SDLC | | *POINTS:* | 1 | | *REFERENCES:* | 4 | | *QUESTION TYPE:* | Completion | |

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| 92. A straight line with a crow’s foot at one end depicts a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ relationship in an E-R Model.​   |  |  | | --- | --- | | *ANSWER:* | one-to-many  one to many | | *POINTS:* | 1 | | *REFERENCES:* | 5 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 93. A solid straight line in an E-R Model depicts a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ relationship.​   |  |  | | --- | --- | | *ANSWER:* | one-to-one  one to one​ | | *POINTS:* | 1 | | *REFERENCES:* | 5 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 94. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ relationship means data can have multiple occurrences in both entities.​   |  |  | | --- | --- | | *ANSWER:* | many-to-many  many to many​ | | *POINTS:* | 1 | | *REFERENCES:* | 6 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 95. Data is in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ normal form if it does not have any repeating groups and has a primary key.​   |  |  | | --- | --- | | *ANSWER:* | first  1st | | *POINTS:* | 1 | | *REFERENCES:* | 8 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 96. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is used to uniquely identify each record.​   |  |  | | --- | --- | | *ANSWER:* | primary key​ | | *POINTS:* | 1 | | *REFERENCES:* | 8 9 | | *QUESTION TYPE:* | Completion | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 97. Data is in second normal form if it is in first normal form and has no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.​   |  |  | | --- | --- | | *ANSWER:* | partial dependencies​ | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | Completion | |

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| 98. If at least one value in a record does not depend upon the primary key, then a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ exists.​   |  |  | | --- | --- | | *ANSWER:* | transitive dependency | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 99. Data is in third normal form if it is in second normal form and has no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.​   |  |  | | --- | --- | | *ANSWER:* | transitive dependencies​ | | *POINTS:* | 1 | | *REFERENCES:* | 9 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 100. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a common field between two tables and is also a primary key for one of the tables.​   |  |  | | --- | --- | | *ANSWER:* | foreign key​ | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | Completion | |

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| 101. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ table can be added to the physical database to eliminate a many-to-many relationship.​   |  |  | | --- | --- | | *ANSWER:* | bridging​ | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 102. A(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ relationship cannot exist in a physical relational database.​   |  |  | | --- | --- | | *ANSWER:* | many-to-many  many to many | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 103. Analyzing historical data stored in a database is referred to as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.​   |  |  | | --- | --- | | *ANSWER:* | data mining​ | | *POINTS:* | 1 | | *REFERENCES:* | 14 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 104. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a data sublanguage that processes sets of data.​   |  |  | | --- | --- | | *ANSWER:* | Structured Query Language  SQL | | *POINTS:* | 1 | | *REFERENCES:* | 12 | | *QUESTION TYPE:* | Completion | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 105. SQL commands can be issued in Oracle *12c* through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which is an interface that allows users to interact with the database.​   |  |  | | --- | --- | | *ANSWER:* | SQL\*Plus​ | | *POINTS:* | 1 | | *REFERENCES:* | 16 | | *QUESTION TYPE:* | Completion | |

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| --- |
| **Essay** |

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| 106. What is the purpose of an E-R Model?​   |  |  | | --- | --- | | *ANSWER:* | An E-R Model is used by designers to determine the types of relationships that exist among entities to be included in the database. In particular, it identifies many-to-many relationships that must be eliminated before the physical database is created.​ | | *POINTS:* | 1 | | *REFERENCES:* | 5 7 | | *QUESTION TYPE:* | Essay | |

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| 107. What steps/tasks are required to convert unnormalized data to third normal form (3NF)?​   |  |  | | --- | --- | | *ANSWER:* | Any repeating groups are eliminated from the unnormalized data and a primary key is identified to put the data in first normal form. If the primary key is a composite primary key, then any partial dependencies must also be eliminated to convert the data to second normal form. Once the data is in second normal form, any transitive dependencies are eliminated and the data is then in third normal form.​ | | *POINTS:* | 1 | | *REFERENCES:* | 6 10 | | *QUESTION TYPE:* | Essay | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 108. What is the purpose of a foreign key?​   |  |  | | --- | --- | | *ANSWER:* | A foreign key is used to link data together that is contained in more than one table. It is usually found in the many side of a one-to-many relationship and links to the primary key in the other table.​ | | *POINTS:* | 1 | | *REFERENCES:* | 10 | | *QUESTION TYPE:* | Essay | |