

CIT-15 Chapter 14 Study Guide

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ___ 1. Most DBMSs come bundled with a set of tools to perform a variety of necessary tasks, such as building user interfaces, creating forms and reports, and interfacing with query languages and ___ for complex applications.
- a. query wizards
 - b. programming languages
 - c. report generators
 - d. form screens
- ___ 2. A field is also called a ___.
- a. column
 - b. row
 - c. table
 - d. record
- ___ 3. A ___ holds a single category of data (such as customer names or employee telephone numbers) that will be stored in a database.
- a. cell
 - b. field
 - c. table
 - d. record
- ___ 4. A record is also called a ___.
- a. field
 - b. report
 - c. row
 - d. table
- ___ 5. A ___ is a collection of related fields.
- a. table
 - b. field
 - c. column
 - d. record
- ___ 6. The field in a table that is used to relate that table to other tables is called the ___.
- a. composite key
 - b. secondary key
 - c. primary key
 - d. primary field
- ___ 7. DBMSs available for use on personal computers include ___ and Corel Paradox.
- a. IBM DB2
 - b. Microsoft Access
 - c. Adobe Acrobat
 - d. Adobe Fireworks
- ___ 8. Virtually all DBMSs include a ___ for easy data input, modification, and retrieval.
- a. user interface
 - b. line interface
 - c. command interface
 - d. device interface
- ___ 9. ___ actually create the database, based on the design generated by the database designer, and get it ready for data entry.
- a. Database developers
 - b. Database administrators (DBAs)
 - c. Database security officers
 - d. Database analysts
- ___ 10. Individual database tables are often referred to as ___.
- a. low files
 - b. base files
 - c. flat files
 - d. clear files
- ___ 11. The characteristics of an entity are called ___.
- a. attributes
 - b. variables
 - c. traits
 - d. fields
- ___ 12. ___ are made up of related records.
- a. Rows
 - b. Fields
 - c. Columns
 - d. Tables
- ___ 13. Data definition involves describing the properties of the data that go into each database table, specifically the ___ that make up the database.
- a. records
 - c. fields

- b. rows
d. characters
- ___ 14. One of the properties that can be assigned to a field is a(n) ___ to specify the format (such as letters, numbers, or symbols) that must be entered into a field.
a. format structure
b. input mask
c. data mask
d. data filter
- ___ 15. The ___ contains all data definitions for a database, including table structures, security information, relationships between the tables in the database, and so on.
a. database book
b. data dictionary
c. data box
d. data book
- ___ 16. In ___, the table field involved in the changes is locked until the changes to that field have been completed.
a. column-level locking
b. database locking
c. row-level locking
d. record-level locking
- ___ 17. ___ is a growing concern because of the vast amounts of personal data stored in databases today and the many breaches that have occurred in the recent past.
a. Data privacy
b. Data integrity
c. Data accessibility
d. Data legibility
- ___ 18. A(n) ___ is a small table consisting only of a list of the primary key field for each record in a table along with location information for that record.
a. tablet
b. keyword
c. index
d. main table
- ___ 19. With ___, the computer uses each record's primary key field and a mathematical formula called a hashing algorithm to determine a unique address that identifies where the record is physically stored in the database file.
a. real-time organization
b. indexed organization
c. sequenced organization
d. direct organization
- ___ 20. One of the simplest hashing algorithms involves dividing the primary key field by a particular _____.
a. power of two
b. prime number
c. irrational number
d. transcendental number
- ___ 21. In a typical client-server database application, the client is called the _____.
a. back end
b. rear end
c. portal
d. front end
- ___ 22. With a ___, a database is located in its entirety on a single computer, such as a server or mainframe computer.
a. distributed database system
b. star database system
c. centralized database system
d. ring database system
- ___ 23. The ___ is the most widely used database model today.
a. hierarchical database management system
b. relational database management system (RDBMS)
c. network database management system
d. database management system (DBMS)
- ___ 24. The process of evaluating and correcting the structures of the tables in a database to minimize data redundancy is called _____.
a. normalization
b. cyclic redundancy check
c. zeroing
d. zonification
- ___ 25. If a new database is to be used with existing data, the data needs to be transferred from its existing form into the new system—a process called _____.
a. migration
b. conversion
c. normalization
d. accommodation

- ___ 26. A ___ extracts specific information from a database by specifying particular conditions (called criteria) about the data you would like to retrieve.
- form
 - query
 - macro
 - view
- ___ 27. To create a query, users can either type a query using SQL or, more commonly, use the query tools built into the DBMS (such as a query design screen or query ___) to create a query object.
- command
 - line
 - wizard
 - key

Order Date	Ship Date	Customer Information	Product	Quantity	Price
1/2/02	1/2/02	ABC Indiana Blvd 12345 12345 1234	ABC	40	180.00
2/1/02	2/1/02	XYZ 12345 12345 1234	DEF	50	180.00
3/1/02	3/1/02	XYZ 12345 12345 1234	DEF	30	180.00

- ___ 28. The figure above illustrates a ____, created from data contained in a database.
- report
 - query
 - form
 - table
- ___ 29. Continuing to evaluate and improve the security measured used with the database is a database ___ activity.
- programming
 - design
 - implementation
 - maintenance
- ___ 30. The key characteristics for an OODBMS (including objects, attributes, methods, ____, and inheritance) are similar to object-oriented programming principles.
- pages
 - scripting
 - conversion
 - classes
- ___ 31. With ____, data is stored in single multidimensional database structures (sometimes called data cubes).
- Online Analytical Processing (OLAP)
 - ROLAP (Relational OLAP)
 - MOLAP (Multidimensional OLAP)
 - HOLAP (Hybrid OLAP)
- ___ 32. ___ databases are designed to store a collection of summarized data for quick and easy data analysis.
- Relational
 - Object-oriented
 - Analytical
 - Multidimensional
- ___ 33. Web-based database requests are received by the Web server, which then converts the request into a database query and passes it on to the database server with the help of software called ___.
- middleware
 - capsules
 - macros
 - applets
- ___ 34. Middleware for Web database applications is commonly written as ___—short sections of code written in a programming or scripting language that are executed by another program.
- scripts
 - JavaScripts
 - applets
 - utilities
- ___ 35. In ASPs, the code to tie the database to the Web site is typically written in JavaScript or ___.
- VBScript
 - CGI
 - PHP
 - BasicScript

Case-Based Critical Thinking Questions

Case 14-1

James is a recent college graduate and has six months of IT experience. He is thinking about pursuing a certification program in order to demonstrate that he is serious about IT.

- ___ 36. Which of the following is the best certification option for James?
- a. CCP
 - b. CBIP
 - c. ACP
 - d. CDMP
- ___ 37. James is most interested in becoming a database designer. Another name for this career choice is database ____.
- a. architect
 - b. developer
 - c. programmer
 - d. administrator

Case-Based Critical Thinking Questions

Case 14-2

The JL Group is a political think tank that is incorporating new media into their analyses.

- ___ 38. The employees of JL Group who use the database of the company for their daily work, without having knowledge of how the underlying database is structured, interact with the database ____.
- a. using the database script
 - b. through the database designer
 - c. through the database programmer
 - d. using the user interface
- ___ 39. The JL Group has gathered data on voting habits. In order to make sure that respondents cannot claim to have voted in more elections than is possible given their age, ____ rules can be assigned to the database tables.
- a. index validation
 - b. record validation
 - c. DBA validation
 - d. dynamic
- ___ 40. The JL Group is in the process of creating dynamic Web pages to poll politically aware young adults. They are interested in creating scripts that are compatible with many types of databases, so they are using the ____ language.
- a. CGI
 - b. API
 - c. COBOL
 - d. PHP