#### ****SQL Server Basics****

1. What is SQL Server?
2. Explain the architecture of SQL Server.
3. What are the different editions of SQL Server?
4. What is a database in SQL Server?
5. What is a table in SQL Server?
6. What are the different data types available in SQL Server?
7. What is a primary key?
8. What is a foreign key?
9. What is a unique key?
10. What is a composite key?
11. What is a clustered index?
12. What is a non-clustered index?
13. What is a view in SQL Server?
14. What is a stored procedure?
15. What is a function in SQL Server?
16. What is a trigger in SQL Server?
17. What is a cursor in SQL Server?
18. What is a transaction in SQL Server?
19. Explain the ACID properties of a transaction.
20. What is a join in SQL Server?
21. What are the different types of joins?
22. What is a subquery?
23. What is a common table expression (CTE)?
24. What is normalization?
25. What are the different normal forms?
26. What is denormalization?
27. What is a schema in SQL Server?
28. What is a synonym in SQL Server?
29. What is a sequence in SQL Server?
30. What is a temp table?
31. What is a table variable?
32. What is a derived table?

#### ****Advanced SQL Server Concepts****

1. What is indexing and why is it important?
2. Explain the difference between a clustered index and a non-clustered index.
3. What are indexed views?
4. What is a full-text index?
5. What is a fill factor in SQL Server?
6. What are page splits?
7. What is database mirroring?
8. What is log shipping?
9. What is replication in SQL Server?
10. What is the difference between snapshot, transactional, and merge replication?
11. What is a database backup?
12. What are the different types of backups in SQL Server?
13. What is a differential backup?
14. What is a transaction log backup?
15. What is a filegroup backup?
16. What is point-in-time recovery?
17. What is a database restore?
18. What is a recovery model in SQL Server?
19. What are the different recovery models in SQL Server?
20. What is database performance tuning?
21. What are some common performance issues in SQL Server?
22. What is SQL Profiler?
23. What is Database Engine Tuning Advisor?
24. What is the purpose of the EXPLAIN plan?
25. What are execution plans?
26. How do you read an execution plan?
27. What are wait types in SQL Server?
28. What is a deadlock?
29. How do you troubleshoot deadlocks in SQL Server?
30. What is SQL injection?
31. How do you prevent SQL injection?
32. What is dynamic SQL?
33. What is parameterized query?

#### ****SQL Server Management and Security****

1. What is SQL Server Management Studio (SSMS)?
2. What is SQL Server Agent?
3. What are jobs in SQL Server?
4. What are alerts in SQL Server?
5. What are operators in SQL Server?
6. What is a database role?
7. What are the different types of database roles?
8. What is a server role?
9. What is the difference between a server role and a database role?
10. What is a user-defined role?
11. What is a login in SQL Server?
12. What is a user in SQL Server?
13. What is the difference between a login and a user?
14. What is row-level security?
15. What is data encryption in SQL Server?
16. What are the different types of encryption in SQL Server?
17. What is Transparent Data Encryption (TDE)?
18. What is Always Encrypted?
19. What is SQL Server Audit?
20. How do you implement auditing in SQL Server?
21. What are extended events in SQL Server?
22. What is Policy-Based Management?
23. What is a resource governor in SQL Server?
24. What is the purpose of sp\_who and sp\_who2?
25. What is DBCC?