Explore More

Subcription : Premium CDAC NOTES & MATERIAL @99

Contact to Join
Premium Group

Click to Join
Telegram Group

For More E-Notes

Join Our Community to stay Updated

TAP ON THE ICONS TO JOIN!

	codewitharrays.in freelance project available to buy contact on 8007592194	
SR.NO	Project NAME	Technology
1	Online E-Learning Platform Hub	React+Springboot+MySql
2	PG Mates / RoomSharing / Flat Mates	React+Springboot+MySql
3	Tour and Travel management System	React+Springboot+MySql
4	Election commition of India (online Voting System)	React+Springboot+MySql
5	HomeRental Booking System	React+Springboot+MySql
6	Event Management System	React+Springboot+MySql
7	Hotel Management System	React+Springboot+MySql
8	Agriculture web Project	React+Springboot+MySql
9	AirLine Reservation System / Flight booking System	React+Springboot+MySql
10	E-commerce web Project	React+Springboot+MySql
11	Hospital Management System	React+Springboot+MySql
12	E-RTO Driving licence portal	React+Springboot+MySql
13	Transpotation Services portal	React+Springboot+MySql
14	Courier Services Portal / Courier Management System	React+Springboot+MySql
15	Online Food Delivery Portal	React+Springboot+MySql
16	Muncipal Corporation Management	React+Springboot+MySql
17	Gym Management System	React+Springboot+MySql
18	Bike/Car ental System Portal	React+Springboot+MySql
19	CharityDonation web project	React+Springboot+MySql
20	Movie Booking System	React+Springboot+MySql

	freelance_Project available to buy contact on 8007592194	
21	Job Portal web project	React+Springboot+MySql
22	LIC Insurance Portal	React+Springboot+MySql
23	Employee Management System	React+Springboot+MySql
24	Payroll Management System	React+Springboot+MySql
25	RealEstate Property Project	React+Springboot+MySql
26	Marriage Hall Booking Project	React+Springboot+MySql
27	Online Student Management portal	React+Springboot+MySql
28	Resturant management System	React+Springboot+MySql
29	Solar Management Project	React+Springboot+MySql
30	OneStepService LinkLabourContractor	React+Springboot+MySql
31	Vehical Service Center Portal	React+Springboot+MySql
32	E-wallet Banking Project	React+Springboot+MySql
33	Blogg Application Project	React+Springboot+MySql
34	Car Parking booking Project	React+Springboot+MySql
35	OLA Cab Booking Portal	React+NextJs+Springboot+MySql
36	Society management Portal	React+Springboot+MySql
37	E-College Portal	React+Springboot+MySql
38	FoodWaste Management Donate System	React+Springboot+MySql
39	Sports Ground Booking	React+Springboot+MySql
40	BloodBank mangement System	React+Springboot+MySql

41	Bus Tickit Booking Project	React+Springboot+MySql
42	Fruite Delivery Project	React+Springboot+MySql
43	Woodworks Bed Shop	React+Springboot+MySql
44	Online Dairy Product sell Project	React+Springboot+MySql
45	Online E-Pharma medicine sell Project	React+Springboot+MySql
46	FarmerMarketplace Web Project	React+Springboot+MySql
47	Online Cloth Store Project	React+Springboot+MySql
48	Train Ticket Booking Project	React+Springboot+MySql
49	Quizz Application Project	JSP+Springboot+MySql
50	Hotel Room Booking Project	React+Springboot+MySql
51	Online Crime Reporting Portal Project	React+Springboot+MySql
52	Online Child Adoption Portal Project	React+Springboot+MySql
53	online Pizza Delivery System Project	React+Springboot+MySql
54	Online Social Complaint Portal Project	React+Springboot+MySql
55	Electric Vehical management system Project	React+Springboot+MySql
56	Online mess / Tiffin management System Project	React+Springboot+MySql
57		React+Springboot+MySql
58		React+Springboot+MySql
59		React+Springboot+MySql
60		React+Springboot+MySql

Spring Boot + React JS + MySQL Project List

Sr.No	Project Name	YouTube Link
1	Online E-Learning Hub Platform Project	https://youtu.be/KMjyBaWmgzg?si=YckHuNzs7eC84-IW
2	PG Mate / Room sharing/Flat sharing	https://youtu.be/4P9clHg3wvk?si=4uEsi0962CG6Xodp
3	Tour and Travel System Project Version 1.0	https://youtu.be/-UHOBywHaP8?si=KHHfE_A0uv725f12
4	Marriage Hall Booking	https://youtu.be/VXz0kZQi5to?si=llOS-QG3TpAFP5k7
5	Ecommerce Shopping project	https://youtu.be/vJ_C6LkhrZ0?si=YhcBylSErvdn7paq
6	Bike Rental System Project	https://youtu.be/FIzsAmIBCbk?si=7ujQTJqEgkQ8ju2H
7	Multi-Restaurant management system	https://youtu.be/pvV-pM2Jf3s?si=PgvnT-yFc8ktrDxB
8	Hospital management system Project	https://youtu.be/IynIouBZvY4?si=CXzQs3BsRkjKhZCw
9	Municipal Corporation system Project	https://youtu.be/cVMx9NVyI4I?si=qX0oQt-GT-LR_5jF
10	Tour and Travel System Project version 2.0	https://youtu.be/_4u0mB9mHXE?si=gDiAhKBowi2gNUKZ

Sr.No	Project Name	YouTube Link
11	Tour and Travel System Project version 3.0	https://youtu.be/Dm7nOdpasWg?si=P_Lh2gcOFhlyudug
12	Gym Management system Project	https://youtu.be/J8_7Zrkg7ag?si=LcxV51ynfUB7OptX
13	Online Driving License system Project	https://youtu.be/3yRzsMs8TLE?si=JRI_z4FDx4Gmt7fn
14	Online Flight Booking system Project	https://youtu.be/m755rOwdk8U?si=HURvAY2VnizIyJlh
15	Employee management system project	https://youtu.be/lD1iE3W_GRw?si=Y_jv1xV_BljhrD0H
16	Online student school or college portal	https://youtu.be/4A25aEKfei0?si=RoVgZtxMk9TPdQvD
17	Online movie booking system project	https://youtu.be/Lfjv_U74SC4?si=fiDvrhhrjb4KSlSm
18	Online Pizza Delivery system project	https://youtu.be/Tp3izreZ458?si=8eWAOzA8SVdNwlyM
19	Online Crime Reporting system Project	https://youtu.be/0UlzReSk9tQ?si=6vN0e70TVY1GOwPO
20	Online Children Adoption Project	https://youtu.be/3T5HC2HKyT4?si=bntP78niYH802I7N

MCQ's on MongoDB

Multiple-choice questions about MongoDB, along with explanations for each answer:

1. Which of the following statements is true about MongoDB?

a) MongoDB is a relational database management system (RDBMS).

b) MongoDB stores data in tables with predefined schemas.

c) MongoDB uses a document-oriented data model.

d) MongoDB supports only SQL queries.

Ans: c) MongoDB uses a document-oriented data model

Explanation:

A flexible, JSON-like document type called BSON (Binary JSON) is used by MongoDB to store data instead of standard RDBMS rigid documents. Data models may be more dynamic and scalable since it does not require a predetermined structure. The MongoDB Query Language (MQL), a separate question language from SQL, is utilized by MongoDB.

2. Which of the following is not a characteristic of MongoDB?

a) High scalability

b) High availability

c) Strong ACID transactions

d) Horizontal sharding

Ans: c) Strong ACID transactions

Explanation:

At the document level, MongoDB offers the ACID (Atomicity, Consistency, Isolation, and Durability) guarantees, however it does not enable the common multi-document ACID transactions spanning different documents or collections. High scalability, high availability via replica sets, and horizontal sharding for spreading data across different servers are the main objectives of MongoDB.

3. What is a replica set in MongoDB?

a) A group of databases sharing the same data

b) A collection of related documents

c) A set of tables in a database

d) A cluster of MongoDB servers working together

Ans: d) A cluster of MongoDB servers working together

Explanation:

A group of MongoDB servers that cooperate to offer high availability and data redundancy is called a replica set in this database system. There are several secondary nodes that duplicate data from the primary node, and there is a primary node that takes write operations. A secondary automatically takes over as the main in the event of the primary failing, ensuring that the data is continuously available.

4. Which of the following indexes is supported by MongoDB?

a) B-tree index

b) Hash index

c) Bitmap index

d) All of the above

Ans: d) All of the above

Explanation:

B-tree, hash, and bitmap indexes are just a few of the several index types that MongoDB offers. The most popular indexes in MongoDB, or B-tree indexes, are useful for range queries since they offer high performance. While bitmap indexes work well for low-cardinality fields with a wide variety of different values, hash indexes are best for precise match queries.

5. What is the purpose of sharding in MongoDB?

a) Sharding improves data consistency.

b) Sharding allows data to be stored in multiple databases.

c) Sharding increases the fault tolerance of the database.

d) Sharding improves query performance and data scalability.

Ans:d) Sharding improves query performance and data scalability

Explanation:

When a MongoDB cluster has numerous servers or shards, the practise of sharding is used to distribute data across them. By dividing the data into smaller, distributable units known as "shards," MongoDB is able to grow horizontally. Through the parallelization of examine and write operations over several shards, sharding will increase query performance and will increase information scalability with the aid of bearing in mind the storage of larger records units than a single server can control.

6. Which of the following is true about MongoDB's data model?

a) It enforces a rigid schema.

b) It supports complex and nested data structures.

c) It requires predefined relationships between collections.

d) It only allows single-valued fields.

Ans: b) It supports complex and nested data structures

Explanation:

The storing of documents that can include nested arrays and sub-documents is supported by the data model of MongoDB. MongoDB is well-suited for storing a variety of data kinds and relationships because of its versatility, which allows for the representation of sophisticated data structures like embedded documents and arrays within documents.

7. What is MongoDB Compass?

a) A command-line interface for MongoDB.

b) A data visualization and exploration tool.

c) A programming language for querying MongoDB.

d) An indexing strategy for optimizing query performance.

Ans: b) A data visualization and exploration tool

Explanation:

A graphical user interface (GUI) tool offered by MongoDB is called MongoDB Compass. Users may query documents, inspect data schemas, interact graphically with MongoDB data, and assess query performance using this tool. It provides database administrators and developers with a user-friendly interface to interact with MongoDB.

8. How does MongoDB handle data durability?

a) By automatically creating backups of the database.

b) By synchronously replicating data to multiple servers.

c) By compressing data before storing it.

d) By encrypting data at rest.

Ans: b) By synchronously replicating data to multiple servers

Explanation:

Replication is how MongoDB ensures data persistence. A replica set ensures that several copies of the data are kept in various places by automatically replicating the data to other servers. MongoDB offers durability even in the case of a server failure by synchronously committing data writes to the main and its replicas.

9. Which of the following is true about MongoDB indexes?

a) Indexes can only be created on primary key fields.

b) Indexes are automatically created for all fields in a collection.

c) Indexes improve query performance by facilitating efficient data retrieval.

d) Indexes cannot be used in aggregation queries.

Ans: c) Indexes improve query performance by facilitating efficient data retrieval

Explanation:

By offering a direct route to the needed data, indexes in MongoDB enable quicker query execution. They are not restricted to main key fields and may be generated on any field in a collection or on a combination of fields. Despite the fact that indexes may greatly improve query speed, they should be properly selected and created based on the unique queries and workload patterns.

10. What is a capped collection in MongoDB?

a) A collection that enforces a maximum size limit.

b) A collection that supports nested documents.

c) A collection that automatically compresses stored data.

d) A collection that allows multiple primary keys.

Ans: a) A collection that enforces a maximum size limit

Explanation:

In MongoDB, a fixed-size collection with automated insertion order maintenance is known as a capped collection. Similar to a circular buffer, when the limit capacity is reached, older documents are immediately deleted to make room for new ones. The sequence of documents and a fixed-size data set are critical in situations where capped collections are helpful, such as log collections.

11. What is the purpose of the "find" command in MongoDB?

a) To create a new document in a collection.

b) To update an existing document in a collection.

c) To retrieve documents that match specified criteria.

d) To delete documents from a collection.

Ans: c) To retrieve documents that match specified criteria

Explanation:

Using the "find" command in MongoDB, you may search a collection and get documents that meet specific criteria. Users can get a subset of documents that meet the stated criteria by setting filters and conditions in the "find" command. This can be done by using complicated searches that employ operators like $gt (greater than) or $in (in array), or by matching values in certain fields.

12. How does MongoDB handle horizontal scaling?

a) By sharding data across multiple servers.

b) By vertically scaling the hardware resources of a single server.

c) By compressing data to reduce storage requirements.

d) By partitioning data within a single server.

Ans: a) By sharding data across multiple servers.

Explanation:

The process by which MongoDB achieves horizontal scalability, commonly referred to as "scaling out," is by distributing data throughout several servers, or "shards." The database can manage enormous data sets and high

traffic levels by using the computational capacity of several servers. Each shard stores a fraction of the data, and MongoDB sends queries to the relevant shards.

13. What is the purpose of the "aggregation pipeline" in MongoDB?

a) To perform complex data analysis using SQL queries.

b) To combine multiple collections into a single view.

c) To define advanced indexes for query optimization.

d) To process and transform data using a sequence of stages.

Ans: d) To process and transform data using a sequence of stages

Explanation:

Advanced data processing and analysis are possible because to MongoDB's aggregation pipeline. It is made up of several pipeline stages, each of which applies a particular action to the data, such as filtering, grouping, sorting, and computing aggregate values. The development of sophisticated data conversions and calculations is made possible by the aggregation pipeline, which is versatile and effective.

14. What is the purpose of the "upsert" operation in MongoDB?

a) To update an existing document in a collection.

b) To insert a new document into a collection.

c) To query multiple collections simultaneously.

d) To perform atomic transactions on multiple documents.

Ans: b) To insert a new document into a collection

Explanation:

In MongoDB, the "upsert" movement combines the capabilities of an replace and an insert operation. If a report already exists that fits the given criteria, it's far updated with the brand new facts. If no matching documents are determined, a new report with the provided data is introduced to the gathering.The logic for inserting or modifying documents in response to a condition is made simpler by the "upsert" procedure.

15. What is the role of a primary key in MongoDB?

a) It ensures uniqueness of field values within a collection.

b) It defines the order of documents in a collection.

c) It establishes relationships between collections.

d) It indexes the most frequently accessed fields.

Ans: a) It ensures uniqueness of field values within a collection

Explanation:

A field, or set of fields, known as a primary key in MongoDB serves to identify each document in a collection in a special way. In addition to requiring uniqueness, it serves as a guide for speedy document retrieval. Although a primary key might affect the actual storage order of documents, it does not by default specify any particular order and does not create connections across collections.

16. Which of the following is true about MongoDB transactions?

a) Transactions are only supported in replica set deployments.

b) Transactions allow for multi-document ACID operations.

c) Transactions are only available in the Enterprise Edition of MongoDB.

d) Transactions are not supported in sharded environments.

Ans:b) Transactions allow for multi-document ACID operations

Explanation:

Multiple operations can be combined into a single atomic transaction with the help of MongoDB's multi-document ACID transactions feature. To ensure that all changes are committed simultaneously or undone in the event of an operation failure, transactions provide the ACID guarantees (Atomicity, Consistency, Isolation, Durability) within the

transaction boundary. The Enterprise Edition is not required to use transactions; they are available in both replica set and sharded deployments.

17. How does MongoDB handle high availability?

a) By creating automatic backups of the database.

b) By automatically compressing stored data to reduce storage requirements.

c) By maintaining multiple copies of data through replication.

d) By leveraging advanced caching mechanisms.

Ans: c) By maintaining multiple copies of data through replication

Explanation:

Through the use of replica sets, MongoDB provides high availability. The configuration of numerous MongoDB servers to store duplicates of the same data is known as a replica set. One of the backup servers will immediately take over as the primary server in the event of a primary server failure, guaranteeing that the data is continuously available. Replication offers fault tolerance and permits automated failover in the case of a server failure.

18. What is the purpose of the "text index" in MongoDB?

a) To perform full-text search on textual data.

b) To enforce uniqueness of field values within a collection.

c) To define a field as the primary key of a collection.

d) To optimize query performance on frequently accessed fields.

Ans: a) To perform full-text search on textual data

Explanation:

The capability of full-text search on textual fields in MongoDB is provided via a text index. With the use of text-based queries and operators like $text and $search, it enables effective searching for words and phrases inside text material. In order to deliver results that are ranked by relevance based on the inputted search words, text indexes require a specialised text search algorithm.

19. How does MongoDB handle data consistency in a distributed environment?

a) By locking documents during write operations.

b) By synchronizing clocks across all servers.

c) By using the Two-Phase Commit protocol.

d) By providing eventual consistency through replication.

Ans:d) By providing eventual consistency through replication

Explanation:

In a distributed context, MongoDB by default offers eventual consistency. MongoDB asynchronously replicates writes that happen on separate replicas across servers when they happen, allowing for a slight delay in the propagation of data. Even while eventual consistency guarantees great performance and availability, it does not offer instantaneous consistency among replicates at the time of writing.

20. What is a change stream in MongoDB?

a) A log of all performed CRUD operations on a collection.

b) A mechanism for compressing stored data.

c) A way to encrypt data at rest.

d) A real-time stream of changes to a collection.

Ans:d) A real-time stream of changes to a collection

Explanation:

Applications may keep an eye out for changes in a collection in real time by using MongoDB's change streams. They give programmes a mechanism to monitor changes as they happen and respond to inserts, updates, and deletes in

almost real-time. Change streams are useful for a variety of things, including real-time alerting, data synchronisation, and starting subsequent operations.

21. How does MongoDB handle data partitioning in sharded environments?

a) By automatically splitting collections into smaller partitions.

b) By distributing documents across multiple shards based on a shard key.

c) By storing partitions on separate servers.

d) By compressing partitions to reduce storage requirements.

Ans:b) By distributing documents across multiple shards based on a shard key

Explanation:

The distribution of documents among various shards in a sharded environment is determined by MongoDB using a shard key. A field or group of fields called the "shard key" controls which shards get data and how it is routed to them. MongoDB guarantees that similar data is stored together by splitting the data depending on the shard key, allowing for scalability and effective query execution.

22. What is the role of the MongoDB WiredTiger storage engine?

a) To handle data replication in a MongoDB cluster.

b) To optimize query performance through caching mechanisms.

c) To compress data to reduce storage requirements.

d) To manage the storage and retrieval of data on disk.

Ans: d) To manage the storage and retrieval of data on disk

Explanation:

Since version 3.2, the WiredTiger storage engine has been MongoDB's default storage engine. It is in charge of controlling disc operations for data storage and retrieval. Concurrency control, compression, and support for multi-version concurrency control (MVCC) are some of the features offered by WiredTiger, which improve the speed and effectiveness of data operations in MongoDB.

23. What is the purpose of the MongoDB GridFS?

a) To store and retrieve large files and binary data.

b) To horizontally partition data across multiple servers.

c) To provide high availability through data replication.

d) To optimize query performance for frequently accessed fields.

Ans: a) To store and retrieve large files and binary data

Explanation:

The MongoDB GridFS standard and toolkit are used to store and retrieve files and binary data that are larger than the 16 MB BSON document size limit. Large files are divided up into smaller bits and stored separately by GridFS, which also associates them with information. Applications can manage file storage and streaming with ease since it makes it possible for huge files to be stored and retrieved efficiently within MongoDB.

24. How does MongoDB handle data privacy and security?

a) By encrypting data at rest and in transit.

b) By automatically anonymizing sensitive fields.

c) By providing access control through user authentication and authorization.

d) By compressing data to reduce storage requirements.

Ans: a) By encrypting data at rest and in transit

Explanation:

There are security and privacy options available in MongoDB. It supports encryption at rest, a method of safeguarding data on disc against unauthorised access in the event that the storage medium is compromised. The data transmission between MongoDB clients and servers over networks is protected by encryption in transit, which is

supported by MongoDB. The ability to limit access to databases and collections is also provided by MongoDB through the use of user authentication and permission.

25. What is the purpose of an aggregation index in MongoDB?

a) To enforce uniqueness of field values within a collection.

b) To optimize query performance for frequently executed aggregations.

c) To horizontally partition data across multiple servers.

d) To compress data to reduce storage requirements.

Ans: b) To optimize query performance for frequently executed aggregations

Explanation:

In MongoDB, an index called an aggregation index is created expressly to speed up aggregation queries that are regularly done. Grouping, sorting, and filtering procedures perform better thanks to the creation of aggregate indices on fields that are often used in aggregation pipelines. MongoDB is able to quickly retrieve and process the data needed for aggregation queries by indexing the columns that are important for aggregations.

Oracle MCQ Questions

Oracle MCQ Questions

1. **Which statement should be used to remove a table from the database permanently?**

a) DELETE

b) TRUNCATE

c) DROP

d) REMOVE

Correct Answer: c) DROP

Explanation: Using the DROP statement, a table can be permanently deleted from the database, as explained. The table structure, together with all related data and indexes, are deleted. Use cautious when using the DROP statement because after it has been executed, it cannot be undone.

2. **What function does an index serve in Oracle Database?**

a) To enforce data integrity constraints

b) To store backup copies of data

c) To improve query performance

d) To manage user privileges

Correct Answer: c) To improve query performance

Explanation: In the Oracle Database, an index is a type of data structure that improves the efficiency of operations like SELECT queries by providing quicker access to data.

3. **Which command is used to grant privileges to a user in Oracle Database?**

a) GRANT

b) ALLOW

c) ACCESS

d) AUTHORIZE

Correct Answer: a) GRANT

Explanation: In Oracle Database, the provide command is used to provide permissions to users or roles. It enables database administrators to provide particular users or roles access to different privileges, including SELECT, INSERT, UPDATE, DELETE, and others.

4. **What is the purpose of a transaction in Oracle Database?**

a) To store data in temporary memory

b) To optimize query execution

c) To manage concurrent access to data

d) To generate database backups

Correct Answer: c) To manage concurrent access to data

Explanation: A transaction in the Oracle Database is a logical work unit made up of one or more SQL statements. A transaction's main goal is to manage concurrent access to data while ensuring data consistency and integrity. It controls simultaneous access by many users or processes using mechanisms like locking and transaction isolation to avoid data inconsistencies and conflicts.

5. **What is the purpose of the COMMIT statement in Oracle Database?**

a) To retrieve data from the database

b) To rollback changes made within a transaction

c) To permanently save changes made within a transaction

d) To generate database statistics

Correct Answer: c) To permanently save changes made within a transaction

Explanation: The COMMIT statement is used in Oracle Database to permanently preserve the changes made during a transaction to the database. It marks the conclusion of a transaction and makes certain that the modifications are made permanent and are accessible to other users. When a COMMIT statement is used, the modifications are made to the database permanently and cannot be undone.

6. **Which command is used to create a new table in Oracle Database?**

a) ALTER TABLE

b) ADD TABLE

c) CREATE TABLE

d) INSERT TABLE

Answer: c) CREATE TABLE

Explanation: In Oracle, we use the CREATE TABLE command to create a new table in the database. Basically, using the CREATE TABLE command we are creating a storage space in the Oracle Database to organize our data in a structured manner.

7. **What is the use of the WHERE clause in an SQL statement?**

a) To specify the columns to be retrieved

b) To filter rows based on a condition

c) To sort the result set in a specific order

c) To join multiple tables together

Answer: b) To filter rows based on a condition

Explanation: The WHERE clause in a SQL statement is used to filter and get particular entries from a table depending on specific criteria. It works much like a filter or a search query to help you focus your search and only retrieve the material that matches certain requirements.

8. **Which of the following programming language is commonly used for querying and data manipulation in Oracle?**

a) Java

b) Python

c) SQL

c) C++

Correct Answer: c) SQL

Explanation: Oracle's primary language for data querying and manipulation is SQL (Structured Query Language).

9. **What is the purpose of an index in Oracle?**

a) To encrypt sensitive data

b) To improve data security

c) To optimize query performance

d) To enforce data integrity

Correct Answer: c) To optimize query performance

Explanation: An index is a database item in Oracle that boosts the speed of data retrieval operations. It establishes a data structure that enables quicker data searching and sorting according to particular columns. Oracle can effectively locate the needed data, leading to quicker query execution, by building an index on frequently searched columns.

10. **Which of the following is a valid constraint in Oracle?**

a) CHECK

b) SELECT

c) DELETE

d) UPDATE

Correct Answer: a) CHECK

Explanation: The CHECK constraint is a valid constraint in Oracle and it is used to specify a condition that must be satisfied by each row in a table. It ensures that the values stored in a column meet certain criteria defined by the condition.

11. **Which SQL statement is used to retrieve data from multiple tables in Oracle?**

a) SELECT

B) JOIN

C) MERGE

D) UNION

Correct Answer: b) JOIN

Explanation: JOIN: Data from various Oracle tables can be retrieved using the JOIN statement. Based on a shared column between two or more tables, it enables you to mix rows from those tables.

12. **Which SQL command is used to add a new column to an existing table in Oracle?**

a) ALTER TABLE

b) CREATE TABLE

c) UPDATE TABLE

d) INSERT INTO

Correct Answer: a) ALTER TABLE

Explanation: Altering the structure of an existing table in Oracle is done using the ALTER TABLE command.

13. **Which of the following is NOT a valid data type in Oracle?**

a) VARCHAR2

b) FLOAT

c) BOOLEAN

d) DATE

Correct Answer: c) BOOLEAN

Explanation: You can efficiently manage Boolean logic and conditions in your Oracle database by using these alternative data types.

14. In Oracle, which function is used to find the number of characters in a string?

a) LENGTH

b) COUNT

c) SIZE

d) SUM

Correct Answer: a) LENGTH

Explanation: Oracle's LENGTH function can be used to count the characters in a string. It determines the length of the entered string and returns that value. The LENGTH function, for instance, will return 5, denoting the number of characters in the string "Hello," as an example. When manipulating strings, such as when determining the length of input data, confirming input size restrictions, or removing substrings based on a predetermined length, the LENGTH function is especially helpful. You may effectively manage string operations and make sure that string data is handled correctly in Oracle by using the LENGTH function.

15. **Which statement is true about Oracle Advanced Queuing (AQ)?**

a) AQ is a database feature that enables asynchronous messaging between applications.

b) AQ is a feature that allows real-time data replication between multiple databases.

c) AQ is a mechanism for optimizing query performance in Oracle databases.

d) AQ is a tool for managing user privileges and access control in Oracle databases.

Explanation: Oracle Advanced Queuing (AQ) is a potent feature in Oracle databases that enables asynchronous message queue communication between applications. It offers scalable and dependable messaging features, making it the perfect choice for developing distributed systems. Applications can ensure message delivery and enable fault tolerance by sending messages to a queue with AQ and retrieving them later.Option b) is erroneous since Oracle GoldenGate or Oracle Data Guard, not AQ, are commonly used to enable real-time data replication. Option c) is erroneous since AQ, which is centred on message queuing and communication, has nothing to do with query optimisation. Option d) is wrong because Oracle's security features, such as roles and privileges, manage user privileges and access control.

16. **Which Oracle feature provides a high availability solution for maintaining database uptime and minimizing downtime during planned or unplanned outages?**

a) Oracle Real Application Clusters (RAC)

b) Oracle Advanced Security

c) Oracle Enterprise Manager

d) Oracle Data Guard

Answer: d) Oracle Data Guard

Explanation: The feature Oracle Data Guard offers high availability and disaster recovery options for Oracle databases. In case of scheduled or accidental outages, it permits the development of one or more standby databases that can be utilised as backups. In order to reduce downtime and guarantee continuous availability, Data Guard keeps synchronised backups of the primary database and switches to a standby database automatically in the case of a breakdown.

17. Which Oracle feature allows you to partition a table or index across multiple storage devices for improved performance and manageability?

a) Oracle Exadata

b) Oracle Advanced Compression

c) Oracle Partitioning

d) Oracle Real Application Testing

Answer: c) Oracle Partitioning

Explanation: Oracle You can divide a table or index into partitions, which are more manageable, using the capability of partitioning. There are various advantages to storing each partition on a distinct storage device or tablespace. By enabling the database to scan just relevant partitions and minimising I/O operations, partitioning enhances query performance. By facilitating simple data maintenance and cleansing actions on particular partitions, it also makes data administration simpler.

18. Which Oracle feature allows you to capture, store, and replay database workloads for testing, tuning, and diagnosis purposes?

a) Oracle Flashback

b) Oracle Real Application Testing

c) Oracle Advanced Security

d) Oracle Data Guard

Answer: b) Oracle Real Application Testing

Explanation: The technology known as Oracle Real Application Testing makes it possible to record, save, and replay actual database workloads. It enables you to capture, save, and replay SQL statements and other database actions in a controlled setting. The impact of database modifications may be tested, system performance can be tuned, and problems that happened in a production environment can be identified thanks to this capability.Option a) is wrong

since Oracle Flashback is not especially geared towards capturing and replaying workloads; instead, it allows users to restore databases to a previous state or access historical data.

19. Which Oracle feature provides a centralized and secure repository for storing and managing sensitive data, such as credit card numbers and social security numbers?

a) Oracle Advanced Security

b) Oracle Data Masking and Subsetting

c) Oracle Advanced Compression

d) Oracle Advanced Queuing

Correct Answer: b) Oracle Data Masking and Subsetting

Explanation: Oracle Data hiding and Subsetting is a function that aids businesses in protecting sensitive data by hiding it in testing and development environments while retaining its realism.

20. Which Oracle feature allows you to automate the creation and management of database backups, providing a reliable and efficient backup and recovery solution?

a) Oracle Recovery Manager (RMAN)

b) Oracle GoldenGate

c) Oracle Real Application Clusters (RAC)

d) Oracle Partitioning

Correct Answer: a) Oracle Recovery Manager (RMAN)

Explanation: The Oracle Recovery Manager (RMAN) programme offers a dependable and effective method for data protection by automating and managing Oracle database backup and recovery procedures.

21. Which of the following statements is true about a PRIMARY KEY constraint in Oracle?

a) It allows NULL values in the columns it is applied to.

b) It can be applied to multiple columns within a table.

c) It can be added to a column that already has a UNIQUE constraint.

d) It is automatically created when a table is defined without specifying any constraints.

Answer: b) It can be applied to multiple columns within a table.

Explanation: A PRIMARY KEY constraint in Oracle is used to specifically identify each entry in a table. It upholds non-nullability and uniqueness. A PRIMARY KEY constraint, as opposed to a UNIQUE constraint, can be used on many columns to create a composite primary key. This means that each row in the table must have a different combination of values in the designated columns.

22. Which of the following statements regarding Oracle sequences is true?

a) Sequences are used to store and retrieve large binary objects (BLOBs).

b) Sequences guarantee uniqueness and order of generated values.

c) Sequences are limited to generating only numeric values.

d) Sequences are defined at the column level within a table.

Answer: b) Sequences guarantee uniqueness and order of generated values.

Explanation: Oracle uses sequences to provide distinct and organized numeric numbers, as explained. They are frequently used to fill up columns that need unique values, such as main key columns. Sequences can also be used with other forms of data, such as dates, and are not just confined to producing numerical numbers. However, their main objective is to offer a trustworthy source of distinct and chronologically ordered values.

23. Which of the following statements regarding Oracle triggers is true?

a) Triggers can only be defined for DML (Data Manipulation Language) statements.

b) Triggers are automatically fired after every SELECT statement executed on a table.

c) Triggers can be defined to execute either before or after a specified DML event.

d) Triggers cannot be used to enforce data integrity constraints.

Answer: c) Triggers can be defined to execute either before or after a specified DML event.

Explanation: Oracle triggers are stored programs that run automatically when certain DML events, such INSERT, UPDATE, or DELETE statements, occur. Triggers can be programmed to run either ahead of or following the specified event. They are frequently employed to carry out data validation, enforce business rules, or start additional operations in response to database changes.

24. Which of the following statements is true regarding Oracle's READ COMMITTED isolation level?

a) READ COMMITTED ensures that all changes made by a transaction are visible to other transactions immediately.

b) READ COMMITTED allows dirty reads, meaning a transaction can read uncommitted data from other transactions.

c) READ COMMITTED guarantees serializability by locking the entire database during a transaction.

c) READ COMMITTED is the highest level of isolation in Oracle, providing the strongest data consistency.

Answer: B) READ COMMITTED allows dirty reads, meaning a transaction can read uncommitted data from other transactions.

Explanation: Just committed data from other transactions may be read by a transaction using Oracle's READ COMMITTED isolation level. However, it permits dirty reads, which let a transaction read data that hasn't yet been committed but has been updated by another transaction. This level of isolation offers a compromise between concurrency and data consistency.

https://www.youtube.com/@codewitharrays

https://www.instagram.com/codewitharrays/

https://t.me/codewitharrays Group Link: https://t.me/ccee2025notes

+91 8007592194 +91 9284926333

codewitharrays@gmail.com

https://codewitharrays.in/project