1. The\_\_\_\_condition allows a general predicate over the relations being joined.  
   a) On  
   b) Using  
   c) Set  
   d) Where

Answer: a  
Explanation: On gives the condition for the join expression.

1. Which of the join operations do not preserve non matched tuples?  
   a) Left outer join  
   b) Right outer join  
   c) Inner join  
   d) Natural join

Answer: c  
Explanation: INNER JOIN: Returns all rows when there is at least one match in BOTH tables.

1. SELECT \* FROM student JOIN takes USING (ID);

The above query is equivalent to

a)

SELECT \*

FROM student INNER JOIN takes USING (ID);

b)

SELECT \*

FROM student OUTER JOIN takes USING (ID);

c)

SELECT \*

FROM student LEFT OUTER JOIN takes USING (ID);

d) None of the mentioned

Answer: a  
Explanation: Join can be replaced by inner join.

1. What type of join is needed when you wish to include rows that do not have matching values?  
   a) Equi-join  
   b) Natural join  
   c) Outer join  
   d) All of the mentioned

Answer: c  
Explanation: An outer join does not require each record in the two joined tables to have a matching record..

1. How many tables may be included with a join?  
   a) One  
   b) Two  
   c) Three  
   d) All of the mentioned

Answer: d  
Explanation: Join can combine multiple tables.

1. Which are the join types in join condition:  
   a) Cross join  
   b) Natural join  
   c) Join with USING clause  
   d) All of the mentioned

Answer: d  
Explanation: There are totally four join types in SQL.

1. How many join types in join condition:  
   a) 2  
   b) 3  
   c) 4  
   d) 5

Answer: d  
Explanation: Types are inner join, left outer join, right outer join, full join, cross join.

1. Which join refers to join records from the right table that have no matching key in the left table are include in the result set:  
   a) Left outer join  
   b) Right outer join  
   c) Full outer join  
   d) Half outer join

Answer: b  
Explanation: RIGHT OUTER JOIN: Return all rows from the right table and the matched rows from the left table.

1. The operation which is not considered a basic operation of relational algebra is  
   a) Join  
   b) Selection  
   c) Union  
   d) Cross product

Answer: a

1. In SQL the statement select \* from R, S is equivalent to  
   a) Select \* from R natural join S  
   b) Select \* from R cross join S  
   c) Select \* from R union join S  
   d) Select \* from R inner join S

Answer: b