***Database Concepts, 10e* (Kroenke)**

**Chapter 1 Getting Started**

1) To be as efficient as possible, data analysis should be done on the production database.

Answer: FALSE

Diff: 2 Page Ref: 26

AACSB: Information Technology

Chapter Obj.: Introduce data warehouses and business intelligence (BI) systems.

Classification: Concept

2) Although users use database systems, they are not considered part of a database system.

Answer: FALSE

Diff: 1 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Know the components of a database system.

Classification: Concept

3) A database is a set of one or more computer programs that serve as an intermediary between the users and the database management system (DBMS).

Answer: FALSE

Diff: 2 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Know the components of a database system.

Classification: Concept

4) A relational database can be defined as a self-describing collection of related tables.

Answer: TRUE

Diff: 1 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Learn the elements of a database.

Classification: Concept

5) A database is self-describing because the user maintains a record of the database structure outside the database itself.

Answer: FALSE

Diff: 2 Page Ref: 18

AACSB: Information Technology

Chapter Obj.: Learn the elements of a database.

Classification: Concept

6) Metadata is the user data stored in the database.

Answer: FALSE

Diff: 1 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Learn the elements of a database.

Classification: Concept

7) Currently, organizations use their own hardware.

Answer: FALSE

Diff: 1 Page Ref: 20

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

8) The DBMS is used to create the database itself.

Answer: TRUE

Diff: 1 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

9) Referential integrity constraints must be enforced by the application program.

Answer: FALSE

Diff: 2 Page Ref: 19

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

10) Application programs are responsible for creating, maintaining, and supporting database backup and recovery systems.

Answer: FALSE

Diff: 2 Page Ref: 20

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

11) A relational database stores data in the form of lists.

Answer: FALSE

Diff: 1 Page Ref: 11

AACSB: Information Technology

Chapter Obj.: Understand how using related tables helps you avoid the problems of using lists.

Classification: Concept

12) Usually, a database table containing both rows and columns is designed to store data for exactly two themes.

Answer: FALSE

Diff: 2 Page Ref: 11

AACSB: Information Technology

Chapter Obj.: Understand how using related tables helps you avoid the problems of using lists.

Classification: Concept

13) MySQL Community Server 8.0 edition is a widely used standard, full-strength edition of MySQL, which can be downloaded for free and which may be used in production environments.

Answer: TRUE

Diff: 2 Page Ref: 25

AACSB: Information Technology

Chapter Obj.: Understand the difference between personal and enterprise-class database systems.

Classification: Concept

14) SQL stands for Structural Question Language.

Answer: FALSE

Diff: 1 Page Ref: 16

AACSB: Information Technology

Chapter Obj.: Understand how using related tables helps you avoid the problems of using lists.

Classification: Concept

15) Relational database tables are commonly combined, queried, and processed using Structured Query Language (SQL).

Answer: TRUE

Diff: 1 Page Ref: 16

AACSB: Information Technology

Chapter Obj.: Understand how using related tables helps you avoid the problems of using lists.

Classification: Concept

16) The DBMS receives data update requests from the application program.

Answer: TRUE

Diff: 3 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

17) In the general division of labor between database applications and the DBMS, the processing of forms is considered a DBMS task.

Answer: FALSE

Diff: 3 Page Ref: 20

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

18) Database applications that hide the underlying database technology are useful only for personal database applications.

Answer: TRUE

Diff: 3 Page Ref: 23

AACSB: Information Technology

Chapter Obj.: Understand the difference between personal and enterprise-class database systems.

Classification: Concept

19) In the general division of labor between database applications and the DBMS, the application program formats the results of a query into a report.

Answer: TRUE

Diff: 3 Page Ref: 21

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

20) Personal DBMS products, such as Microsoft Access, create a clear distinction between the DBMS and the database application.

Answer: FALSE

Diff: 2 Page Ref: 22

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

21) There is no reason for serious database developers to learn many aspects of database processing technology because DBMS products like Microsoft Access hide these aspects.

Answer: FALSE

Diff: 1 Page Ref: 24

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

22) Microsoft Access is a personal database that combines a DBMS with an application generator.

Answer: TRUE

Diff: 1 Page Ref: 43

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

23) The Microsoft Access application generator provides the ability to create and store forms, reports, and queries.

Answer: TRUE

Diff: 2 Page Ref: 43

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

24) Microsoft Access databases are stored using the file extension .accdb.

Answer: TRUE

Diff: 2 Page Ref: 48

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

25) Microsoft Access uses the Access 2003 .mdb file format as the default file format for database files.

Answer: FALSE

Diff: 2 Page Ref: 48

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

26) Microsoft Access uses the AutoNumber data type to create surrogate keys.

Answer: TRUE

Diff: 2 Page Ref: 56

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

27) Web 2.0 Web sites were popular due to their static, unchanging content.

Answer: FALSE

Diff: 1 Page Ref: 5

AACSB: Information Technology

Chapter Obj.: Understand the importance of databases in Internet Web applications and mobile apps.

Classification: Concept

28) Theoretically, databases could store instances in columns and characteristics in rows, instead of the other way around.

Answer: TRUE

Diff: 1 Page Ref: 12

AACSB: Information Technology

Chapter Obj.: Understand the nature and characteristics of databases.

Classification: Concept

29) A possible problem with keeping data in lists is that if you delete a row of data from a list, you may also delete some data items that you want to keep.

Answer: TRUE

Diff: 1 Page Ref: 10

AACSB: Information Technology

Chapter Obj.: Understand the potential problems with lists.

Classification: Concept

30) An advantage of keeping data in lists is that if you update a data value in one row of data in a list, other occurrences of the same data item in other rows will be automatically updated as well.

Answer: FALSE

Diff: 1 Page Ref: 9

AACSB: Information Technology

Chapter Obj.: Understand the potential problems with lists.

Classification: Concept

31) An advantage of keeping data in lists is that if you add a row of data to the list, you will never have null values occurring for any data item in the row.

Answer: FALSE

Diff: 1 Page Ref: 10

AACSB: Information Technology

Chapter Obj.: Understand the potential problems with lists.

Classification: Concept

32) One problem with storing duplicated data is the potential for inconsistent values.

Answer: TRUE

Diff: 2 Page Ref: 10

AACSB: Information Technology

Chapter Obj.: Understand the potential problems with lists.

Classification: Concept

33) The purpose of a database is to help people keep track of things.

Answer: TRUE

Diff: 1 Page Ref: 8

AACSB: Information Technology

Chapter Obj.: Understand the reasons for using a database.

Classification: Concept

34) Regarding Big Data, what does the term NoSQL really mean?

A) No SQL used

B) NortonOS Query Language

C) Notational Query Language

D) Nonrelational Database

Answer: D

Diff: 2 Page Ref: 27

AACSB: Information Technology

Chapter Obj.: Introduce Big Data and cloud computing.

Classification: Concept

35) What role does the Web browser play in a Web database application?

A) Hardware support

B) Microchip accelerator

C) Web user interface

D) Back-end Database Management System

Answer: C

Diff: 1 Page Ref: 26

AACSB: Information Technology

Chapter Obj.: Introduce Web database applications.

Classification: Concept

36) Which of the following is not a basic component of a database system?

A) Database

B) User

C) ERD

D) DBMS

Answer: C

Diff: 2 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Know the components of a database system.

Classification: Concept

37) A relational database is \_\_\_\_\_\_\_\_.

A) a self-describing collection of related tables

B) a collection of forms and reports that support a given purpose

C) a library of queries and data files for querying

D) a set of applications and the data sets for those applications

Answer: A

Diff: 2 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Know the components of a database system.

Classification: Concept

38) The component of a database that makes it self-describing is the \_\_\_\_\_\_\_\_.

A) related tables

B) applications

C) metadata

D) data set

Answer: C

Diff: 2 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Know the components of a database system.

Classification: Concept

39) Which of the following would not be an example of database metadata?

A) Queries against records in the database tables

B) Properties of tables in a database

C) Names of columns in a database and their associated tables

D) Properties of columns

Answer: A

Diff: 2 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Know the components of a database system.

Classification: Concept

40) The creation of a database and its tables is a function of which component of the database system?

A) Users

B) Application

C) DBMS

D) Database

Answer: C

Diff: 2 Page Ref: 18

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

41) Which of the following is a function of the DBMS in a database system?

A) Create and transmit queries

B) Control applications

C) Create and process forms

D) Perform backup and recovery

Answer: D

Diff: 3 Page Ref: 19

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

42) Microsoft SQL Server is an example of a \_\_\_\_\_\_\_\_.

A) database

B) database management system

C) data manipulation system

D) table

Answer: B

Diff: 1 Page Ref: 25

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

43) Microsoft Access is a personal database system. A personal database system is characterized by \_\_\_\_\_\_\_\_.

A) the DBMS removing the metadata from the database

B) the DBMS product taking the role of the DBMS and the database application generator

C) the database being stored inside the DBMS

D) the DBMS product being limited to a maximum of ten tables in any given database

Answer: B

Diff: 1 Page Ref: 43

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

44) The Microsoft Access application generator is not responsible for \_\_\_\_\_\_\_\_.

A) creating forms

B) creating reports

C) creating queries

D) creating tables

Answer: D

Diff: 3 Page Ref: 43

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

45) Today almost every commercial database is based on \_\_\_\_\_\_\_\_.

A) lists

B) the hierarchical model

C) the linked-list model

D) the relational model

Answer: D

Diff: 1 Page Ref: 11

AACSB: Information Technology

Chapter Obj.: Understand how using related tables helps you avoid the problems of using lists.

Classification: Concept

46) A relational database stores data in the form of \_\_\_\_\_\_\_\_.

A) lists

B) forms

C) columns

D) tables

Answer: D

Diff: 1 Page Ref: 11

AACSB: Information Technology

Chapter Obj.: Understand how using related tables helps you avoid the problems of using lists.

Classification: Concept

47) SQL stands for \_\_\_\_\_\_\_\_.

A) Standard Query Language

B) Structural Question Language

C) Structured Query Language

D) Standard Question Language

Answer: C

Diff: 1 Page Ref: 16

AACSB: Information Technology

Chapter Obj.: Understand how using related tables helps you avoid the problems of using lists.

Classification: Concept

48) The statement

SELECT STUDENT.StudentNumber, STUDENT.StudentName,

FROM STUDENT

WHERE STUDENT.StudentNumber = S12345678;

is an example of \_\_\_\_\_\_\_\_.

A) QBE

B) SQL

C) QLE

D) C++

Answer: B

Diff: 2 Page Ref: 16

AACSB: Information Technology

Chapter Obj.: Understand how using related tables helps you avoid the problems of using lists.

Classification: Concept

49) Which of the following is a function of the database application in a database system?

A) Process user queries

B) Update database data

C) Maintain database structures

D) Create tables

Answer: A

Diff: 2 Page Ref: 21

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

50) Which of the following is not a function of the database application in a database system?

A) Execute application logic

B) Control concurrency

C) Create and process forms

D) Process user queries

Answer: B

Diff: 3 Page Ref: 20

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

51) Microsoft Access database files are stored using the file extension \_\_\_\_\_\_\_\_.

A) .adb

B) .asp

C) .accdb

D) .mdb

Answer: C

Diff: 2 Page Ref: 48

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

52) The default file format for Microsoft Access database files is the \_\_\_\_\_\_\_\_.

A) Access 2007 format

B) Access 2003 format

C) Access XP format

D) SQL Server format

Answer: A

Diff: 2 Page Ref: 48

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

53) The Microsoft Access data type of AutoNumber is used when there is a specific need for a \_\_\_\_\_\_\_\_.

A) foreign key

B) changeable key

C) surrogate key

D) randomized key

Answer: C

Diff: 3 Page Ref: 56

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

54) Which of the following problems associated with storing data in a list is avoided by storing data in a relational database?

A) CPU processing inefficiencies

B) Lack of necessary bandwidth

C) Running out of memory storage

D) Duplication of data items

Answer: D

Diff: 2 Page Ref: 9

AACSB: Information Technology

Chapter Obj.: Understand the potential problems with lists.

Classification: Concept

55) A database may be used to help people with all of the following except \_\_\_\_\_\_\_\_.

A) track which student is assigned to a particular adviser

B) debug existing program code

C) check on the estimated arrival time of an incoming flight at an airport

D) look up their checking account balance over the Internet

Answer: B

Diff: 2 Page Ref: 9

AACSB: Information Technology

Chapter Obj.: Understand the reasons for using a database.

Classification: Concept

56) What is the name of Microsoft's cloud services?

Answer: Azure

Diff: 2 Page Ref: 28

AACSB: Information Technology

Chapter Obj.: Introduce Big Data and cloud computing.

Classification: Concept

57) In relational databases, query requests use a language called \_\_\_\_\_\_\_\_.

Answer: Structured Query Language, (SQL)

Diff: 1 Page Ref: 16-17

AACSB: Information Technology

Chapter Obj.: Know the components of a database system.

Classification: Concept

58) Data that the database keeps about its own structure is called \_\_\_\_\_\_\_\_.

Answer: metadata

Diff: 1 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Learn the elements of a database.

Classification: Concept

59) The purpose of the \_\_\_\_\_\_\_\_ in a database system is to receive requests from applications and to translate those requests into reads and writes on the database files.

Answer: DBMS

Diff: 3 Page Ref: 18

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

60) \_\_\_\_\_\_\_\_ constraints are rules that the DBMS enforces to ensure that data values in one table have corresponding values in another related table.

Answer: Referential integrity

Diff: 2 Page Ref: 19

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

61) The DBMS controls \_\_\_\_\_\_\_\_ by ensuring that one user's work does not inappropriately interfere with another user's work.

Answer: concurrency

Diff: 2 Page Ref: 19

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

62) Microsoft Access is a(n) \_\_\_\_\_\_\_\_, which combines a DBMS and an application generator.

Answer: personal database

Diff: 2 Page Ref: 22

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

63) The Microsoft Access application generator adds the ability to create and store \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_.

Answer: forms; reports; queries

Diff: 3 Page Ref: 43

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

64) Microsoft Access database files are stored using the \_\_\_\_\_\_\_\_ file extension.

Answer: .accdb

Diff: 2 Page Ref: 48

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

65) By default, Microsoft Access saves data files in the \_\_\_\_\_\_\_\_ file format.

Answer: Access 2007

Diff: 2 Page Ref: 48

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

66) Microsoft Access generates surrogate key values when the \_\_\_\_\_\_\_\_ data type is used.

Answer: AutoNumber

Diff: 2 Page Ref: 56

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

67) A relational database stores data in the form of \_\_\_\_\_\_\_\_.

Answer: tables

Diff: 2 Page Ref: 11

AACSB: Information Technology

Chapter Obj.: Understand how using related tables helps you avoid the problems of using lists.

Classification: Concept

68) It is almost always best to design a table in a database so that it contains data on \_\_\_\_\_\_\_\_ theme.

Answer: one, 1

Diff: 2 Page Ref: 11

AACSB: Information Technology

Chapter Obj.: Understand how using related tables helps you avoid the problems of using lists.

Classification: Concept

69) A(n) \_\_\_\_\_\_\_\_ is a set of one or more computer programs that serve as an intermediary between the user and the DBMS.

Answer: database application

Diff: 2 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

70) In a database system, the \_\_\_\_\_\_\_\_ creates and processes forms.

Answer: database application

Diff: 3 Page Ref: 20

AACSB: Information Technology

Chapter Obj.: Understand the functions of a database application.

Classification: Concept

71) The purpose of a database is to help people \_\_\_\_\_\_\_\_.

Answer: keep track of things

Diff: 1 Page Ref: 8

AACSB: Information Technology

Chapter Obj.: Understand the reasons for using a database.

Classification: Concept

72) What is a surrogate key and how does Microsoft Access create surrogate keys?

Answer: A surrogate key is usually a computer-generated unique number that serves as the identifier of each row in a table. Microsoft Access generates surrogate keys by using the Access AutoNumber data type.

Diff: 1 Page Ref: 56

AACSB: Information Technology

Chapter Obj.: Learn the elements of a database.

Classification: Concept

73) Briefly describe the four components of a database system.

Answer: The components of a database system are: (1) the users, (2) the application programs, (3) the DBMS, and (4) the database. The users are the people that will employ the system to input data, modify existing data, and delete data in order to perform their jobs. The application programs are computer programs that act as intermediaries between the users and the DBMS. The application programs produce forms, reports, and queries; they also translate user actions into data management requests for the DBMS. The DBMS manipulates the database. It receives data management requests from the computer applications and translates them into read and write commands for the database. The database contains the actual user data that the users need to perform their jobs.

Diff: 2 Page Ref: 17-21

AACSB: Information Technology

Chapter Obj.: Know the components of a database system.

Classification: Concept

74) What components are included in a database?

Answer: The database contains user data, metadata, indexes and other overhead data, and application metadata. User data is the data from the users' environment that they want to track. Metadata is data about the structure of the database. Indexes and other overhead data are structures that the database uses to improve performance. Finally, the application metadata is data about forms, reports, and other application components that some databases, particularly those created with desktop DBMS products, store with the database.

Diff: 2 Page Ref: 18

AACSB: Information Technology

Chapter Obj.: Know the components of a database system.

Classification: Concept

75) What is "metadata," and how does it relate to the definition of a database?

Answer: Metadata is data about the structure of the database itself. This includes data about the names of all the tables in the database, the names of all the columns in each of the tables, the data type of each column in each table, the properties of the tables and the columns, etc. Metadata accounts for the "self-describing" aspect of the definition of a database as a "self-describing collection of integrated tables."

Diff: 2 Page Ref: 17

AACSB: Information Technology

Chapter Obj.: Know the components of a database system.

Classification: Concept

76) Briefly describe the function of the DBMS in a database system.

Answer: The DBMS creates the database and the tables and structures within it. The DBMS also reads and updates the database data. It receives requests from application programs to perform data maintenance tasks. These requests are translated into actions that are performed on the database. In addition to maintaining the user data within the database, the DBMS also maintains the database structures. The DBMS also enforces any rules that have been defined to govern the values of the data, such as data type requirements and referential integrity constraints. The DBMS controls concurrency issues, which deal with the unwanted interruption of one user's work by another user's work. As the only point of entry into the database, the DBMS also provides security for the database to restrict users' access to only the data that they have authority to read or modify. Finally, the DBMS is responsible for the creation of backup copies of the database data and for restoring the database in case a recovery is required.

Diff: 2 Page Ref: 18

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

77) What are "referential integrity constraints"? Give an example.

Answer: A referential integrity constraint is a rule that restricts certain actions on the database data. A referential integrity constraint is used to ensure that the values in a field in one table have matching values in a corresponding field in another table. These constraints are enforced by the DBMS, which will not allow changes to the values of the database that would result in violations of this rule. For example, a database has an EMPLOYEE table and a VEHICLE table that are used to store data on employees and the vehicles that they are assigned to drive. The EMPLOYEE table has a column called EmployeeID that is used to distinguish one employee record from another. The VEHICLE table also has an EmployeeID column that is used to associate a vehicle with the appropriate employee. A referential integrity constraint could be used to prevent a vehicle from being assigned to an employee with an EmployeeID that does not appear in the EMPLOYEE table by requiring that all values in EmployeeID in the VEHICLE table have a matching value in EmployeeID in the EMPLOYEE table.

Diff: 3 Page Ref: 19

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

78) Briefly describe the function of an application program in a database system.

Answer: The application program is responsible for creating and processing forms. The application displays the form to the user, allows the user to complete the data entry, evaluates the form to determine which data management tasks need to be performed, and transmits the appropriate requests to the DBMS. The application creates and transmits queries. The queries are requests for data that are created in a language like SQL, and transmitted to the DBMS to have the requested data returned to the application program. The application also creates and processes reports. The query to retrieve the necessary data for the report is sent to the DBMS. When the DBMS returns the needed data, the application manipulates it as necessary to create the requested report. The application program also applies application logic to control the manipulation of data in accordance with the business rules. Finally, the application program is responsible for providing control. Control must be exercised to allow the users to make choices for functions and tasks as appropriate for their jobs. Also, control must be exercised to manage the activities of the DBMS.

Diff: 2 Page Ref: 20-23

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

79) What are the advantages and disadvantages of personal DBMS products hiding the complexity of database systems?

Answer: The advantage of hiding the complexity of database systems is that it makes database systems easier for novices to create. Using the graphical tools and wizards of a desktop DBMS product, databases and application programs can be created without developing much database expertise. The disadvantage of hiding the complexity is that the developer does not understand what the desktop DBMS product is doing on the developer's behalf. This limits the developer's ability to create systems with functions not anticipated by the DBMS design team. Further, the developer is limited in their ability to develop systems on a larger scale.

Diff: 3 Page Ref: 23-25

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

80) Microsoft Access is considered a "personal database" product. What is a personal database?

Answer: A personal database combines a DBMS with an application generator. The DBMS performs the functions expected of a DBMS such as database creation, processing, and administration. The application generator adds the ability to create and store forms, reports and queries, as well as some other application-related functions.

Diff: 1 Page Ref: 22-24

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

81) What Microsoft Access file format is used by default in Microsoft Access?

Answer: By default, Microsoft Access supports Access 2007 files formats. Microsoft Access 2007 database files are stored using the *.accdb* file extension.

Diff: 1 Page Ref: 48

AACSB: Information Technology

Chapter Obj.: Learn the purpose of a database management system (DBMS).

Classification: Concept

82) What problems with storing data on two themes in a list are addressed by database technology?

Answer: First, data updates are simplified because the number of updates is reduced when data appears in more than one location in the list. Second, the possibility of incorrectly entering duplicate data is reduced. Third, the problem of inconsistently entering data values is removed. Finally, the ability to enter data on one theme in the list without having data for the other theme is enhanced.

Diff: 2 Page Ref: 11

AACSB: Information Technology

Chapter Obj.: Understand the potential problems with lists.

Classification: Concept

83) Which of the following is not an indicator that you are using cloud computing?

A) Access 2007 format

B) if the servers are off site

C) they are at someone else's data center

D) SQL Server format

Answer: A

Diff: 2 Page Ref: 29

AACSB: Information Technology

Chapter Obj.: Understand the basics of cloud computing and cloud-based databases.

Classification: Concept

84) Which type of network links computers over larger geographic areas such as cities or countries, as well as the Internet itself?

A) WAN

B) LAN

C) PAN

D) BAN

Answer: A

Diff: 2 Page Ref: 30

AACSB: Information Technology

Chapter Obj.: Understand the basics of cloud computing and cloud-based databases.

Classification: Concept

85) The actual computer hardware, now called the host machine, runs a special program known as a virtual machine manager or \_\_\_\_\_\_\_\_.

A) hypervisor

B) hypercomputer

C) hyperhost

D) hyperserver

Answer: A

Diff: 2 Page Ref: 33

AACSB: Information Technology

Chapter Obj.: Understand the basics of cloud computing and cloud-based databases.

Classification: Concept

86) The simplest way to lease cloud services is \_\_\_\_\_\_\_\_.

A) software as a service (SaaS)

B) platform as a service (PaaS)

C) infrastructure as a service (IaaS)

D) database as a service (DBaaS)

Answer: A

Diff: 2 Page Ref: 38

AACSB: Information Technology

Chapter Obj.: Understand the basics of cloud computing and cloud-based databases.

Classification: Concept

87) Which of the following is not an advantage of cloud computing?

A) Security (potential)

B) Scalability

C) Elasticity

D) Easier maintenance

Answer: A

Diff: 2 Page Ref: 43

AACSB: Information Technology

Chapter Obj.: Understand the basics of cloud computing and cloud-based databases.

Classification: Concept

88) Amazon's cloud computing platform is called Amazon Web \_\_\_\_\_\_\_\_.

Answer: Services

Diff: 1 Page Ref: 29

AACSB: Information Technology

Chapter Obj.: Understand the basics of cloud computing and cloud-based databases.

Classification: Concept

89) \_\_\_\_\_\_\_\_ is using hardware and software to simulate another hardware resource.

Answer: Virtualization

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90) In a \_\_\_\_\_\_\_\_ cloud, cloud technology is provided locally by the organization itself to its users.

Answer: private

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91) If an organization uses both private and public clouds, they are said to be using a \_\_\_\_\_\_\_\_ cloud.

Answer: hybrid

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92) Streaming services often use a solution called \_\_\_\_\_\_\_\_ to help place their data geographically close to where it is needed to alleviate network traffic.

Answer: Content Delivery Network (CDN)

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93) In what ways can moving to a cloud computing platform lower the business costs for an organization?

Answer: This can result in lower business costs for the organization because it does not incur the costs of buying, housing, and maintaining computer hardware and the software that runs on the hardware.

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94) Explain the two basic ways to implement hypervisors.

Answer: There are two basic ways to implement hypervisors. The first is the "bare metal," or type 1 hypervisor shown in Figure 1-35(a). These are loaded into memory, or "booted," before any other programs. Thus, the hypervisor has direct control over the hardware and provides the illusion to virtual machines that they are running on the physical hardware. Type 1 hypervisors are typically used in large data centers. Type 2, or "hosted," hypervisors, as shown in Figure 1-35(b), are typically used by students or other computer users to run multiple operating systems as regular applications on their desktop or laptop computer.

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95) Until the late 1980s, most computing was done in a mainframe setting.

Answer: TRUE

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96) Virtual machines are aware that they are sharing a physical computer with other virtual machines.

Answer: FALSE

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97) Virtualization always occurs in the cloud.

Answer: FALSE

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