Test Bank for Concepts of Database Management 10th Edition by Friedrichsen
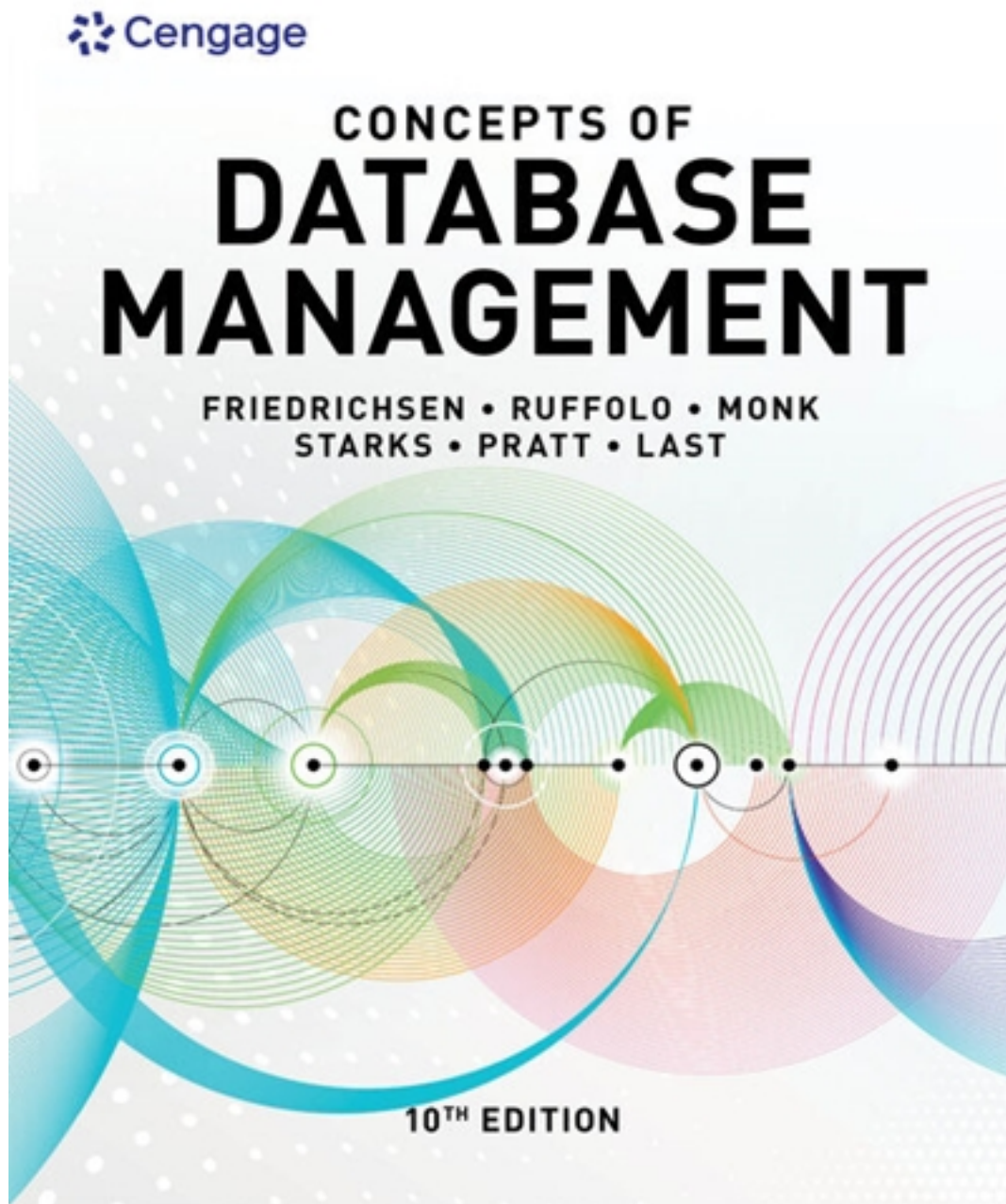
Test Bank

Module 01 - Introduction to Database Management

True / False

1. Redundancy refers to the duplication of data, or the storing of the same data in more than one place.
    a. True
    b. False

ANSWER:	True
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	JC Consulting Company Background
QUESTION TYPE:	True / False
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.01 - Examine JC Consulting (JCC), the company used for many of the examples throughout the text
KEYWORDS:	Bloom's: Remember

2. Redundancy makes changing data more cumbersome and time-consuming.
    a. True
    b. False

ANSWER:	True
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	JC Consulting Company Background
QUESTION TYPE:	True / False
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.01 - Examine JC Consulting (JCC), the company used for many of the examples throughout the text
KEYWORDS:	Bloom's: Understand

3. An entity is a person, place, event, item, or other transaction for which you want to store and process data.
    a. True
    b. False

ANSWER:	True
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	Selecting a Database Solution
QUESTION TYPE:	True / False
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.02 - Define basic database terminology
KEYWORDS:	Bloom's: Remember

4. An employee's last name is an example of an attribute.
    a. True
    b. False

ANSWER:	False
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	Selecting a Database Solution
QUESTION TYPE:	True / False

LEARNING OBJECTIVES: CDBM.PRAT.21.01.02 - Define basic database terminology
KEYWORDS: Bloom's: Remember

5. An attribute is known as a row in most databases.
    a. True
    b. False

ANSWER: False
POINTS: 1
DIFFICULTY: Easy
REFERENCES: Selecting a Database Solution
QUESTION TYPE: True / False
LEARNING OBJECTIVES: CDBM.PRAT.21.01.02 - Define basic database terminology
KEYWORDS: Bloom's: Remember

Multiple Choice

6. A(n) _____ can store information about multiple types of entities and the relationships among the entities.
    a. flat file
    b. attribute
    c. relational database
    d. spreadsheet

ANSWER: c
POINTS: 1
DIFFICULTY: Easy
REFERENCES: Storing Data
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.02 - Define basic database terminology
KEYWORDS: Bloom's: Remember

7. Which of the following is a visual way to represent and analyze a database?
    a. entity-relationship (E-R) diagram
    b. algorithm
    c. encryption diagram
    d. metadata

ANSWER: a
POINTS: 1
DIFFICULTY: Easy
REFERENCES: Storing Data
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.02 - Define basic database terminology
KEYWORDS: Bloom's: Remember

8. What do two tables use to link related records from each table?
    a. a form
    b. an orphan record

c. a unique value

d. a common field

ANSWER:	d
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Storing Data
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.02 - Define basic database terminology
KEYWORDS:	Bloom's: Remember

9. In an organization, who is usually responsible for improving databases to provide efficient and effective access to their information?

a. business owner

b. database administrator (DBA)

c. database supporter (DBS)

d. data-entry clerks

ANSWER:	b
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	Preparing for a Career in Database Administration
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.05 - Prepare for a career in database administration
KEYWORDS:	Bloom's: Remember

10. Microsoft Access is well-suited to which of the following cases?

a. A few trusted users work with the database at the same time.

b. The database is very large, containing dozens of tables and thousands of records.

c. Many users work with the database in separate geographical locations.

d. The database has strict security requirements because it is available on the Internet.

ANSWER:	a
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	Identifying Database Management Systems
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.03 - Describe database management systems (DBMSs)
KEYWORDS:	Bloom's: Understand

11. Which of the following is a screen object used to maintain and view data from a database?

a. spreadsheet

b. macro

c. report

d. form

ANSWER:	d
POINTS:	1

DIFFICULTY: Easy
REFERENCES: Identifying Database Management Systems
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.03 - Describe database management systems (DBMSs)
KEYWORDS: Bloom's: Remember

12. Which of the following is a drawback of flat files?
    a. Several users can access the same information at the same time.
    b. Flat files ensure that users enter data in a consistent format.
    c. Data is organized to meet all integrity constraints.
    d. Data partitioned into several separate files can be difficult to summarize.

ANSWER: d
POINTS: 1
DIFFICULTY: Moderate
REFERENCES: Advantages of a Properly Designed Relational Database
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.04 - Explain the advantages and key factors for a healthy relational database system
KEYWORDS: Bloom's: Understand

13. In the Sports Physical Therapy database, you determine the description of the therapy a patient is receiving by finding the TherapyCode for the patient in the Session table, and then _____.
    a. looking up the TherapyCode in the Patient table
    b. looking up the TherapyCode in the Therapies table
    c. looking up the SessionNum in the Session table
    d. looking up the TherapyCode in the Therapist table

ANSWER: b
POINTS: 1
DIFFICULTY: Moderate
REFERENCES: Introduction to the Sports Physical Therapy Database Case
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.07 - Review Sports Physical Therapy, a company used in another case that appears at the end of each module
KEYWORDS: Bloom's: Understand

14. A database that enforces _____ prevents users from creating orphan records.
    a. primary key creation
    b. referential integrity
    c. data redundancy
    d. data security

ANSWER: b
POINTS: 1
DIFFICULTY: Easy
REFERENCES: Advantages of a Properly Designed Relational Database
QUESTION TYPE: Multiple Choice

Module 01 - Introduction to Database Management

LEARNING OBJECTIVES: CDBM.PRAT.21.01.04 - Explain the advantages and key factors for a healthy relational database system
KEYWORDS: Bloom's: Remember

15. According to the Bureau of Labor Statistics, what is the job growth outlook for database administrators?
    a. faster than average
    b. slower than average
    c. about average
    d. No growth is expected.

ANSWER: a
POINTS: 1
DIFFICULTY: Easy
REFERENCES: Preparing for a Career in Database Administration
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.05 - Prepare for a career in database administration
KEYWORDS: Bloom's: Remember

16. Which term can be described as the duplication of data and storing data in multiple locations?
    a. data independence
    b. redundancy
    c. data integrity
    d. security

ANSWER: b
POINTS: 1
DIFFICULTY: Easy
REFERENCES: JC Consulting Company Background
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.01 - Examine JC Consulting (JCC), the company used for many of the examples throughout the text
KEYWORDS: Bloom's: Remember

17. What is the term for a collection of data organized in a manner that allows access, retrieval, and use of the data?
    a. database
    b. entity
    c. code file
    d. flat file

ANSWER: a
POINTS: 1
DIFFICULTY: Easy
REFERENCES: JC Consulting Company Background
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.01 - Examine JC Consulting (JCC), the company used for many of the examples throughout the text
KEYWORDS: Bloom's: Remember

18. Which of the following is a reason to store business data in a database rather than a spreadsheet?
     a. Spreadsheets have limited text-formatting features.
     b. Spreadsheets cannot be backed up.
     c. Spreadsheets have limited data sharing and security features.
     d. Spreadsheets have strict rules about data consistency.

ANSWER:	c
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	JC Consulting Company Background
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.01 - Examine JC Consulting (JCC), the company used for many of the examples throughout the text
KEYWORDS:	Bloom's: Understand

19. Which of the following is a problem that data redundancy causes?
     a. removal of orphan records
     b. increased data independence
     c. increased data errors and inconsistencies
     d. removal of primary key fields

ANSWER:	c
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	JC Consulting Company Background
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.01 - Examine JC Consulting (JCC), the company used for many of the examples throughout the text
KEYWORDS:	Bloom's: Understand

20. Which of the following tasks is a data analyst likely to perform?
     a. apply an algorithm to find sales trends
     b. install software to work with a database
     c. design a new database
     d. maintain the company database

ANSWER:	a
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Preparing for a Career in Database Administration
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.05 - Prepare for a career in database administration
KEYWORDS:	Bloom's: Understand

21. How are entities represented in a relational database?
     a. Each entity is stored as a row.
     b. Each entity is stored as an attribute.
     c. Each entity is stored as a table.

d. Each entity is stored as a column.

ANSWER:	c
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	Storing Data
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.02 - Define basic database terminology
KEYWORDS:	Bloom's: Remember

22. Which of the following is a popular software stack?
    a. SQL Server
    b. Oracle
    c. LAMP
    d. DAMP

ANSWER:	c
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	Identifying Database Management Systems
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.03 - Describe database management systems (DBMSs)
KEYWORDS:	Bloom's: Remember

23. What type of software programs are Access, Oracle, DB2, MySQL, and SQL Server?
    a. E-R diagrams
    b. DBAs
    c. data files
    d. DBMSs

ANSWER:	d
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	Identifying Database Management Systems
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.03 - Describe database management systems (DBMSs)
KEYWORDS:	Bloom's: Remember

24. During which phase does a database developer create the entities, attributes, and relationships between the tables of data?
    a. data security
    b. database integrity
    c. database design
    d. database selection

ANSWER:	c
POINTS:	1
DIFFICULTY:	Moderate

REFERENCES:	Identifying Database Management Systems
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.03 - Describe database management systems (DBMSs)
KEYWORDS:	Bloom's: Understand

25. Which of the following are screen objects used to maintain, view, and print data from a database?
    a. fields
    b. forms
    c. data files
    d. entities

ANSWER:	b
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	Identifying Database Management Systems
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.03 - Describe database management systems (DBMSs)
KEYWORDS:	Bloom's: Remember

26. Which of the following statements is correct?
    a. In a flat-file environment, data is partitioned into several disjointed systems, lists, and files.
    b. User data cannot be combined and shared among authorized users.
    c. Database users should each work on their own copy of the database.
    d. Controlling redundancy is easier in a flat file than in a database.

ANSWER:	a
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Advantages of a Properly Designed Relational Database
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.04 - Explain the advantages and key factors for a healthy relational database system
KEYWORDS:	Bloom's: Understand

27. Which type of rule prevents the creation of orphan records?
    a. redundancy constraint
    b. integrity constraint
    c. conflict requirement
    d. security requirement

ANSWER:	b
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Advantages of a Properly Designed Relational Database
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.04 - Explain the advantages and key factors for a healthy relational database system

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KEYWORDS: Bloom's: Understand

28. Which of the following is a responsibility of a database administrator?
    a. improving the efficiency of a database
    b. creating projections of future sales
    c. supervising an organization's external communications
    d. coordinating marketing presentations

ANSWER: a
POINTS: 1
DIFFICULTY: Easy
REFERENCES: Preparing for a Career in Database Administration
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.05 - Prepare for a career in database administration
KEYWORDS: Bloom's: Remember

29. In a large business, who mines a database for information, trends, and insights?
    a. data analyst
    b. database administrator
    c. data entry manager
    d. data security expert

ANSWER: a
POINTS: 1
DIFFICULTY: Moderate
REFERENCES: Preparing for a Career in Database Administration
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.05 - Prepare for a career in database administration
KEYWORDS: Bloom's: Understand

30. In the Pitt Fitness database, which attribute uniquely identifies each class?
    a. ClassName
    b. ClassLocation
    c. ClassType
    d. ClassID

ANSWER: d
POINTS: 1
DIFFICULTY: Easy
REFERENCES: Introduction to the Pitt Fitness Database Case
QUESTION TYPE: Multiple Choice
LEARNING OBJECTIVES: CDBM.PRAT.21.01.06 - Review Pitt Fitness, a company used in a case that
                             appears at the end of each module
KEYWORDS: Bloom's: Understand

31. In the Pitt Fitness database, which of the following attributes belongs in the Customers table?
    a. ClassName
    b. ReservationID

    c. BirthDate

    d. InstructorID

ANSWER:	c
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Introduction to the Pitt Fitness Database Case
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.06 - Review Pitt Fitness, a company used in a case that appears at the end of each module
KEYWORDS:	Bloom's: Understand

32. In the Pitt Fitness database, which table relates classes and instructors?

    a. Reservations

    b. Customers

    c. CustomerReservations

    d. ClassInstructors

ANSWER:	d
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Introduction to the Pitt Fitness Database Case
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.06 - Review Pitt Fitness, a company used in a case that appears at the end of each module
KEYWORDS:	Bloom's: Remember

33. In the Sports Physical Therapy database, which table stores the date of an interaction between a patient and a therapist?

    a. Patient

    b. Billings

    c. Session

    d. PatientBillings

ANSWER:	c
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Introduction to the Sports Physical Therapy Database Case
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.07 - Review Sports Physical Therapy, a company used in another case that appears at the end of each module
KEYWORDS:	Bloom's: Understand

34. In the Sports Physical Therapy database, which attribute uniquely identifies each therapy session?

    a. TherapyCode

    b. SessionNum

    c. SessionType

    d. PatientNum

Module 01 - Introduction to Database Management

ANSWER: b

POINTS: 1

DIFFICULTY: Easy

REFERENCES: Introduction to the Sports Physical Therapy Database Case

QUESTION TYPE: Multiple Choice

LEARNING OBJECTIVES: CDBM.PRAT.21.01.07 - Review Sports Physical Therapy, a company used in another case that appears at the end of each module

KEYWORDS: Bloom's: Understand

35. In the Sports Physical Therapy database, which table determines which therapist provided a service to a patient?

     a. Patients

     b. Session

     c. Therapist

     d. Therapies

ANSWER: b

POINTS: 1

DIFFICULTY: Moderate

REFERENCES: Introduction to the Sports Physical Therapy Database Case

QUESTION TYPE: Multiple Choice

LEARNING OBJECTIVES: CDBM.PRAT.21.01.07 - Review Sports Physical Therapy, a company used in another case that appears at the end of each module

KEYWORDS: Bloom's: Remember

36. Which of the following will be an entity in the JC Consulting database?

     a. Client name

     b. Estimate

     c. Clients

     d. Project description

ANSWER: c

POINTS: 1

DIFFICULTY: Moderate

REFERENCES: JC Consulting Company Background

QUESTION TYPE: Multiple Choice

LEARNING OBJECTIVES: CDBM.PRAT.21.01.01 - Examine JC Consulting (JCC), the company used for many of the examples throughout the text

KEYWORDS: Bloom's: Apply

37. Which of the following is a popular relational database management system?

     a. Apache

     b. SQL Server

     c. Rails

     d. PHP

ANSWER: b

POINTS: 1

DIFFICULTY: Easy

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REFERENCES:	Identifying Database Management Systems
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.03 - Describe database management systems (DBMSs)
KEYWORDS:	Bloom's: Remember

38. In the Sports Physical Therapy database, how can you determine which therapist provided the longest amount of time to complete a particular service?

    a. In the Therapies table, find the highest value in the UnitOfTime column.

    b. In the Session table, find the highest value in the LengthOfSession column.

    c. In the Therapies table, find the highest value in the TherapyCode column.

    d. In the Session table, find the highest value in the SessionNum column.

ANSWER:	b
POINTS:	1
DIFFICULTY:	Easy
REFERENCES:	Introduction to the Sports Physical Therapy Database Case
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.07 - Review Sports Physical Therapy, a company used in another case that appears at the end of each module
KEYWORDS:	Bloom's: Understand

39. In the Sports Physical Therapy database, how can you determine the number of sessions completed by therapist Steven Wilder?

    a. In the Therapist table, count the number of values in the SessionNum column for Steven Wilder.

    b. In the Session table, count the number of times Steven Wilder appears in the TherapistName column.

    c. In the Therapies table, count the number of values in the SessionTherapist column for Steven Wilder.

    d. In the Therapist table, find the TherapistID for Steven Wilder, and then count the number of times his TherapistID appears in the Session table.

ANSWER:	d
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Introduction to the Sports Physical Therapy Database Case
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.07 - Review Sports Physical Therapy, a company used in another case that appears at the end of each module
KEYWORDS:	Bloom's: Understand

40. _____ describes the large volume of data produced by every digital process, system, sensor, mobile device, and even social media exchange.

    a. Metadata

    b. Database management system

    c. Software stack

    d. Big data

ANSWER:	d
POINTS:	1
DIFFICULTY:	Easy

Module 01 - Introduction to Database Management

REFERENCES:	Big Data
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.04 - Explain the advantages and key factors for a healthy relational database system
KEYWORDS:	Bloom's: Remember

41. A(n) _____ is a set of rules, calculations, and assumptions used to solve a problem.
    a. attribute
    b. algorithm
    c. integrity constraint
    d. form

ANSWER:	b
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Preparing for a Career in Database Administration
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.05 - Prepare for a career in database administration
KEYWORDS:	Bloom's: Remember

42. In the Pitt Fitness database, which of the following is an attribute in the Instructors entity?
    a. InstructorRoom
    b. InstructorDescription
    c. InstructorCity
    d. InstructorFee

ANSWER:	c
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Review Pitt Fitness, a company used in a case that appears at the end of each module
QUESTION TYPE:	Multiple Choice
LEARNING OBJECTIVES:	CDBM.PRAT.21.01.06 - Review Pitt Fitness, a company used in a case that appears at the end of each module
KEYWORDS:	Bloom's: Understand

43. In the Pitt Fitness database, what can you learn by examining the ClassInstructors data?
    a. Some classes use more than one instructor.
    b. Each class has only one instructor.
    c. Each instructor teaches only one class.
    d. All the instructors live in Pittsburgh.

ANSWER:	a
POINTS:	1
DIFFICULTY:	Moderate
REFERENCES:	Review Pitt Fitness, a company used in a case that appears at the end of each module
QUESTION TYPE:	Multiple Choice

Module 01 - Introduction to Database Management

LEARNING OBJECTIVES: CDBM.PRAT.21.01.06 - Review Pitt Fitness, a company used in a case that appears at the end of each module

KEYWORDS: Bloom's: Apply

44. In the Pitt Fitness database, how can you determine the number of classes offered on Tuesday?

    a. In the Classes table, count the occurrences of Tuesday in the Time column.

    b. In the ClassInstructors table, count the occurrences of Tuesday in the DayOfWeek column.

    c. In the Classes table, count the entries in the Tuesday column.

    d. In the Classes table, count the occurrences of Tuesday in the Day column.

ANSWER: d

POINTS: 1

DIFFICULTY: Moderate

REFERENCES: Review Pitt Fitness, a company used in a case that appears at the end of each module

QUESTION TYPE: Multiple Choice

LEARNING OBJECTIVES: CDBM.PRAT.21.01.06 - Review Pitt Fitness, a company used in a case that appears at the end of each module

KEYWORDS: Bloom's: Apply

45. In the Pitt Fitness database, you can determine which instructor is assigned a particular class by looking in the _____ table.

    a. ClassInstructors

    b. Classes

    c. Reservations

    d. Instructors

ANSWER: a

POINTS: 1

DIFFICULTY: Moderate

REFERENCES: Review Pitt Fitness, a company used in a case that appears at the end of each module

QUESTION TYPE: Multiple Choice

LEARNING OBJECTIVES: CDBM.PRAT.21.01.06 - Review Pitt Fitness, a company used in a case that appears at the end of each module

KEYWORDS: Bloom's: Apply

Essay

46. List nine advantages of a properly designed relational database.

ANSWER: Better information is provided.
Data and information are shared.
Multiple business information requirements are addressed.
Data redundancy is minimized.
Data consistency is applied.
Referential integrity is enforced.
Security is increased.
Productivity is increased.
Data is freed from individual applications.

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POINTS: 1

RUBRIC:

Criteria	10	0
	Pts	Your Score
The answer includes nine advantages, including the following or similar advantages:	1	
Better information is provided.	1	
Data and information are shared.	1	
Multiple business information requirements are addressed.	1	
Data redundancy is minimized.	1	
Data consistency is applied.	1	
Referential integrity is enforced.	1	
Security is increased.	1	
Productivity is increased.	1	
Data is freed from individual applications.	1	

DIFFICULTY: Difficult

REFERENCES: Advantages of a Properly Designed Relational Database

QUESTION TYPE: Essay

LEARNING OBJECTIVES: CDBM.PRAT.21.01.04 - Explain the advantages and key factors for a healthy relational database system

KEYWORDS: Bloom's: Understand

47. Explain when Access is an appropriate choice as a DBMS and when an enterprise-level DBMS system would be more appropriate.

ANSWER: Access is an appropriate choice as a DBMS when only a handful of trusted users are simultaneously using the database and they are all located in the same building. Choose an enterprise-level DBMS such as Oracle when you have many users and a large amount of data, you require sophisticated security and application development features, and you want to use the DBMS across wide area intranets or the Internet.

POINTS: 1

RUBRIC:

Criteria	10	0
	Pts	Your Score
Access is an appropriate choice as a DBMS when only a handful of trusted users are simultaneously using the database.	2	
Access is an appropriate choice when all users are all located in the same building.	2	
An enterprise-level DBMS is more appropriate than Access when the database has many users and a very large amount of data.	2	
An enterprise-level DBMS is more appropriate when the organization requires sophisticated security and application development features.	2	
An enterprise-level DBMS is more appropriate when the organization	2	

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wants to use the DBMS across wide area intranets or the Internet.		

DIFFICULTY: Difficult

REFERENCES: Identifying Database Management Systems

QUESTION TYPE: Essay

LEARNING OBJECTIVES: CDBM.PRAT.21.01.03 - Describe database management systems (DBMSs)

KEYWORDS: Bloom's: Remember

48. Discuss why using a relational DBMS provides better information than data stored in multiple flat files.

ANSWER: A fundamental goal of a DBMS is to turn data (recorded facts) into information (the knowledge gained by processing those facts). A flat file partitions data into several disjointed systems, lists, and files. Any request for information that involves accessing data from more than one of these areas can be difficult to fulfill, especially summarized data that helps confirm assumptions, analyze trends, and spot exceptions. In contrast, a DBMS stores data in a single file and uses related tables to make information easy to access and retrieve.

POINTS: 1

RUBRIC:

Criteria	15	0
	Pts	Your Score
The answer explains that a flat file partitions data into several disjointed systems, lists, and files.	5	
The answer also explains that with a flat file, it is difficult to fulfill requests for information that involve accessing data from more than one file, especially summarized data.	5	
In contrast, a relational DBMS stores data in a single system that uses related tables to make information easy to access and retrieve.	5	

DIFFICULTY: Difficult

REFERENCES: Advantages of a Properly Designed Relational Database

QUESTION TYPE: Essay

LEARNING OBJECTIVES: CDBM.PRAT.21.01.04 - Explain the advantages and key factors for a healthy relational database system

KEYWORDS: Bloom's: Understand

49. Explain the key differences between the job description and responsibilities of a database administrator and a data analyst.

ANSWER: A database administrator manages database management systems and software. Responsibilities include installing, maintaining, and testing database hardware and software as well as designing and improving the database to provide efficient and effective access to the information. A data analyst uses tools and algorithms to mine a database for answers, information, trends, and insights. Responsibilities include analyzing data to find answers to business questions.

POINTS: 1

RUBRIC:

Criteria	10	0
	Pts	Your Score

A database administrator (DBA) is defined as someone who manages database management systems and software.	2	
Responsibilities of a DBA are identified as installing, maintaining, and testing database hardware and software.	2	
Other DBA responsibilities include designing and improving the database to provide efficient and effective access to the information.	2	
A data analyst is defined as someone who uses tools and algorithms to mine a database for answers, information, trends, and insights.	2	
Responsibilities of a data analyst are identified as analyzing data to find answers to business questions.	2	

DIFFICULTY: Moderate

REFERENCES: Preparing for a Career in Database Administration

QUESTION TYPE: Essay

LEARNING OBJECTIVES: CDBM.PRAT.21.01.05 - Prepare for a career in database administration

KEYWORDS: Bloom's: Remember

50. Describe the types of big data Sports Physical Therapy could collect to improve its services and financial performance.

ANSWER: Sports Physical Therapy could collect blog postings that mention its services or therapists; website analytics to find details about its website usage; photos showing therapists and facilities; and social media posts mentioning the business and its services.

POINTS: 1

RUBRIC:

Criteria	5	0
	Failure	**Below Expectations**
The answer includes at least two types of big data.	2	
The answer mentions blog postings, web analytics, photos, social media posts, and other types of unstructured data.	3	

DIFFICULTY: Moderate

REFERENCES: Introduction to the Sports Physical Therapy Database Case

QUESTION TYPE: Essay

LEARNING OBJECTIVES: CDBM.PRAT.21.01.07 - Review Sports Physical Therapy, a company used in another case that appears at the end of each module

KEYWORDS: Bloom's: Understand