Quiz: DB Build

1) Which of these are benefits of putting SQL code in a script? Select all that apply.

\*a) The code can be rerun as needed

\*b) The code can be checked in to version control such as GitHub

\*c) The code can be used by others to duplicate and sync the database

d) None of these are benefits

2) You want to aggregate data with a SQL query. Which command best allows you to do this?  
  
a) HAVING  
\*b) GROUP BY  
c) WHERE  
d) SELECT

3) Consider code block 1. What is the purpose of *mult\_sections*? Select the best answer.

WITH mult\_sections AS (

SELECT term\_name, course\_mnemonic

FROM course\_assignment

GROUP BY term\_name, course\_mnemonic

HAVING count(\*)>2

)

SELECT ms.\*, ca.instructor\_name

FROM mult\_sections as ms

JOIN course\_assignment as ca

ON ms.term\_name = ca.term\_name

AND [INSERT CORRECT CODE HERE]

a) It allows you to join two tables together

b) It allows you to create a class with multiple sections

\*c) It allows you to form a subquery for composing a complex query

d) none of these are true

4) Consider code block 1. What should be substituted for [INSERT CORRECT CODE HERE] ?   
Select the best answer.

a) ca.term\_name = ma.term\_name;  
  
\*b) ms.course\_mnemonic = ca.course\_mnemonic;  
  
c) course\_assignment = mult\_sections;  
  
d) none of these are correct

5) You want to delete record from the table *course, and you write the following SQL code:*

DELETE FROM course;  
  
This is not recommended, and if you’re operating in safe mode, the command is not allowed. Select the best answer that provides an explanation.

*a) You cannot delete data from a table after it’s been inserted*

*b) Only the database administrator is allowed to delete from the course table*

*c) When deleting data, it is recommended the query includes a SELECT statement*

*\*d) When deleting data, it is recommended the query includes a WHERE statement*

*6) Select all functionality included in MySQL Workbench.*

*\*a) SQL query editor*

*\*b) Ability to save and load SQL files*

*\*c) Object browser for inspecting tables and views*

*\*d) Ability to view and create diagrams of the database*

7) True or False: MySQL is a relational database.

\*a) True

b) False

8) Is it possible to change the schema of a table after it has been created?

a) No

b) Yes, using the SELECT command

\*c) Yes, using the ALTER command

d) Yes, using a database index

9) You create Table A with a field called *course\_mnemonic*, which is a primary key.  
You create Table B with *course\_mnemonic* as the foreign key.  
Now you try to insert a record into Table B which contains a course\_mnemonic that is not contained in Table A. What will happen?

a) This will proceed normally  
\*b) This will fail, as there will be a foreign key constraint violation  
c) This will work if you include an INNER JOIN in the INSERT command  
d) None of these statements are true

10) Consider a row of data containing three fields, where two of the fields form a composite key.   
The value for one of the composite key fields is missing. Will you be able to insert this data into the database?

a) Yes; this will proceed normally

b) Yes; but only if the missing data is entered as a string

\*c) No; all fields in the composite key must have values