

Yan

Gu

**yg369**

Start

Time:

17:46

End

Time:

18:16

**CS527****- Final  
Exam**

## Database Certification



1. They are all DML staements EXCEPT \_\_\_\_\_.

- ☐ LIKE
- ☐ RIGHT OUTER JOIN
- ☐ SELECT INTO
- ☐ UNION
- ☐ GROUP BY
- ☒ ALTER VIEW



2. \_\_\_\_\_ returns all rows from the right table, and the matching rows from the left table.

- ☒ RIGHT OUTER JOIN
- ☐ CROSS JOIN
- ☐ RIGHT LEFT SUBQUERY
- ☐ LEFT OUTER JOIN
- ☐ FULL JOIN
- ☐ INNER JOIN



3. A \_\_\_\_\_ is a mechanism used to control access to database objects.

- ☒ Lock
- ☐ Log In
- ☐ Log
- ☐ Constraint
- ☐ Catalog
- ☐ Password



4. Which one is the proper steps in database data model design?

- ☐ Conceptual, Logical, Physical and View
- ☒ Conceptual, Logical, Physical and External
- ☐ Logical, Conceptual, Physical, External
- ☐ External, Physical, Logical, Conceptual
- ☐ Conceptual, Internal, External, Physical
- ☐ Internal, Conceptual, Physical, External



5. Which Normal Form takes care of dependency of a non-prime attribute to a partial prime attribute (Partial Dependency)?

- ☐ 1NF
- ☒ 2NF
- ☐ 3NF
- ☐ BCNF
- ☐ 4NF
- ☐ 5NF



6. \_\_\_\_\_ is an DDL statement.

- ☐ DROP TRANSACTION
- ☐ DELETE USER
- ☒ DROP FUNCTION
- ☐ CROSS JOIN
- ☐ DELETE TABLE

○ INNER JOIN



7. Which one is the proper sequence of statements for a SQL Cursor?

- ☐ DECLARE > OPEN > FETCH > DEALLOCATE > CLOSE
- ☐ DECLARE > OPEN > CLOSE > DEALLOCATE
- ☐ OPEN > FETCH > CLOSE > DEALLOCATE
- ☒ DECLARE > OPEN > FETCH > CLOSE > DEALLOCATE
- ☐ DECLARE > OPEN > FETCH > CLOSE > CLEAR
- ☐ DECLARE > OPEN > FETCH > CLOSE > DEALLOCATE > LEAVE



8. They are the typical Key\_Value API functions EXCEPT \_\_\_\_\_.

- ☐ Get
- ☐ Put
- ☐ Delete
- ☐ Execute
- ☒ Create
- ☐ None of the above



9. \_\_\_\_\_ is not a MongoDB statement or function.

- ☐ UPDATE
- ☐ INSERT
- ☒ SELECT
- ☐ FIND
- ☐ USE
- ☐ SORT



10. A \_\_\_\_\_ is a centralized repository that allows you to store all your structured and unstructured data at any scale.

- ☐ Data mart
- ☐ Virtual Data warehouse
- ☐ Cube

- ☒ Data lake
- ☐ Virtual Cube
- ☐ Cursor



11. Data warehouse is about all of the followings EXCEPT\_\_\_\_\_.

- ☒ Normalized data
- ☐ Subject Oriented
- ☐ Historical data
- ☐ Select/Insert
- ☐ Decision support
- ☐ Aggregation



12. We use \_\_\_\_\_ to build Recommendation Systems.

- ☐ Classification
- ☐ Aggregation
- ☐ Regression
- ☒ Association rules
- ☐ Clustering
- ☐ Supervised Learning



13. The \_\_\_\_\_ command is used to create a database in MongoDB.

- ☐ CREATE DATABASE
- ☒ USE
- ☐ ADD DATABASE
- ☐ GENERATE DB
- ☐ NEWDB
- ☐ INSERTDB

14. Which SQL statement is very useful for binning?

- ☐ WHILE-CONTINUE-BREAK

- ☐ TRIGGER
- ☐ GOTO
- ☐ IF-THEN
- ☐ CASE-WHEN\_THEN-ELSE-END
- ☒ BEGIN-END



15. \_\_\_\_\_ means that the system continues to function even the communication among the servers is unreliable.

- ☐ Isolation
- ☐ Durability
- ☐ Atomicity
- ☐ Consistency
- ☐ Availability
- ☒ Partition Tolerance



16. AVG is?

- ☐ User Defined Aggregate Function
- ☒ System Aggregate Function
- ☐ User Define Stored Procedure
- ☐ System Stored Procedure
- ☐ User Defined Function
- ☐ Trigger



17. \_\_\_\_\_ gives a column or table a temporary name (alias).

- ☒ AS
- ☐ CHECK
- ☐ DROP TABLE
- ☐ EXISTS
- ☐ HAVING
- ☐ INNER JOIN



18. \_\_\_\_\_ intended to guarantee validity of data in a database even in

the event of errors, power failures, media failure and more.

- ☒ ACID
- ☐ ER Diagram
- ☐ Query Optimization
- ☐ Normalization
- ☐ Integrity enforcement
- ☐ Backup



19. A \_\_\_\_\_ specifies a set of values that may be assigned to an attribute.

- ☐ role
- ☐ relationship
- ☒ domain
- ☐ cardinality
- ☐ constraint
- ☐ unique key



20. \_\_\_\_\_ is an algorithm that stores all available cases and classifies new cases based on a similarity measure.

- ☐ K-Means
- ☐ Decision Tree
- ☒ KNN
- ☐ Naive Bayesian
- ☐ OneR
- ☐ Neural Network



21. Which supervised learning algorithm can be used for both Classification and Regression?

- ☐ K Nearest Neighbors (KNN)
- ☐ Decision Trees
- ☐ Random Forest
- ☐ Deep Learning
- ☒ All of the above

☐ None of the above



22. \_\_\_\_\_ means all operations in a transaction succeed or every operation is rolled back.

- ☐ Isolation
- ☐ Durability
- ☒ Atomicity
- ☐ Consistency
- ☐ Availability
- ☐ Partition Tolerance



23. \_\_\_\_\_ captures data from multiple, heterogeneous sources and integrate into a single persistent store.

- ☐ Outtrigger table
- ☒ ETL process
- ☐ Data mart
- ☐ Data lake
- ☐ OLAP
- ☐ Star Schema



24. \_\_\_\_\_ buffer the data warehouse from the operational environment.

- ☐ Primary keys
- ☐ Foreign keys
- ☐ Unique keys
- ☐ Indexes
- ☐ Constraints
- ☒ Surrogate keys



25. \_\_\_\_\_ represents the data in the database at a moment.

- ☐ Database model

- ☐ Database Catalog
- ☒ Database State
- ☐ Data Model
- ☐ Data Integrity
- ☐ Database Query



26. They are all NoSQL databases EXCEPT \_\_\_\_\_.

- ☐ Key-Value store
- ☒ List-oriented
- ☐ Document-oriented
- ☐ Column-oriented
- ☐ Graph
- ☐ None of the above

27. In MongoDB we add the first member of Replica Set using \_\_\_\_\_ command.

- ☐ rs.add()
- ☐ rs.initiate()
- ☒ rs.addfirst()
- ☐ rs.add(1)
- ☐ rs.addnew()
- ☐ rs.addnew(1)



28. Predictive modeling is about all of the followings EXCEPT \_\_\_\_\_.

- ☐ Classification
- ☒ Aggregation
- ☐ Regression
- ☐ Association rules
- ☐ Clustering
- ☐ Supervised Learning



29. An external data model is also called a \_\_\_\_\_.



- ☐ Schema
- ☐ Table
- ☐ Column
- ☐ Catalog
- ☒ View
- ☐ Entity



30. A(n) \_\_\_\_\_ is an association among two entity types.

- ☐ attribute type
- ☐ key attribute type
- ☐ aggregation
- ☐ relationship sets
- ☒ relationship type
- ☐ association type



31. These are all related to integrity constraint **EXCEPT**?

- ☐ Primary key
- ☒ Restrict key
- ☐ Unique key
- ☐ Check
- ☐ Not Null
- ☐ Default



32. \_\_\_\_\_ tests for the existence of any record in a subquery.

- ☐ DEFAULT
- ☐ CHECK
- ☐ WHERE
- ☒ EXISTS
- ☐ HAVING
- ☐ None of the above



33. All the following SQL Statements should be executed by users EXCEPT \_\_\_\_\_.

- ☐ Functions
- ☒ Triggers
- ☐ Stored Procedures
- ☐ Cursors
- ☐ Transaction
- ☐ Select ... From ... Where ...



34. \_\_\_\_\_ is an unsupervised learning algorithm.

- ☐ KNN
- ☐ Decision Tree
- ☒ K-Means
- ☐ Naive Bayesian
- ☐ LDA
- ☐ Association Rules



35. NoSQL is about all the following items EXCEPT \_\_\_\_\_.

- ☐ Non-relational database
- ☐ Distributed data stores
- ☒ Fixed schema
- ☐ Avoiding join operations
- ☐ Scale horizontally
- ☐ None of the above

36. In the following RDBMS and MongoDB objects comparison, \_\_\_\_\_ is not correct.

- ☐ Database - Database
- ☐ Table - Collection
- ☐ Row - Document
- ☐ Column - Field (Key)

- ☐ Join – Array
- ☒ None of the above

37. Data quality is about all of the followings EXCEPT \_\_\_\_\_.

- ☐ data completeness
- ☐ data timeliness
- ☐ data transformation
- ☐ data accessibility
- ☐ data accuracy
- ☒ all of the above



38. \_\_\_\_\_ is a numerical attribute with patterns.

- ☐ Gender
- ☐ Height
- ☐ Heart Rate
- ☒ Heart Sound
- ☐ Date of Birth
- ☐ NULL



39. \_\_\_\_\_ statement creates a table and copies data from one or more tables into the new table.

- ☐ LIKE
- ☐ RIGHT OUTER JOIN
- ☒ SELECT INTO
- ☐ UNION
- ☐ ALTER VIEW
- ☐ INSERT INTO



40. A description of data in terms of a data model is called a schema. Where does DBMS save its schemas?

- ☒ Catalog

- ☐ Schema
- ☐ Log
- ☐ Lock
- ☐ Buffer
- ☐ ER Diagram



41. \_\_\_\_\_ is a part of Enhanced Entity Relationship (EER) model but not ER model.

- ☒ aggregation
- ☐ domain
- ☐ entity
- ☐ relationship
- ☐ weak entity
- ☐ role



42. Which Normal Form takes care of dependency of two non-prime attributes (Transitive Dependency)?

- ☐ 1NF
- ☐ 2NF
- ☒ 3NF
- ☐ BCNF
- ☐ 4NF
- ☐ 5NF

43. \_\_\_\_\_ returns all (matched or unmatched) rows from the tables on both sides of the join clause.

- ☐ CROSS JOIN
- ☐ RIGHT OUTER JOIN
- ☐ SELF JOIN
- ☐ FULL OUTER JOIN
- ☐ LEFT OUTER JOIN
- ☒ INNER JOIN



44. \_\_\_\_\_ defines TIMING in a trigger.

- ☒ AFTER
- ☐ FOR
- ☐ WHILE
- ☐ INSERT
- ☐ START
- ☐ END



45. \_\_\_\_\_ calculates the relative rank of a row within a group of rows.

- ☐ Rank
- ☐ Dense\_Rank
- ☐ Cume\_Rank
- ☐ NTILE
- ☐ Gap\_Rank
- ☒ Percent\_Rank



46. \_\_\_\_\_ corresponds to a range selection on one or more dimensions of a cube.

- ☐ Drill Up
- ☐ Drill Down
- ☒ Dicing
- ☐ Slicing
- ☐ Rank
- ☐ Grouping Set



47. \_\_\_\_\_ operator generates a result set equivalent to that generated by a UNION ALL of multiple simple GROUP BY clauses.

- ☐ GROUP BY ROLLUP
- ☒ GROUPING SETS
- ☐ GROUP BY UNION
- ☐ GROUP BY CUBE
- ☐ OVER()
- ☐ WINDOWING



48. \_\_\_\_\_ refers to narrow down to more detailed data.

- ☐ Drill Up
- ☐ Roll Up
- ☐ Group by Cube
- ☐ Group by Rollup
- ☒ Drill Down
- ☐ Slice Down



49. When would you store data in No-SQL database?

- ☐ An online store with a collection of data on customers, products, and employees.
- ☐ A university with a collection of data on students, professors and courses.
- ☐ An insurance company with a collection of data to be used for a credit scoring model.
- ☐ A hospital with a collection of data on patients, doctors and clinics.
- ☒ A company with a collection of 1 billion bidding transactions daily.
- ☐ None of the above

50. \_\_\_\_\_ is the correct MongoDB Update statement.

- ☐ db.Employee.update({"EmpId" : 1}, {{ "EmpName" : "Joe"}});
- ☐ db.Employee.update({"EmpId" : 1}, {{ "EmpName" = "Joe"}});
- ☐ db.Employee.update({"EmpId" : 1}, {\$set: { "EmpName" = "Joe"}});
- ☒ db.Employee.update({"EmpId" : 1}, {\$set: { "EmpName" : "Joe"}});
- ☐ db.Employee.update({"EmpId" : 1}, {#set: { "EmpName" : "Joe"}});
- ☐ db.Employee.update({"EmpId" : 1}, {#set: { "EmpName" = "Joe"}});

Correct = 44 of  
50 (88%)