

1) A database is a self-describing collection of integrated records.

- a. True
- b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 131

Topic: Q4

Skill: RECALL

2) Special data called structured data describes the structure of the database.

- a. True
- b. False

Answer: b

Diff: 1

Type: TF

Page Reference: 134

Topic: Q4

Skill: RECALL

3) Metadata is data about data.

- a. True
- b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 134

Topic: Q4

Skill: RECALL

4) The name of the field, its datatype, and description are examples of metadata.

- a. True
- b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 134

Topic: Q4

Skill: RECALL

5) A DBMS is software that helps manage the operating system.

a. True

b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 141

Topic: Q5

Skill: RECALL

6) A database application system consists of forms, reports, and database programs.

a. True

b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 135

Topic: Q5

Skill: RECALL

7) Most large companies develop their own DBMSs.

a. True

b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 135

Topic: Q5

Skill: RECALL

8) IBM makes a DBMS called SQL-Server.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 135

Topic: Q5

Skill: RECALL

9) MySQL is an open source DBMS product.

- a. True
- b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 135

Topic: Q5

Skill: RECALL

10) Oracle makes a DBMS packaged called DB2.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 135

Topic: Q5

Skill: RECALL

11) SQL Server is an open-source DBMS package that is free for most database applications.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 135

Topic: Q5

Skill: RECALL

12) A DBMS and a database are two different things.

- a. True
- b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 135

Topic: Q5

Skill: RECALL

13) A DBMS is a collection of tables, relationships, and metadata.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 135

Topic: Q5

Skill: RECALL

14) SQL is an international standard language for processing a database.

- a. True
- b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 136

Topic: Q5

Skill: RECALL

15) SQL stands for "Standard Query Language".

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 136

Topic: Q5

Skill: RECALL

16) SQL can be used to add a new column to a table.

- a. True
- b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 136

Topic: Q5

Skill: APPLIED

17) A database can have one and only one application.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 137

Topic: Q6

Skill: RECALL

18) A database application can have one or more users.

- a. True
- b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 137

Topic: Q6

Skill: RECALL

19) A database form translates inputted changes into a SQL query in order for the database to process them.

- a. True
- b. False

Answer: a

Diff: 3

Type: TF

Page Reference: 136

Topic: Q5

Skill: APPLIED

20) Many people find it easier to store data using a spreadsheet than a database.

- a. True
- b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 130

Topic: Q3

Skill: RECALL

21) The only remaining personal DBMS today is Paradox.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 142

Topic: Q7

Skill: RECALL

22) A spreadsheet is just another type of relational database.

- a. True

b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 133

Topic: Q4

Skill: applied

23) Personal DBMS can handle over 100 users.

a. True

b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 142

Topic: Q7

Skill: RECALL

24) Spreadsheets usually track only one “theme”, but databases usually involved more than one “theme”.

a. True

b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 130

Topic: Q3

Skill: RECALL

25) Employees usually insert content directly into a company's website without a controlling editor.

a. True

b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 129

Topic: Q2

Skill: APPLIED

26) \_\_\_\_\_ is a form of creative endeavor that can be protected through a trademark, patent, copyright, industrial design, or integrated circuit topography.

- a. Innovative design
- b. Intellectual property
- c. Creative writing
- d. Programming
- e. Digital design

Answer: b

Diff: 1

Type: MC

Page Reference: 128

Topic: Q1

Skill: RECALL

27) What does CMS stand for?

- a. Content Management System
- b. Copy Management System
- c. Customer Management System
- d. Customer Manipulation System
- e. Content Manipulation System

Answer: a

Diff: 1

Type: MC

Page Reference: 129

Topic: Q2

Skill: RECALL

28) A \_\_\_\_\_ is a self-describing collection of integrated records.

- a. column
- b. table

- c. row
- d. field
- e. database

Answer: e

Diff: 1

Type: MC

Page Reference: 131

Topic: Q4

Skill: RECALL

29) A group of similar rows or records is called a \_\_\_\_\_.

- a. database
- b. table
- c. instance
- d. attribute
- e. column

Answer: b

Diff: 1

Type: MC

Page Reference: 131

Topic: Q4

Skill: RECALL

30) \_\_\_\_\_ describe(s) the structure of the database.

- a. Metadata
- b. Tables
- c. Columns
- d. A relationship diagram
- e. Fields

Answer: a

Diff: 2

Type: MC

Page Reference: 131

Topic: Q4

Skill: RECALL

31) A database consists of

- a. rows, tables, instructions.
- b. metadata, keyboard, relationships.
- c. tables, instructions, relationships.
- d. relationships, rows tables.
- e. CPU, tables, rows.

Answer: d

Diff: 3

Type: MC

Page Reference: 131

Topic: Q4

Skill: RECALL

32) A \_\_\_\_\_ is a column or group of columns that identifies a unique row in a table.

- a. record
- b. relationship
- c. row
- d. key
- e. field

Answer: d

Diff: 2

Type: MC

Page Reference: 132

Topic: Q4

Skill: RECALL

33) \_\_\_\_\_ are keys in a different table from the one in which they reside.

- a. Secondary keys
- b. Simple keys
- c. Special keys

- d. Primary keys
- e. Foreign keys

Answer: e

Diff: 3

Type: MC

Page Reference: 133

Topic: Q4

Skill: RECALL

34) \_\_\_\_\_ is a formal name for a table.

- a. File
- b. Database
- c. Collection
- d. Metadata
- e. Relation

Answer: e

Diff: 2

Type: MC

Page Reference: 133

Topic: Q4

Skill: RECALL

35) A relational database refers to

- a. databases that have related objects related by similar attributes.
- b. a set of tables that contains similar content.
- c. a set of files that have similar names.
- d. databases that carry data in the form of tables with individual primary keys.
- e. databases that carry data in the form of tables and that represent relationships using foreign keys.

Answer: e

Diff: 2

Type: MC

Page Reference: 133

Topic: Q5

Skill: RECALL

36) Which of the following are not considered to be metadata?

- a. Field properties
- b. Description
- c. File name
- d. Data type
- e. Field name

Answer: c

Diff: 2

Type: MC

Page Reference: 133

Topic: Q4

Skill: APPLIED

37) \_\_\_\_\_ consists of forms, formatted reports, queries, and application programs.

- a. A database application
- b. A DBMS program
- c. A Visual Basic application
- d. A database
- e. A Windows application

Answer: a

Diff: 1

Type: MC

Page Reference: 135

Topic: Q5

Skill: RECALL

38) Which of the following is a personal DBMS product?

- a. Microsoft Access
- b. Oracle
- c. SQL.

- d. Microsoft SQL Server
- e. IBM DB2.

Answer: a

Diff: 1

Type: MC

Page Reference: 142

Topic: Q7

Skill: RECALL

39) Which of the following is an international standard language for processing a database?

- a. VBA
- b. C++
- c. Visual Basic
- d. Standard Query Language
- e. Structured Query Language

Answer: e

Diff: 2

Type: MC

Page Reference: 136

Topic: Q5

Skill: RECALL

40) A database applications is a collection of programs, forms, reports and

- a. Queries
- b. Tables
- c. Metadata
- d. Keys
- e. Printers

Answer: a

Diff: 2

Type: MC

Page Reference: 137

Topic: Q6

Skill: RECALL

41) \_\_\_\_\_ are used to display formatted data and to generate paper copies of the data.

- a. Tables
- b. Forms
- c. Views
- d. Reports
- e. Queries

Answer: d

Diff: 2

Type: MC

Page Reference: 139

Topic: Q6

Skill: RECALL

42) Which of the following techniques is used to resolve the lost-update problem?

- a. Preemptive updating
- b. Sharing
- c. Task switching
- d. Locking
- e. Multitasking

Answer: d

Diff: 2

Type: MC

Page Reference: 141

Topic: Q6

Skill: RECALL

43) Which of the following is a file extension name of a graphics file?

- a. .wav
- b. .mov
- c. .mpg

- d. .pdf
- e. .bmp

Answer: e

Diff: 2

Type: MC

Page Reference: 128

Topic: Q1

Skill: RECALL

44) Which of the following is a file extension name of an audio file?

- a. .pdf
- b. .wav
- c. .mov
- d. .bmp
- e. .mpg

Answer: b

Diff: 1

Type: MC

Page Reference: 128

Topic: Q1

Skill: RECALL

45) Which of the following is a file extension name of a video file?

- a. .wav
- b. .mpg
- c. .doc
- d. .pdf
- e. .bmp

Answer: b

Diff: 1

Type: MC

Page Reference: 128

Topic: Q1

Skill: RECALL

46) Which of the following is a file extension name of a word-processing document?

- a. .mpg
- b. .docx
- c. .bmp
- d. .xlsx
- e. .wav

Answer: b

Diff: 1

Type: MC

Page Reference: 128

Topic: Q1

Skill: RECALL

47) Which of the following are not users of a content management system?

- a. Customers
- b. Web masters
- c. Copy editors
- d. Managers
- e. Employees

Answer: a

Diff: 3

Type: MC

Page Reference: 129

Topic: Q2

Skill: RECALL

48) The company that digitized the Oxford English Dictionary is called

- a. IBM.
- b. Nortel.
- c. Microsoft.
- d. Open Text.

e. Research in Motion.

Answer: d

Diff: 1

Type: MC

Page Reference: 129

Topic: Q2

Skill: RECALL

49) Columns are also called

a. rows.

b. databases.

c. fields.

d. relations.

e. tables.

Answer: c

Diff: 1

Type: MC

Page Reference: 131

Topic: Q4

Skill: RECALL

50) In a relational database, a collection of related records is a(n)

a. row.

b. attribute.

c. table.

d. column.

e. field.

Answer: c

Diff: 2

Type: MC

Page Reference: 131

Topic: Q4

Skill: RECALL

51) A collection of records in a relational database can be called a

- a. matrix.
- b. column.
- c. field.
- d. row.
- e. relation.

Answer: e

Diff: 2

Type: MC

Page Reference: 133

Topic: Q4

Skill: RECALL

52) The company Open Text provides companies with “cloud based”

- a. sales management software
- b. document management software
- c. Microsoft Office
- d. data storage
- e. accounting software

Answer: b

Diff: 3

Type: MC

Page Reference: 129

Topic: Q2

Skill: RECALL

53) Many users prefer to avoid database applications altogether and simply store their data in a(n)

- a. mattress.
- b. file.
- c. old can.
- d. spreadsheet.
- e. encrypted table.

Answer: d

Diff: 2

Type: MC

Page Reference: 130

Topic: Q3

Skill: RECALL

54) \_\_\_\_\_ software assists in creating, maintaining, and manipulating databases.

a. DMS

b. KMS

c. DBMS

d. MIS

e. DBM

Answer: c

Diff: 3

Type: MC

Page Reference: 135

Topic: Q5

Skill: RECALL

55) Content management is indexing the right information, processing, sorting it, and then

a. getting it printed when needed.

b. hiring good programmers.

c. editing right employee input.

d. making it available in the right format at the right time.

e. giving it to employees with “strong” passwords.

Answer: d

Diff: 3

Type: MC

Page Reference: 128

Topic: Q2

Skill: RECALL

56) \_\_\_\_\_ is a record in a relational database.

- a. A field
- b. A table
- c. A column
- d. A row
- e. A key

Answer: d

Diff: 2

Type: MC

Page Reference: 131

Topic: Q4

Skill: RECALL

57) \_\_\_\_\_ is an example of a personal DBMS.

- a. Access
- b. SQL Server
- c. DB2
- d. SQL
- e. Oracle

Answer: a

Diff: 2

Type: MC

Page Reference: 131

Topic: Q4

Skill: RECALL

58) \_\_\_\_\_ is an example of an enterprise DBMS.

- a. Access
- b. DB2
- c. FoxPro
- d. Quattro Pro
- e. Paradox

Answer: b

Diff: 2

Type: MC

Page Reference: 135

Topic: Q5

Skill: RECALL

59) MySQL is popular because it is a(n) \_\_\_\_\_ DBMS.

- a. open-source
- b. work-group
- c. personal
- d. enterprise
- e. powerful

Answer: a

Diff: 2

Type: MC

Page Reference: 135

Topic: Q5

Skill: RECALL

60) One example of a DBMS is

- a. SQL Server.
- b. .NET.
- c. Java.
- d. OEM.
- e. Excel.

Answer: a

Diff: 2

Type: MC

Page Reference: 135

Topic: Q5

Skill: RECALL

61) SQL is a

- a. query language.
- b. database system.
- c. 3GL.
- d. 2GL.
- e. programming language.

Answer: a

Diff: 2

Type: MC

Page Reference: 136

Topic: Q5

Skill: RECALL

62) A(n) \_\_\_\_\_ DBMS is designed to process large organizational and workgroup databases.

- a. object-oriented
- b. network
- c. relational
- d. personal
- e. enterprise

Answer: e

Diff: 2

Type: MC

Page Reference: 141

Topic: Q7

Skill: RECALL

63) SQL stands for

- a. Structured Query Language.
- b. Standard Query Language.
- c. Structured Question Language.
- d. Simple Query Language.
- e. Standard Question Language.

Answer: a

Diff: 2

Type: MC

Page Reference: 136

Topic: Q5

Skill: RECALL

64) \_\_\_\_\_ is an international standard language for processing a database.

- a. VBA
- b. SQL
- c. Java
- d. .NET
- e. MySQL

Answer: b

Diff: 2

Type: MC

Page Reference: 136

Topic: Q5

Skill: RECALL

65) The \_\_\_\_\_ problem is unique to a multi-user database environment.

- a. redundancy
- b. lost-update
- c. locked file
- d. security
- e. data integrity

Answer: b

Diff: 3

Type: MC

Page Reference: 141

Topic: Q6

Skill: RECALL

66) Users process data in the database using

- a. files.
- b. logic.
- c. programs.
- d. reports.
- e. queries.

Answer: e

Diff: 3

Type: MC

Page Reference: 135

Topic: Q5

Skill: APPLIED

67) The name of the field, the data type, and number of characters allowed are examples of

- a. attributes.
- b. characters.
- c. content.
- d. overhead.
- e. metadata.

Answer: e

Diff: 2

Type: MC

Page Reference: 134

Topic: Q4

Skill: RECALL

68) \_\_\_\_\_ describe(s) the structure of a database.

- a. Logic
- b. Metadata
- c. Models
- d. Protocols
- e. Content

Answer: b

Diff: 2

Type: MC

Page Reference: 134

Topic: Q4

Skill: RECALL

69) In today's business world content is just not about collection and distribution. It is also about

- a. the accuracy of the content.
- b. the organization of the content.
- c. the content management system.
- d. the relevance of the content.
- e. presenting the content appropriately for the audience.

Answer: e

Diff: 2

Type: MC

Page Reference: 128

Topic: Q1

Skill: RECALL

70) In the early days of corporate websites, employees were allowed to add content directly to the sites. Today this practice is not acceptable because

- a. of the lack of consistency in both look and accuracy of the web site.
- b. employees lack the skills to add content to web sites due to the greater sophistication of the software used today for corporate web sites.
- c. companies with web sites now have copy editors to prepare web site content.
- d. most companies use content management systems today.
- e. most web sites are driven by database management systems.

Answer: a

Diff: 3

Type: MC

Page Reference: 129

Topic: Q2

Skill: RECALL

71) Modern content management systems

- a. seek out documents located across an organization and actively manage access to the content.
- b. manage only media files.
- c. archive documents.
- d. organize content for corporate web sites.
- e. manage all aspects of corporate data.

Answer: a

Diff: 3

Type: MC

Page Reference: 129

Topic: Q2

Skill: RECALL

72) Content is closely related to

- a. intellectual property.
- b. words.
- c. software.
- d. property in the broadest sense.
- e. organized materials.

Answer: a

Diff: 2

Type: MC

Page Reference: 128

Topic: Q1

Skill: RECALL

73) One of the DMBS administrative functions includes

- a. building the database.
- b. backing up the database.
- c. collecting user requirements for the database.
- d. planning the database.

e. entering new data into the database.

Answer: b

Diff: 3

Type: MC

Page Reference: 137

Topic: Q5

Skill: RECALL

74) A database differs from a spreadsheet by

- a. involving lists of a single theme.
- b. having only columns.
- c. having lists of multiple rows and columns.
- d. involving lists of multiple themes.
- e. having only rows.

Answer: d

Diff: 3

Type: MC

Page Reference: 130

Topic: Q3

Skill: APPLIED

75) In databases, names of clients can be troublesome since they may not be

- a. relevant.
- b. simple.
- c. reconciled.
- d. unique.
- e. normalized.

Answer: d

Diff: 3

Type: MC

Page Reference: 138

Topic: Q6

Skill: RECALL

76) In a relational database application, a(n) \_\_\_\_\_ key is used to link one table with another.

- a. primary
- b. index
- c. secondary
- d. foreign
- e. composite

Answer: d

Diff: 2

Type: MC

Page Reference: 133

Topic: Q4

Skill: RECALL

77) Some employees are frustrated with database applications or are unwilling to share their data, so they prefer to store their data in a(n) spreadsheet instead of a database application.

Diff: 2

Type: FIB

Page Reference: 130

Topic: Q3

Skill: RECALL

78) If a user stores their data in a spreadsheet, it is unavailable to other users unless it is stored in the company's CMS.

Diff: 3

Type: FIB

Page Reference: 129

Topic: Q2

Skill: RECALL

79) metadata describes the data in a database.

Diff: 2

Type: FIB

Page Reference: 134

Topic: Q4

Skill: RECALL

80) Enterprise DBMS like DB2 are designed for large, corporate database applications.

Diff: 1

Type: FIB

Page Reference: 141

Topic: Q7

Skill: RECALL

81) For applications that need to process databases over the Internet, the application serves as an intermediary between the web server and the database.

Diff: 2

Type: FIB

Page Reference: 140

Topic: Q6

Skill: RECALL

82) Characters of information are represented by individual bytes.

Diff: 1

Type: FIB

Page Reference: 132

Topic: Q4

Skill: RECALL

83) A(n) DBMS is software that is used to create, process, and administer a database.

Diff: 2

Type: FIB

Page Reference: 135

Topic: Q5

Skill: RECALL

84) A(n) relation is another name for a table in relational database terms.

Diff: 2

Type: FIB

Page Reference: 133

Topic: Q4

Skill: RECALL

85) SQL is a query language that is portable between all relational DBMSs.

Diff: 2

Type: FIB  
Page Reference: 136  
Topic: Q5  
Skill: RECALL

86) Personal database products like MS Access are designed for individual users or small workgroups of no more than 15 users.

Diff: 2  
Type: FIB  
Page Reference: 142  
Topic: Q7  
Skill: RECALL

87) If your database produces inaccurate results that don't seem to have a cause, your database may be having lost-update problems.

Diff: 3  
Type: FIB  
Page Reference: 141  
Topic: Q6  
Skill: RECALL

88) A web CMS helps to enable a company to standardize the look and feel of a web site.

Diff: 2  
Type: FIB  
Page Reference: 129  
Topic: Q2  
Skill: RECALL

89) A collection of columns or fields is called rows or records.

Diff: 1  
Type: FIB  
Page Reference: 131  
Topic: Q4  
Skill: RECALL

90) A group of similar rows or records is called a file or a(n) table.

Diff: 1  
Type: FIB  
Page Reference: 131  
Topic: Q4  
Skill: RECALL

91) Bytes are grouped into columns or fields.

Diff: 1  
Type: FIB  
Page Reference: 131  
Topic: Q4  
Skill: RECALL

92) A database is a self-describing collection of integrated records.

Diff: 1  
Type: FIB  
Page Reference: 131  
Topic: Q4  
Skill: RECALL

93) A database is a collection of tables, relationships, and metadata.

Diff: 2  
Type: FIB  
Page Reference: 131  
Topic: Q4  
Skill: RECALL

94) Data type and description are examples of metadata.

Diff: 2  
Type: FIB  
Page Reference: 134  
Topic: Q4  
Skill: RECALL

95) The purpose of a database is to keep track of things that involve more than one theme.

Diff: 2  
Type: FIB  
Page Reference: 130  
Topic: Q3  
Skill: RECALL

96) A(n) query is a special name for a question that is asked in a database application.

Diff: 2  
Type: FIB

Page Reference: 136

Topic: Q5

Skill: RECALL

97) A database is a collection of tables, metadata, and relationships.

Diff: 2

Type: FIB

Page Reference: 135

Topic: Q5

Skill: RECALL

98) Setting up the database security is a part of database administration.

Diff: 2

Type: FIB

Page Reference: 137

Topic: Q5

Skill: RECALL

99) When a database form is processed to add a new record to a table, the DBMS converts the contents of the form into a(n) SQL statement.

Diff: 3

Type: FIB

Page Reference: 136

Topic: Q5

Skill: RECALL

100) To prevent the lost-update problem, the DBMS should have some type of locking mechanism.

Diff: 3

Type: FIB

Page Reference: 141

Topic: Q6

Skill: RECALL

101) Forms and reports are usually part of a database application.

Diff: 2

Type: FIB

Page Reference: 139

Topic: Q6

Skill: RECALL

102) What are the differences between a database and a spreadsheet?

Answer:

A spreadsheet table is organized into rows and columns and is typically used to track related data across two dimensions (e.g. student grades on course assignments), whereas a database is a three-dimensional storage structure—think of a series of two-dimensional tables linked together (e.g. course scheduling for faculty and students). A database has metadata to structure the data of the database.

Spreadsheets are simple to set up and understand. However, a database is preferable in cases where the user needs to keep track of three or more things—customers, sales, suppliers, and other transactions—and databases are better when data involves more than one topic or theme. Spreadsheets work best when the data involves just one topic or theme.

Diff: 3

Type: ES

Page Reference: 130

Topic: Q3

Skill: APPLIED

103) Explain the difference between a primary key and a foreign key.

Answer:

A primary key is a column or group of columns that has a unique value for each row in a table. Foreign keys are primary keys from a different table than the one in which they reside.

Diff: 3

Type: ES

Page Reference: 133

Topic: Q4

Skill: APPLIED

104) What is a database application?

Answer:

A database application consists of forms, formatted reports, queries, and application programs. Each of these in turn calls on the database management system to process the database tables.

Diff: 2

Type: ES

Page Reference: 135

Topic: Q5

Skill: RECALL

105) Discuss the challenges for a multiuser database application.

Answer:

Multiple users may try to update the same record at the same time, which can make for a lost-update problem. To prevent this problem, some type of locking must be used to coordinate the activities of users.

Diff: 3

Type: ES

Page Reference: 141

Topic: Q6

Skill: APPLIED

106) Describe the use of a content management system.

Answer:

When an employee wants to place some content on the organizations web site he or she will access the web content management system. The web CMS is usually located on the company's web site server. The employee typically loads the raw content into the CMS. Copy editors then review the document and make necessary changes. They then pass the content on to layout editors, who prepare how the content will be presented. The content and presentation are stored with the help of a DBMS. The manager in charge of the web site will then review the content and presentation and publish the work to the live web site.

Diff: 3

Type: ES

Page Reference: 129

Topic: Q2

Skill: RECALL

107) Name three different DBMS packages available today.

Answer:

IBM DB2, Oracle, Microsoft SQL Server, MySQL.

Diff: 1

Type: ES

Page Reference: 135

Topic: Q5

Skill: recall

108) What is the difference between a DBMS and a database?

Answer:

A DBMS is a software program that helps to build, control and maintain a database; a database is a collection of tables, relationships, and metadata.

Diff: 2

Type: ES

Page Reference: 135

Topic: Q5

Skill: RECALL

109) What is metadata? Give an example. Why is it important?

Answer:

Metadata is data "about" data. Metadata describes the structure of the database and its contents. Examples include the names and descriptions of the fields, the various aliases for them throughout the database, the dates that they were created and modified, the data types, the field widths, and whether it's a key or indexed. Metadata is important because it helps the DBMS to automate some data management tasks. However, as the amount of metadata grows it takes up more memory and must be managed itself.

Diff: 3

Type: ES

Page Reference: 134

Topic: Q4

Skill: APPLIED

110) What is a DBMS? What are the advantages and disadvantages of using a DBMS?

Answer:

DBMS stands for Database Management System. There are many different kinds but the relational DBMS (RDBMS) is by far the most popular today. A DBMS is useful because it helps database developers create tables and relationships, manage the metadata, process

the database with queries, and administer the user access and security. It standardizes data access in the organization and simplifies data maintenance. Data can be quite complex and quite expensive to manage. If the centralized data store is not archived and backed up properly, the impact of lost corporate data will be more severe than in an older situation where there were a lot of redundant databases.

Diff: 3

Type: ES

Page Reference: 135

Topic: Q5

Skill: APPLIED

111) It is often said that much of corporate data resides in various unrelated spreadsheet files or, "spreadsheet silos." What are these concepts and why are they a problem?

Answer:

Millions of business users rely daily on spreadsheets for business intelligence (BI) functions such as data manipulation, data visualization, presentation graphics, forecasting, and so on. For many users, spreadsheets are a form of reporting, and pivot tables a type of data analysis. When users modify the data in spreadsheets and add new data, soon the data in the spreadsheet looks nothing like the source data. This creates problems for sharing the data with others and it generates inconsistent versions of the data in the organization.

Diff: 3

Type: ES

Page Reference: 130

Topic: Q3

Skill: APPLIED

112) What is meant by a relational database? What are the advantages of relational database technology?

Answer:

Relational databases store data in tables and use shared fields (primary and foreign keys) in order to show the relationships between tables. Relational databases are based on strong fundamental theory and limit the amount of data redundancy and data errors. A relational database can enforce data and referential integrity constraints. They are the most popular type of DBMS available because they capture all the possible types of relationships and they are fairly easy to learn and implement. There are many skilled IT specialists in this field so it is fairly easy to find support for this technology.

Diff: 3

Type: ES

Page Reference: 133

Topic: Q4

Skill: APPLIED

113) What is SQL? Why is it so important for DBMS? Give an example.

Answer:

SQL stands for "Structured Query Language", and this is the standard query language for all DBMSs. It is a 4GL so it is fairly English-like and easy to learn. A knowledge of generic SQL can be transferred to any of the popular DBMSs easily. There are SQL commands for creating tables, manipulating data, and for maintaining the data.

A standard format for a data manipulation type of query is:

SELECT field 1, field 2, ....field n

FROM table 1, table 2, ....table m

WHERE condition 1, condition 2, ....condition p is true

So a typical query might be:

SELECT CustomerNumber, CustomerName

FROM Customer

WHERE Province = 'AB'

Diff: 3

Type: ES

Page Reference: 136

Topic: Q5

Skill: APPLIED

114) What is the difference between a personal DBMS and an enterprise DBMS? Give an example of each.

Answer:

A personal DBMS is designed for smaller, simpler database applications. It can be used for personal or small workgroup applications with fewer than 100 users, usually less than 15. Most of the time a personal DBMS is used by a single user for a stand-alone application. The most popular example is MS Access. Enterprise DBMSs like DB2 from IBM process large organizational or workgroup database applications. They may have thousands of users with multiple applications distributed across various networks. They have more sophisticated network and security capabilities than a personal DBMS.

Diff: 3

Type: ES

Page Reference: 141-142

Topic: Q7

Skill: APPLIED

115) If you are a database administrator and you uncover some suspicious transactions in one of your database applications, what should you do?

Answer:

Everyone should be aware that fraud does happen, it is more likely to be due to an employee than an outsider. The first thing to be aware of is you must not speak casually about this situation with anyone. It is important to begin carefully to collect as much data as possible on the situation and document all the names and dates. As soon as possible you should speak with a member of the senior management, possibly a CIO or CFO since the CFO is usually in charge of financial controls. If the matter continues for very long and looks complicated, you should consider contacting your own lawyer to protect your own interests.

Diff: 3

Type: ES

Page Reference: 137

Topic: Q5

Skill: APPLIED