

**STUDENT ACTIVITY 6.1.2: PRACTICE QUIZ**

**PRACTICE TEST**

MTA Course: Database Administration Fundamentals

Topic: Master Summary, Part 2

File name: DBAdminFund\_SA\_6.1.2

**Lesson Objective:**

**6.1:** Master review of the Database Administration Fundamentals review lessons.

**Resources, software, and additional files needed for this lesson:**

- Copy the test and the answer key to distribute when students leave the room.

**Directions to the student:**

This is a formal practice test. You will need a pen or pencil.

**Content:**

**Practice Quiz for Database Administration Fundamentals**

Make up your own reasonable table and column names as need to answer the questions as needed.

1. Write a SELECT example with a WHERE condition.
  
2. What forms of normalization are typically used and why?

3. Create a table that will store the students' final grades for this class. You must include: a table name and a minimum of four fields. Extra credit—add two more fields that would add value and usefulness to this table.
  
4. What data type should be used to hold student names?
  
5. What data type should be used for student IDs and why?
  
6. What data type should be used for a student's grade?
  
7. Describe the relationship between tables, queries, and views.
  
8. How is T-SQL different from graphical designers?
  
9. What is the basic difference between a function and a stored procedure?
  
10. What is a subquery?
  
11. What is a JOIN?

12. Create a view that will find all the male medical students in a database.
13. Why can a foreign key have a NULL value but a primary key cannot?
14. What is the difference between a clustered and non-clustered index?
15. What do we add to our `sp_getclass` stored procedure (listed below) to make it more specific/useful?

```
CREATE PROCEDURE sp_getclass
@campuslocation varchar(30)
AS
SELECT ClassName, ClassSection
FROM Current_term
WHERE campus = @campuslocation
```

16. What is the command that is used to keep duplicate results in UNION and INTERSECTS?
17. What is the difference between AND and OR?
18. Write a SELECT example that arranges student's letter grades in ascending order?
19. What is the purpose of INSERT INTO?

20. Create a view that will find all students over 62.
  
21. What happens if a column is not specified using the basic `INSERT` command?
  
22. What is the fastest restore method and why?
  
23. What command is used for a subquery with `INSERT`? Give an example.
  
24. Define the `CASE` statement. Give an example.
  
25. What is the relationship between `TRANSACTIONS`, `ROLLBACK`, and `COMMIT`?
  
26. What is the fastest backup method?
  
27. Create a view that will find all employees that have first aid training in a database.
  
28. What is the purpose of the `UPDATE` statement?

**29.** Why is it important to check for errors after every statement?

**30.** What is normalization?

**31.** Why use normalization?

**32.** What is the relationship between keys and data types?

**33.** What is a security plan?

**34.** What is a foreign key?

**35.** What are inference and SQL injection?

**36.** What is a B-tree?

**37.** How are user accounts and roles different?

**38.** Why do we use indexes?

**39.** Describe a situation in which you might have a small-scale version of replicated services.

**40.** What are the three main types of backups?