1. The most recent version of standard SQL prescribed by the American National Standards Institute is  
a) SQL 2016  
b) SQL 2002  
c) SQL – 4  
d) SQL2

Answer: a  
Explanation: SQL-2016 is the most recent version of standard SQL prescribed by the ANSI.

2. ANSI-standard SQL allows the use of special operators in conjunction with the WHERE clause. A special operator used to check whether an attribute value is null is  
a) BETWEEN  
b) IS NULL  
c) LIKE  
d) IN

Answer: b  
Explanation: Exists is used to check whether an attribute value is null or not in conjunction with the where clause.

3. A lock that prevents the use of any tables in the database from one transaction while another transaction is being processed is called a  
a) Database-level lock  
b) Table-level lock  
c) Page-level lock  
d) Row-level lock

Answer: a  
Explanation: Data base-level lock prevents the use of any tables in the data base from one transaction while another transaction is being processed.

4. A condition that occurs when two transactions wait for each other to unlock data is known as a(n)  
a) Shared lock  
b) Exclusive lock  
c) Binary lock  
d) Deadlock

Answer: d  
Explanation: Deadlock occurs when two transactions wait for each other to unlock data.

5. \_\_\_\_\_\_\_ means that data used during the execution of a transaction cannot be used by a second transaction until the first one is completed.  
a) Serializability  
b) Atomicity  
c) Isolation  
d) Time stamping

Answer: c  
Explanation: Isolation means that data used during the execution of a transaction can’t be used by a second transaction until the first one is completed.

6. A unit of storage that can store one or more records in a hash file organization is denoted as  
a) Buckets  
b) Disk pages  
c) Blocks  
d) Nodes

Answer: a  
Explanation: Buckets are used to store one or more records in a hash file organization.

7. The file organization which allows us to read records that would satisfy the join condition by using one block read is  
a) Heap file organization  
b) Sequential file organization  
c) Clustering file organization  
d) Hash files organization

Answer: c  
Explanation: Clustering file organization allows us to read records that would satisfy the join condition by using one block read.

8. Which of the following is not true about B+ trees?  
a) B+ tree index takes the form of balanced tree  
b) Performance of B+ tree degrades as the file grows  
c) Look-up in B+ tree is straightforward and efficient  
d) Insertion and deletion in B+ tree is complicated but efficient

Answer: b  
Explanation: The answer is evident.

9. The extent of the database resource that is included with each lock is called the level of  
a) Impact  
b) Granularity  
c) Management  
d) DBMS control

Answer: b  
Explanation: The extent of the data base resource that is included with each lock is called the level of Granularity.

10. DBMS periodically suspends all processing and synchronizes its files and journals through the use of  
a) Checkpoint facility  
b) Backup facility  
c) Recovery manager  
d) Database change log

Answer: a  
Explanation: DBMS periodically suspends all processing and synchronizes its files and journals through the use of Check point facility.