TEST BANK

Succeeding in **Business**
with Microsoft® Office

Access™ 2007

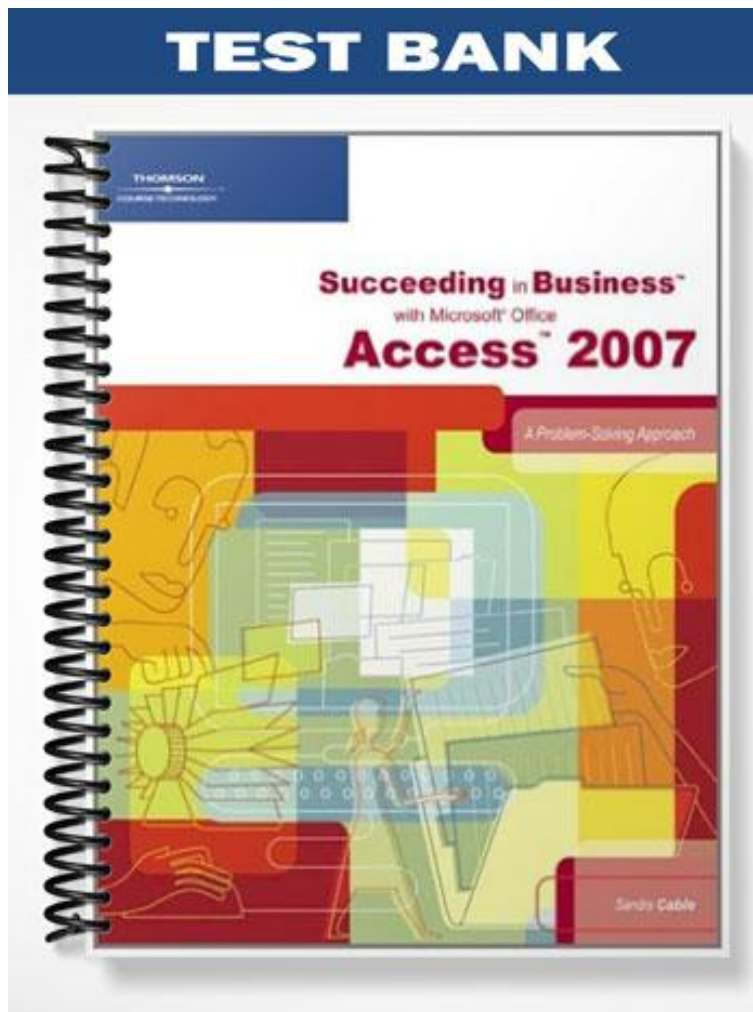*A Problem-Solving Approach*

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Chapter 1: Preparing to Automate Data Management

TRUE/FALSE

1. Data duplication is a desirable aspect of a database.

   ANS: F   PTS: 1   REF: 27

2. Given a pharmacy's database, when one member of a customer household reports a new address or change of insurance that also affects other people in the household, the pharmacy database must update the records for everyone affected by the change.

   ANS: T   PTS: 1   REF: 29

	A	B	C	D	E	F	G	H
1	SSN (Last 4)	First Name	Last Name	Birthdate	Address	City	State	ZIP
2	2243	Anders	Aannastad	9/11/1974	623 South Hampton Way	Farmington	NM	87499
3	0979	Geoffrey	Baez	12/31/2001	1233 Myrna Place	Kirtland	NM	87417
4	2943	Rose	Baez	4/12/1970	1233 Myrna Place	Aneth	UT	84510
5	1064	Sonia	Cardenas	4/12/1968	116 North Adams Street	Chinle	AZ	86503
6	1329	Daniel	Cardenas	5/12/2002	620 East Empire Street	Kayenta	AZ	86033
7	1329	Danny	Cardenas	5/12/2002	620 East Empire Street	Kayenta	AZ	86033
8	2797	Jessica	Cortez	8/13/1978	912 North Hampton Avenue	Yellow Jacket	CO	81335
9	0424	Gaetano	Feraco	7/4/1946	1102 Jackson Street	Lewis	CO	81327
10	1422	Chloe	Feraco	6/1/1946	403 North Madison Street	Flora Vista	NM	87415
11	1689	Gloria	Fernandes	5/1/1979	307 Memorial Drive	Kirtland	NM	87417
12	2215	Maria	Gabel	8/12/1980	9411 Clarkston Avenue	Aneth	UT	84510
13	2197	Christina	Hargus	2/14/1998	1645 Johnny Cake Ridge Road	Kayenta	AZ	86033
14	1395	Josephina	Hernandez	6/30/1978	1309 Mesa Avenue	Shiprock	NM	87420
15	1486	Oksana	Lapshina	4/29/1957	133 South Washington	Dolores	CO	81323
16	0975	Isabel	Lopez	8/30/1949	633 Empire Street	Flora Vista	NM	87415
17	1068	Gina	Mercado	6/17/1979	755 Cherry Street	Pleasant View	CO	81331
18	2253	Steven	Nguyen	10/12/1976	1322 East Fairmont Street	Montezuma Creek	UT	84534
19	0846	Scott	Prager	8/27/1951	11259 Road 22	Dolores	CO	81323
20	1166	Ted	Sabus	12/11/1954	620 East Empire Street	Kayenta	AZ	86033
21	3623	Kimberley	Schultz	1/16/1969	1155 NE Highland Parkway	Shiprock	NM	87420
22	3869	Adriana	Walters	4/22/1963	56 East Pioneer Road	Lewis	CO	81327

⊢ ⊣ ▶ ▶ ▶ 4Corners Customers

3. The phenomenon pointed out in the accompanying figure can consume a great deal of space in a database.

   ANS: T   PTS: 1   REF: 29

4. The Number data type can only store positive numbers in a field.

   ANS: F   PTS: 1   REF: 42

5. By default, the Currency data type displays values with a dollar sign.

   ANS: T   PTS: 1   REF: 42

6. Dates stored using the Date/Time data type cannot be used in calculations.

   ANS: F   PTS: 1   REF: 43

7. The Yes/No data type takes up nine characters of storage space.

   ANS: F   PTS: 1   REF: 43

8. Using the Yes/No field makes data entry more difficult.

    ANS: F   PTS: 1   REF: 43

9. A Byte field stores only positive numbers.

    ANS: T   PTS: 1   REF: 46

10. Database tables must have unique names.

    ANS: T   PTS: 1   REF: 51

11. Table names can include a period.

    ANS: F   PTS: 1   REF: 51

12. Table names should not include spaces.

    ANS: T   PTS: 1   REF: 51

13. Most developers capitalize the first letter of the second word when a table name includes two words, such as employeeTraining.

    ANS: F   PTS: 1   REF: 51

14. When you run a select query, the query results are dynamic.

    ANS: T   PTS: 1   REF: 53

15. Data in a relational database is stored in one or more tables.

    ANS: T   PTS: 1   REF: 57

16. A one-to-many relationship exists when each record in one table matches exactly one record in the related table.

    ANS: F   PTS: 1   REF: 62

17. One reason to enforce referential integrity is to make it possible to add records to a related table that do not have matching records in the primary table.

    ANS: F   PTS: 1   REF: 65

18. One reason to enforce referential integrity is to prevent orphaned related records if the record in the primary table is deleted.

    ANS: T   PTS: 1   REF: 66

19. The goal of normalization is to split tables into smaller related tables to avoid creating anomalies.

    ANS: T   PTS: 1   REF: 70

20. A surrogate key is a field or collection of fields that could function as the primary key, but was not chosen to do so.

ANS: F   PTS: 1   REF: 73

MODIFIED TRUE/FALSE

1. Data duplication can lead to inconsistent and inaccurate data. _____

    ANS: T   PTS: 1   REF: 27

2. The Currency data type is used to store numbers that are used in calculations.
    _____

    ANS: F, Number

    PTS: 1   REF: 40

3. The OLE Object data type is used to store text or alphanumeric combinations of data and numbers that
    are not used in calculations. _____

    ANS: F, Text

    PTS: 1   REF: 40

4. The Hyperlink data type creates fields that let you look up data in another table or in a list of values
    created for the field. _____

    ANS: F, Lookup Wizard

    PTS: 1   REF: 41

5. It is important not to include calculated fields in your reports. _____

    ANS: F, tables

    PTS: 1   REF: 42

6. The Storage data type lets you store one or more files for each record in the database.
    _____

    ANS: F, Attachment

    PTS: 1   REF: 44

7. The Yes/No and Lookup Wizard data types ease data entry by controlling what data a user can enter
    into a field. _____

    ANS: T   PTS: 1   REF: 45

8. The Number field size of Double allows globally unique identifiers that are used to identify replicas,
    replica sets, tables, records, and other objects. _____

    ANS: F, Replication ID

PTS: 1   REF: 46

9. Naming conventions in which a prefix precedes the object name to define it further are called the
    <u>Leszynski/Reddick</u> naming conventions. _____

    ANS: T   PTS: 1   REF: 51

10. <u>Relational</u> databases overcome the limitations of flat file databases. _____

    ANS: T   PTS: 1   REF: 62

11. In a one-to-many relationship, the <u>related</u> table is on the "one" side of the relationship.
    _____

    ANS: F, primary

    PTS: 1   REF: 62

12. A <u>many-to-many</u> relationship occurs when each record in the first table matches many records in the
    second table, and each record in the second table matches many records in the first table.
    _____

    ANS: T   PTS: 1   REF: 64

13. A <u>determinant</u> is a field or collection of fields whose values determines the value in another field.
    _____

    ANS: T   PTS: 1   REF: 72

14. A(n) <u>surrogate</u> key is a primary key that details an obvious and innate trait of a record.
    _____

    ANS: F, natural

    PTS: 1   REF: 73

15. A(n) <u>artificial</u> key is a computer-generated primary key that is usually invisible to users.
    _____

    ANS: F, surrogate

    PTS: 1   REF: 73

MULTIPLE CHOICE

1. The ____ phase includes gathering all existing data, researching missing and incomplete data, and
    talking with users about their data output needs.
    a. analysis   c. design
    b. discovery   d. collection

    ANS: B   PTS: 1   REF: 25

2. One of the first tasks of creating a database is to identify the _____ that the organization needs to manage and organize.
   a. databases   c. resources
   b. networks   d. information

   ANS: D   PTS: 1   REF: 26

3. Oracle, ColdFusion, Microsoft Access, and MySQL are all _____.
   a. DBMSs   c. 3NFs
   b. SQLs   d. word processors

   ANS: A   PTS: 1   REF: 26

4. If two or more records are stored for the same customer without the mistake being realized, this is referred to as _____.
   a. data duplication   c. data mismanagement
   b. data corruption   d. data deletion

   ANS: A   PTS: 1   REF: 27

5. Data duplication can lead to _____ data.
   a. manually edited   c. inaccurate
   b. inaccessible   d. encrypted

   ANS: C   PTS: 1   REF: 27

6. Which of the following is an application that an employer might use to maintain employee address and telephone information?
   a. Microsoft PowerPoint   c. Adobe Photoshop
   b. Microsoft Outlook   d. both a and b

   ANS: B   PTS: 1   REF: 34

7. Which of the following is NOT likely to be a database expectation for the marketing department of a business?
   a. printing customer mailing labels   c. monitoring staff development
   b. using customer data to gather data on   d. any of the above
      customer buying habits

   ANS: C   PTS: 1   REF: 37

8. Which of the following is NOT likely to be a database expectation for the accounting and finance department of a business?
   a. identifying poor-selling items   c. valuing the store's inventory
   b. tracking the business profit   d. determining profit and loss for individual
                                            sale items

   ANS: A   PTS: 1   REF: 37

9. During the planning stage of a database design process, it is important to manage expectations early and agree on project specifications, in order to combat _____.
   a. scope creep   c. data duplication
   b. data redundancy   d. data concatenation

   ANS: A   PTS: 1   REF: 38

10. In a database, a ____ is a single characteristic of an entity.
   a. row   c. record
   b. table   d. field

   ANS: D   PTS: 1   REF: 39

11. The values in each field in a table are collectively called a ____.
   a. form   c. report
   b. data type   d. record

   ANS: D   PTS: 1   REF: 39

12. A database is a collection of one or more ____.
   a. rows   c. fields
   b. tables   d. reports

   ANS: B   PTS: 1   REF: 39

13. After identifying the fields that describe the data that will be stored in the tables in the database, the next step is to determine the ____ to assign to each field.
   a. row   c. relation
   b. table   d. data type

   ANS: D   PTS: 1   REF: 40

14. The ____ data type is used to store long passages of data containing text and alphanumeric characters.
   a. Memo   c. AutoNumber
   b. Text   d. OLE Object

   ANS: A   PTS: 1   REF: 40

15. The ____ data type is used for linked or embedded objects that are created in another program.
   a. Import   c. OLE Object
   b. Lookup Wizard   d. Hyperlink

   ANS: C   PTS: 1   REF: 41

16. The ____ data type is used for a field that lets you look up data in another table or in a list of values created for the field.
   a. Hyperlink   c. OLE Object
   b. Lookup Wizard   d. AutoNumber

   ANS: B   PTS: 1   REF: 40

17. The Text data type stores a maximum of ____ characters.
   a. 64   c. 16,320
   b. 255   d. 64,000

   ANS: B   PTS: 1   REF: 41

18. The Memo data type stores a maximum of ____ characters.
   a. 64   c. 2,040
   b. 255   d. 64,000

   ANS: D   PTS: 1   REF: 41

19. The Number data type stores numbers in a field containing up to ____ digits.

a.   6   c.   15
b.   10   d.   25

ANS: C   PTS: 1   REF: 42

20. Fields storing monetary data are assigned the _____ data type.
a.   Currency   c.   Number
b.   Money   d.   Text

ANS: A   PTS: 1   REF: 42

21. By default, fields assigned the Date/Time data type display values in the format _____.
a.   mm/dd/yy   c.   mm-dd-yy
b.   mm/dd/yyyy   d.   mm-dd-yyyy

ANS: B   PTS: 1   REF: 42

22. The _____ data type is a number automatically generated by Access that produces unique values for
each record.
a.   Number   c.   OLE Object
b.   RecordNumber   d.   AutoNumber

ANS: D   PTS: 1   REF: 43

23. The _____ data type is assigned to fields that contain files that open in a Web browser, an e-mail client,
or another application when clicked.
a.   Lookup Wizard   c.   Memo
b.   Hyperlink   d.   AutoNumber

ANS: B   PTS: 1   REF: 43

24. The _____ data type is new to Access 2007.
a.   Attachment   c.   OLE
b.   Memo   d.   all of the above

ANS: A   PTS: 1   REF: 44

25. The _____ data type lets you store one or more files for each record in the database.
a.   Storage   c.   Link
b.   Memo   d.   Attachment

ANS: D   PTS: 1   REF: 44

26. An Integer field has a storage size of _____ byte(s).
a.   1   c.   3
b.   2   d.   4

ANS: B   PTS: 1   REF: 46

27. Which of the following is the correct order for these steps in the database design process?
a.   Discovery phase, normalize the data, plan the tables, test the database using sample data
b.   Plan the tables, normalize the data, test the database using sample data, discovery phase
c.   Discovery phase, plan the tables, normalize the data, test the database using sample data
d.   Test the database using sample data, discovery phase, plan the tables, normalize the data

ANS: C   PTS: 1   REF: 47

28. A(n) _____ key is a field or a combination of fields that creates a unique value in each record so you can identify each record in the table.
    a. functional
    b. identification
    c. primary
    d. relationship

    ANS: C   PTS: 1   REF: 48

29. Object names cannot exceed _____ characters.
    a. 16
    b. 24
    c. 32
    d. 64

    ANS: D   PTS: 1   REF: 51

30. A _____ is a question that you ask about the data stored in a database.
    a. search
    b. report
    c. form
    d. query

    ANS: D   PTS: 1   REF: 53

31. Query results look similar to a _____.
    a. report
    b. form
    c. table
    d. Web page

    ANS: C   PTS: 1   REF: 53

32. The table on which a query is based is called the _____ table.
    a. base
    b. originating
    c. central
    d. native

    ANS: A   PTS: 1   REF: 53

33. The base table of a query is also called the _____ table.
    a. display
    b. central
    c. focus
    d. underlying

    ANS: D   PTS: 1   REF: 53

Clinic ID	1
Clinic Name	Southern Colorado Area Clinic
Address 1	8989 Highway 16
Address 2	P.O. Box 2311
City	Cortez
State	CO
Zip	81321
Phone	(970) 322-5747

Add New   Find Clinic   Close Form

34. The accompanying figure shows a _____.
    a. report
    b. form
    c. query
    d. datasheet

    ANS: B   PTS: 1   REF: 54

35. The item in the accompanying figure is used to _____ records in the database.
   a. view   c. delete
   b. add   d. any of the above

   ANS: D   PTS: 1   REF: 54

36. The item like that in the accompanying figure presents an interface to _____.
   a. enter data into tables   c. build a query
   b. create tables   d. add fields to a table

   ANS: A   PTS: 1   REF: 62

37. In the _____ query, data is selected from the table on which the query is based and displayed in a
    datasheet.
   a. action   c. crosstab
   b. select   d. base

   ANS: B   PTS: 1   REF: 53

38. A(n) _____ query performs an action on the table on which it is based.
   a. select   c. crosstab
   b. action   d. performance

   ANS: B   PTS: 1   REF: 54

39. A(n) _____ query performs calculations on the values in a field and displays the results in a datasheet.
   a. crosstab   c. select
   b. action   d. calculation

   ANS: A   PTS: 1   REF: 54

40. A _____ provides a controlled method for users to open the objects in a database.
   a. report   c. data access page
   b. switchboard   d. query

   ANS: B   PTS: 1   REF: 55

Accounts Receivable

Last Name	First Name	Balance
Aannastad	Anders	$82
Cardenas	Sonia	$80
Cardenas	Daniel	$80
Cortez	Jessica	$40
Fernandes	Gloria	$90
Gabel	Maria	$40
Hargus	Christina	$30
Hernandez	Josephina	$15
Mercado	Gina	$65
Nguyen	Steven	$20
Prager	Scott	$30
Walters	Adriana	$40

41. The item in the accompanying figure is a formatted presentation of data from a ____ that is created as a printout or to be viewed on screen.
    a. table   c. report
    b. query   d. either a or b

    ANS: D   PTS: 1   REF: 55

42. You can ____.
    a. view the data in a report like the one in the accompanying figure
    b. change the data in a datasheet like the one in the accompanying figure
    c. use a form like the one in the accompanying figure to add a new record
    d. edit the data in a query like the one in the accompanying figure

    ANS: A   PTS: 1   REF: 55

43. The accompanying figure shows a ____.
    a. form   c. query
    b. datasheet   d. report

    ANS: D   PTS: 1   REF: 56

44. Microsoft has moved toward ____ Services for sharing data on your company's local intranet or on the Web.
    a. Integrated   c. Data Access
    b. SharePoint   d. Macro

    ANS: B   PTS: 1   REF: 56

45. A ____ is a set of instructions that you specify to automate certain database tasks.
    a. data access page   c. report
    b. form   d. macro

    ANS: D   PTS: 1   REF: 56

46. A ____ is an object that contains instructions to automate a database task.

a. switchboard   c. module
b. report   d. form

ANS: C   PTS: 1   REF: 57

47. Modules are written in ____.
   a. SQL   c. HTML
   b. VBA   d. JavaScript

ANS: B   PTS: 1   REF: 57

48. ____ is the programming language for Microsoft Office programs, including Access.
   a. SQL   c. HTML
   b. VBA   d. JavaScript

ANS: B   PTS: 1   REF: 57

49. A simple database that contains a single table of information is called a(n) ____ database.
   a. simplex   c. relational
   b. flat file   d. open

ANS: B   PTS: 1   REF: 57

50. Professional relational database design requires that every table has a(n) ____ key field that stores
    unique values.
   a. relational   c. number
   b. identification   d. primary

ANS: D   PTS: 1   REF: 59

51. A ____ field is a field that appears in two or more tables and contains identical data to relate the tables.
   a. common   c. joining
   b. relational   d. corresponding

ANS: A   PTS: 1   REF: 60

52. The common field is called a(n) ____ key in the second table that it relates.
   a. identification   c. foreign
   b. primary   d. corresponding

ANS: C   PTS: 1   REF: 60

53. ____ display subsets of data from the tables in response to a command that asks a question.
   a. Forms   c. Switchboards
   b. Queries   d. Records

ANS: B   PTS: 1   REF: 62

54. A(n) ____ specifies a relationship between tables and the properties of that relationship.
   a. link   c. hyperlink
   b. join   d. object

ANS: B   PTS: 1   REF: 62

55. In a one-to-many relationship, one record in the first table matches ____ records in the related table.
   a. many   c. zero, one, or many
   b. one or many   d. one

ANS: C PTS: 1 REF: 62

56. In a one-to-many relationship, the _____ table is on the "many" side of the relationship.
  a. primary   c. number
  b. join   d. related

  ANS: D PTS: 1 REF: 62

57. A _____ relationship occurs when each record in the first table matches many records in the second table, and each record in the second table matches many records in the first table.
  a. one-to-one   c. many-to-one
  b. one-to-many   d. many-to-many

  ANS: D PTS: 1 REF: 64

58. When a field does not contain a value, either because that value is unknown or inapplicable, it is called a(n) _____ value.
  a. void   c. null
  b. empty   d. redundant

  ANS: C PTS: 1 REF: 65

59. Including a primary key field in a table ensures _____.
  a. entity integrity   c. data redundancy
  b. a flat file database   d. data duplication

  ANS: A PTS: 1 REF: 65

60. _____ integrity is the rule that makes it possible for a DBMS to prevent records from being orphaned if a user attempts to change a primary key or delete a record in a table that has matching records in another table.
  a. Join   c. Primary
  b. Referential   d. Relational

  ANS: B PTS: 1 REF: 67

61. When a primary key is changed in one table but the corresponding foreign keys in the related table are not, records can become _____.
  a. orphaned   c. childless
  b. widowed   d. unrelated

  ANS: A PTS: 1 REF: 66

62. In some DBMSs, including Access, you can choose the option to _____ updates, which permits a user to change a primary key value so that the DBMS automatically updates the appropriate foreign key values in the related table.
  a. cascade   c. deliver
  b. direct   d. relate

  ANS: A PTS: 1 REF: 67

63. A(n) _____ anomaly occurs when a user deletes data from a database and unintentionally deletes the only occurrence of that data in the database.
  a. update   c. append
  b. deletion   d. purging

ANS: B   PTS: 1   REF: 70

	A	B	C	D	E	F	G	H
1	SSN (Last 4)	First Name	Last Name	Birthdate	Address	City	State	ZIP
2	2243	Anders	Aannastad	9/11/1974	623 South Hampton Way	Farmington	NM	87499
3	0979	Geoffrey	Baez	12/31/2001	1233 Myrna Place	Kirtland	NM	87417
4	2943	Rose	Baez	4/12/1970	1233 Myrna Place	Aneth	UT	84510
5	1064	Sonia	Cardenas	4/12/1968	116 North Adams Street	Chinle	AZ	86503
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14	1395	Josephina	Hernandez	6/30/1978	1309 Mesa Avenue	Shiprock	NM	87420
15	1486	Oksana	Lapshina	4/29/1957	133 South Washington	Dolores	CO	81323
16	0975	Isabel	Lopez	8/30/1949	633 Empire Street	Flora Vista	NM	87415
17	1068	Gina	Mercado	6/17/1979	755 Cherry Street	Pleasant View	CO	81331
18	2253	Steven	Nguyen	10/12/1976	1322 East Fairmont Street	Montezuma Creek	UT	84534
19	0846	Scott	Prager	8/27/1951	11259 Road 22	Dolores	CO	81323
20	1166	Ted	Sabus	12/11/1954	620 East Empire Street	Kayenta	AZ	86033
21	3623	Kimberley	Schultz	1/16/1969	1155 NE Highland Parkway	Shiprock	NM	87420
22	3869	Adriana	Walters	4/22/1963	56 East Pioneer Road	Lewis	CO	81327

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64. An update anomaly occurs when, due to _____ data in a database like that shown in the accompanying figure, a user fails to update some records or updates records erroneously.
a. widowed
b. appended
c. redundant
d. orphaned

ANS: C   PTS: 1   REF: 70

65. A(n) _____ anomaly occurs when a user cannot add data to a database unless it is preceded by the entry of other data.
a. deletion
b. update
c. addition
d. insertion

ANS: D   PTS: 1   REF: 71

66. To understand normalization, you first must understand _____ dependency, because it will help you analyze fields within tables an decide if they need to be split into smaller tables.
a. partial
b. determinant
c. functional
d. flexible

ANS: C   PTS: 1   REF: 71

67. A _____ is a field or collection of fields whose value sets the value in another field.
a. collaborator
b. matrix
c. filter
d. determinant

ANS: D   PTS: 1   REF: 72

68. When a field contains more than one value, it is called a(n) _____ group.
a. multivariate
b. baseline
c. indexed
d. repeating

ANS: D   PTS: 1   REF: 74

69. A(n) _____ key is a field or collection of fields that could function as the primary key, but was not chosen to do so.
a. candidate
b. artificial
c. surrogate
d. foreign

ANS: A   PTS: 1   REF: 78

70. A(n) ____ dependency occurs between two nonkey fields that are both dependent on a third field.
    a. transitive   c. indexed
    b. dependent   d. absolute

    ANS: A   PTS: 1   REF: 78

Case-Based Critical Thinking Questions

Case 1
Penny is just starting out in her database coursework and she is looking for a quick primer on some of the key terms that she will use again and again. Her roommate Meredith has offered to give her the guidance she seeks.

71. Penny knows that items such as first name, last name, city, state, and zip are referred to by a common name. Meredith informs Penny that she can use the term ____ to refer to these items.
    a. fields   c. rows
    b. records   d. relations

    ANS: A   PTS: 1   REF: 39   TOP: Critical Thinking

72. Penny has grouped one customer base into a single collection of records. Meredith informs Penny that she should refer to this collection as a ____.
    a. record   c. database
    b. column   d. table

    ANS: D   PTS: 1   REF: 39   TOP: Critical Thinking

73. Penny is confused by Meredith's use of the term column. Meredith informs Penny that column is a synonym for ____.
    a. row   c. relation
    b. field   d. table

    ANS: B   PTS: 1   REF: 39   TOP: Critical Thinking

74. Penny has collected all of the fields for a given customer together. Meredith uses the term ____ to refer to this grouping.
    a. valence   c. record
    b. column   d. relation

    ANS: C   PTS: 1   REF: 39   TOP: Critical Thinking

75. Meredith uses the term ____. Penny questions the term until Meredith informs Penny that this is simply a synonym for table.
    a. relation   c. entity
    b. database   d. record

    ANS: A   PTS: 1   REF: 39   TOP: Critical Thinking

Case-Based Critical Thinking Questions

Case 2

As Dan creates a new table for the database he is building to track the budget for his small business, he is struck by how many different data types he will be using. He turns to his friend Giovanni for a quick refresher on each of the data types and which one is most germane to a particular need.

76. Which of the following data types does Giovanni suggest that Dan use when he is adding a field to record the cost of a particular service rendered?
    a. Monetary
    b. Currency
    c. Number
    d. AutoNumber

    ANS: B   PTS: 1   REF: 40   TOP: Critical Thinking

77. Dan has a field that indicates whether or not a particular vendor is an bonded agent. Which of the following data types does Giovanni say is a good match for this need?
    a. Binary
    b. Integer
    c. Yes/No
    d. Lookup Wizard

    ANS: C   PTS: 1   REF: 40   TOP: Critical Thinking

78. For each of his vendors, Dan wants to be able to attach a PDF of the contract signed with each. Which of the following can Giovanni NOT suggest to Dan as a way to satisfy this need?
    a. Attach the contracts to the database using the OLE data type.
    b. Post the contracts on the Web and use the Hyperlink data type to link to the Web page.
    c. Attach the contracts to the database using the Attachment data type.
    d. Link the contracts to the database using the Lookup Wizard.

    ANS: D   PTS: 1   REF: 41   TOP: Critical Thinking

79. Dan wants to be able to capture long text descriptions about the services available from a particular vendor. Which of the following data types is a match for this need, according to Giovanni?
    a. Memo
    b. Text
    c. Attachment
    d. OLE Object

    ANS: A   PTS: 1   REF: 40   TOP: Critical Thinking

80. Dan wants to track inventory expiration dates in his database. Which of the following data types works for this need, according to Giovanni?
    a. Number
    b. Text
    c. Date/Time
    d. both a and c

    ANS: C   PTS: 1   REF: 40   TOP: Critical Thinking

COMPLETION

1. Gathering all existing data, researching missing and incomplete data, and talking with users about their data output needs are all tasks involved in the _____ phase.

    ANS: discovery

    PTS: 1   REF: 25

	A	B	C	D	E	F	G	H
1	SSN (Last 4)	First Name	Last Name	Birthdate	Address	City	State	ZIP
2	2243	Anders	Aannastad	9/11/1974	623 South Hampton Way	Farmington	NM	87499
3	0979	Geoffrey	Baez	12/31/2001	1233 Myrna Place	Kirtland	NM	87417
4	2943	Rose	Baez	4/12/1970	1233 Myrna Place	Aneth	UT	84510
5	1064	Sonia	Cardenas	4/12/1968	116 North Adams Street	Chinle	AZ	86503
6	1329	Daniel	Cardenas	5/12/2002	620 East Empire Street	Kayenta	AZ	86033
7	1329	Danny	Cardenas	5/12/2002	620 East Empire Street	Kayenta	AZ	86033
8	2797	Jessica	Cortez	8/13/1978	912 North Hampton Avenue	Yellow Jacket	CO	81335
9	0424	Gaetano	Feraco	7/4/1946	1102 Jackson Street	Lewis	CO	81327
10	1422	Chloe	Feraco	6/1/1946	403 North Madison Street	Flora Vista	NM	87415
11	1689	Gloria	Fernandes	5/1/1979	307 Memorial Drive	Kirtland	NM	87417
12	2215	Maria	Gabel	8/12/1980	9411 Clarkston Avenue	Aneth	UT	84510
13	2197	Christina	Hargus	2/14/1998	1645 Johnny Cake Ridge Road	Kayenta	AZ	86033
14	1395	Josephina	Hernandez	6/30/1978	1309 Mesa Avenue	Shiprock	NM	87420
15	1486	Oksana	Lapshina	4/29/1957	133 South Washington	Dolores	CO	81323
16	0975	Isabel	Lopez	8/30/1949	633 Empire Street	Flora Vista	NM	87415
17	1068	Gina	Mercado	6/17/1979	755 Cherry Street	Pleasant View	CO	81331
18	2253	Steven	Nguyen	10/12/1976	1322 East Fairmont Street	Montezuma Creek	UT	84534
19	0846	Scott	Prager	8/27/1951	11259 Road 22	Dolores	CO	81323
20	1166	Ted	Sabus	12/11/1954	620 East Empire Street	Kayenta	AZ	86033
21	3623	Kimberley	Schultz	1/16/1969	1155 NE Highland Parkway	Shiprock	NM	87420
22	3869	Adriana	Walters	4/22/1963	56 East Pioneer Road	Lewis	CO	81327

4Corners Customers

2. In the accompanying figure, the fact that there are two records for people with the last name Baez, and both people share the same address shows an example of data _____.

   ANS: redundancy

   PTS: 1   REF: 29

3. In the customer data shown in the above figure, the records of Daniel Cardenas and Danny Cardenas show an example of data _____.
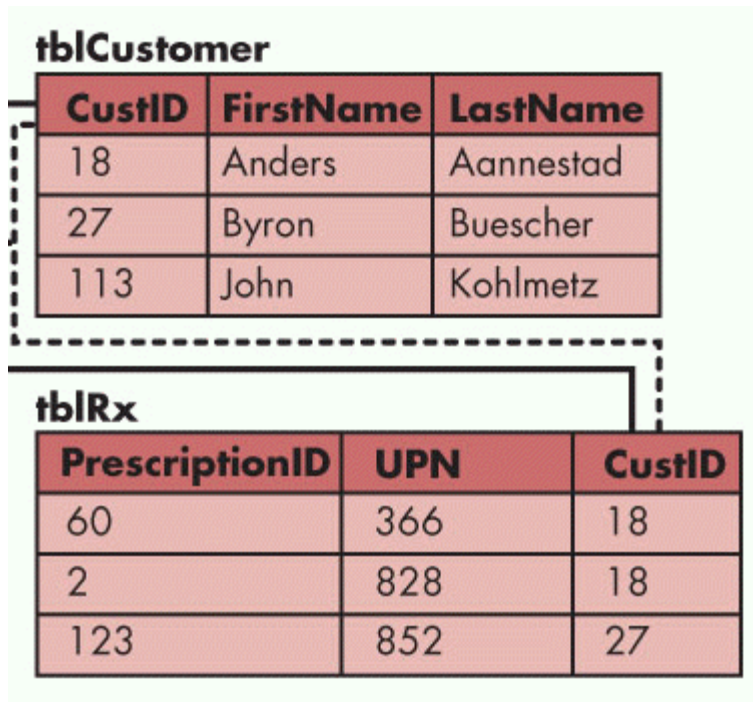
   ANS: duplication

   PTS: 1   REF: 30

4. If the addresses of customers already exist in another worksheet, the address data for each customer in the accompanying figure is _____.

   ANS: redundant

   PTS: 1   REF: 32

tblCustomer

CustID	FirstName	LastName
18	Anders	Aannestad
27	Byron	Buescher
113	John	Kohlmetz

tblRx

PrescriptionID	UPN	CustID
60	366	18
2	828	18
123	852	27

5. In the accompanying figure, "CustID" and "FirstName" are examples of _____.

ANS: fields

PTS: 1   REF: 39

6. In the accompanying figure, the entity identified by a CustID of "113" is referred to as a(n) _____.

ANS:
record
row

PTS: 1   REF: 39

7. In the accompanying figure, "FirstName" is an example of a(n) _____.

ANS:
field
column

PTS: 1   REF: 39

8. When a database contains related tables through fields that contain identical data, like the CustID fields in the accompanying figure, the database is called a(n) _____ database.

ANS: relational

PTS: 1   REF: 40

9. A(n) _____ determines how to store the data in the field.

ANS: data type

PTS: 1   REF: 40

10. The _____ data type is used to store numbers that are used in calculations.

ANS: Number

PTS: 1   REF: 40

11. The _____ data type is used to store monetary values.

ANS: Currency

PTS: 1   REF: 40

12. The _____ data type is used for a field value that is limited to yes or no, on or off, and true or false values.

ANS: Yes/No

PTS: 1   REF: 40

13. The _____ data type is used to store text that contains a hyperlink to an Internet or file location.

ANS: Hyperlink

PTS: 1   REF: 41

14. The _____ data type is used to identify files that are created in another program and then linked or embedded in the database.

ANS: OLE object

PTS: 1   REF: 41

15. In the _____ query, data is selected from the table on which the query is based and displayed in a datasheet.

ANS: select

PTS: 1   REF: 53

16. A(n) _____ is a form that might be displayed when you open a database and provides a controlled method for users to open the objects in a database.

ANS: switchboard

PTS: 1   REF: 55

17. A field that appears in two or more tables and contains identical data to relate the tables is called a(n) _____ field.

ANS: common

PTS: 1   REF: 60

18. Reports produce printouts of data pulled from tables or _____.

ANS: queries

PTS: 1   REF: 62

19. _____ is a guarantee that there are no duplicate records in a table, that each record is unique, and that no primary key field contains null values.

ANS: Entity integrity

PTS: 1   REF: 65

20. _____ integrity is the rule that if the foreign key in one table matches the primary key in a second table, the values in the foreign key must match the values in the primary key.

ANS: Referential

PTS: 1   REF: 65

MATCHING

Identify the letter of the choice that best matches the phrase or definition.

a.	OLE Object data type	g.	data type
b.	form	h.	Memo data type
c.	field	i.	database
d.	query	j.	macro
e.	report	k.	record
f.	table	l.	switchboard

1. A single characteristic of an entity.
2. Consists of the values in each field in a table.
3. A collection of fields that describe one entity, such as a person, place, thing, or idea.
4. A collection of one or more tables.
5. Determines how to store the data in the field.
6. Used to identify files that are created in another program and then linked or embedded in the database.
7. Used to store long passages of data containing text and alphanumeric characters.
8. A question that you ask about the data stored in a database.
9. Used to view, add, delete, update, and print records in the database.
10. A formatted presentation of data from a table or query that is created as a printout or to be viewed on screen.
11. A form that might be displayed when you open a database and provides a controlled method for users to open the objects in a database.
12. A set of instructions that you specify to automate certain database tasks.

1.	ANS: C	PTS: 1	REF: 39
2.	ANS: K	PTS: 1	REF: 39
3.	ANS: F	PTS: 1	REF: 39

4.	ANS: I	PTS: 1	REF: 39
5.	ANS: G	PTS: 1	REF: 40
6.	ANS: A	PTS: 1	REF: 41
7.	ANS: H	PTS: 1	REF: 40
8.	ANS: D	PTS: 1	REF: 53
9.	ANS: B	PTS: 1	REF: 54
10.	ANS: E	PTS: 1	REF: 55
11.	ANS: L	PTS: 1	REF: 55
12.	ANS: J	PTS: 1	REF: 56

ESSAY

1. Discuss the problems with the process of logging prescriptions using the current system at 4Corners Pharmacy.

   ANS:
   Don sees some very serious problems with the current process of logging prescriptions using this system. First, there is no method to control the duplication of data. If a customer fills three prescriptions on the same day, there will be three rows in the worksheet—one row for each prescription filled. The name, address, and phone number can vary in each of these three rows because there is no built-in method in a worksheet to prevent this problem from occurring. It is possible to have similar variances in the doctor's name, address, clinic affiliation, and phone number. Second, data is difficult to track and aggregate. For example, because the pharmacy creates new worksheets for each day's prescriptions, pharmacists would need to know the original fill date for a prescription to find out how many refills the doctor authorized. Aggregating data by customer, doctor, or drug would also be difficult.

   PTS: 1   REF: 32|33   TOP: Critical Thinking

2. Discuss the reasons why it is essential to choose the appropriate data type for each field in a table.

   ANS:
   Choosing the appropriate data type for each field in a table is essential for two reasons. First, it helps store the correct data in the correct format while using the least amount of space. Second, it eases data entry and interactivity with data because choosing certain data types results in user-friendly interactive features, such as drop-down menus, check boxes, and hyperlinks. Choosing the appropriate data type also lets you correctly manipulate the data.

   PTS: 1   REF: 44   TOP: Critical Thinking

3. Discuss the three goals of normalization.

   ANS:
   Normalization has three goals. First, normalization reduces the space required to store data by eliminating duplicate data in the database (with the exception of duplicate data in the foreign key fields). Second, normalization reduces inconsistent data in the database by storing data only once, thereby reducing the chance of typographical, spelling, and transposition errors and other inconsistent data possible in flat file databases. Finally, normalization reduces the chance of deletion, update, and insertion anomalies.

   PTS: 1   REF: 70   TOP: Critical Thinking