**Exam instruction:**

**Please submit both MCQ and the query in own git hub repository and shared with me as collaborator.**

**\*\* Submitting on my created repository ‘Java1010\_Batch\_notes’ will not be considered and rejected.**

**SQL MCQ QUESTION (Duration: 20 min)**

1. **Which of the following is not a DDL command?**
2. TRUNCATE
3. ALTER
4. CREATE
5. UPDATE

Answer: D

1. **Which statement is used to delete all rows in a table without having the action logged?**
2. DELETE
3. REMOVE
4. DROP
5. TRUNCATE

Answer: D

1. **How many Primary keys can have in a table?**
2. 2
3. 1
4. Depends on no of Columns
5. Depends on DBA

Answer: B

1. **Which of the following is not a valid aggregate function?**
2. COUNT
3. COMPUTE
4. SUM
5. MAX

Answer: B

1. **Which of the following statement is true?**
2. TRUNCATE free the table space while DELETE does not.
3. Both TRUNCATE and DELETE statements free the table's space.
4. Both TRUNCATE and DELETE statement does not free the table's space.
5. DELETE free the table space while TRUNCATE does not.

Answer: A

1. **\_\_\_\_\_\_\_\_\_ command makes the updates performed by the transaction permanent in the database.**
2. ROLLBACK
3. COMMIT
4. TRUNCATE
5. DELETE

Answer: B

1. **How can you change "Thomas" into "Michel" in the "LastName" column in the Users table?**
2. UPDATE User SET LastName = 'Thomas' INTO LastName = 'Michel'
3. MODIFY Users SET LastName = 'Michel' WHERE LastName = 'Thomas'
4. MODIFY Users SET LastName = 'Thomas' INTO LastName = 'Michel'
5. UPDATE Users SET LastName = 'Michel' WHERE LastName = 'Thomas'

Answer: D

1. **Which command is used to change the definition of a table in SQL?**
2. CREATE
3. UPDATE
4. ALTER
5. SELECT

Answer: C

1. **Which of the following are the DATETIME data types that can be used in column definitions?**
2. TIMESTAMP
3. INTERVAL MONTH TO DAY
4. INTERVAL YEAR TO MONTH
5. TIMESTAMP WITH DATABASE TIMEZONE

Answer: A

1. **What does the following code snippet do?**

|  |
| --- |
| **ALTER TABLE STUDENT ADD(ADDRESS VARCHAR2(20));** |

1. Add a column call ADDRESS in the table student
2. Check if a column called ADDRESS is present in the table student.
3. Invalid Syntax
4. None of the Above

Answer: A

1. **Which of the following commands is used to delete all rows and free up space from a table?**
2. TRUNCATE
3. DROP
4. DELETE
5. ALTER

Answer: A

1. **What does the following code snippet do?**

|  |
| --- |
| **DELETE** **FROM** STUDENTS  **WHERE** AGE = 16;  **ROLLBACK**; |

1. Perform an undo operation on the delete Operation
2. Delete Rows from the table where AGE = 16
3. Delete the entire tables
4. None of the above

Answer: A

1. **Which SQL constraint do we use to set some value to a field whose value has not been added explicitly?**
2. UNQUE
3. DEFAULT
4. CHECK
5. NOT NULL

Answer: B

1. **Which of the following is not a SQL command?**
2. DELETE
3. ORDER BY
4. SELECT
5. WHERE

Answer: D

1. **Which of the following are valid logical operators in SQL?**
2. SOME
3. ALL
4. AND
5. ALL OF THE ABOVE

Answer: D

1. **Primary key can be?**
2. NULL
3. NOT NULL
4. Both NULL and NOT NULL
5. Depends on the Situation

Answer: B

1. **Which is the AS clause used for?**
2. Rename
3. Selection
4. Join
5. Projection

Answer: A

1. **You can remove a row using SQL in a database with which of the following?**
2. REMOVE FROM CUSTOMER ...
3. DROP FROM CUSTOMER ...
4. DELETE FROM CUSTOMER WHERE ...
5. UPDATE FROM CUSTOMER ...

Answer: C

1. **The SQL WHERE clause:**
2. limits the column data that are returned.
3. limits the row data are returned.
4. Both A and B are correct.
5. Neither A nor B are correct.

Answer: A

1. **Which of the following is the correct order of keywords for SQL SELECT statements?**
2. SELECT, FROM, WHERE
3. FROM, WHERE SELECT
4. WHERE, FROM,SELECT
5. SELECT, WHERE,FROM

Answer: A

**Write SQL Queries (Duration 40 min):**

1. Create a new Schema and keep the schema for all the sql exam**.**

Name of the schema would be **‘zorba\_sql\_exam’.** Make sure this schema will only be used for this table creation purpose

1. Create 2 tables: Write Create and insert statement for below tableswith primary key and foreign key syntax.

**Department:** column as **(dept\_id(PK), dept\_name, dept\_location)**

**Employees :** column as **(emp\_id(PK) , emp\_name, job\_name, manager\_id, hire\_date, salary, commission, dept\_id(FK))**

Sample data below

**Department:**

**-----------**

**dep\_id | dep\_name | dep\_location**

**--------+------------+--------------**

1001 | FINANCE | SYDNEY

2001 | AUDIT | MELBOURNE

3001 | MARKETING | PERTH

4001 | PRODUCTION | BRISBANE

**Employees:**

**----------**

**emp\_id | emp\_name | job\_name | hire\_date | salary | dep\_id**

**--------+----------+-----------+------------+------------+---------**

68319 | KAYLING | PRESIDENT | 1991-11-18 | 6000.00 | 1001

66928 | BLAZE | MANAGER | 1991-05-01 | 2750.00 | 3001

67832 | CLARE | MANAGER | 1991-06-09 | 2550.00 | 1001

65646 | JONAS | MANAGER | 1991-04-02 | 2957.00 | 2001

67858 | SCARLET | ANALYST | 1997-04-19 | 3100.00 |2001

1. Add Not null constraints on dep\_name and job\_name column.

Answer:

**alter table department alter column dep\_name smallint not null;**

**alter table employees alter column job\_name smallint not null;**

1. Add Check constraints on dept\_location as location can’t be other than **‘SYDNEY’, ‘MELBOURNE’, ‘PERTH’, ‘BRISBANE’.**

**Answer:**

**Alter table department add dept\_location varchar null constraint chk\_department**

**Check (dept\_location = SYDNET, MELBOURNE, PERTH, BRISBANE)**

1. Fetch employee information of those whose name contains ‘LA’ in any position.

Answer:

**Select \* from employee where emp\_name like’%LA%’;**

1. Fetch employee information and average salary based on department id and average salary more than 2000.

Answer:

Select \* from employee

1. Fetch employee information whose hire date after 1991-05-03 and sum of the salary based on department id.
2. Fetch employee details of whom job name is Manager, hire date before 1st May, 1991 and salary is more than 2800.