**Objective Type Question Paper on MySQL Data Analytics**

**Time:** 60 Minutes  
**Maximum Marks:** 35

**Section A: Multiple Choice Questions (MCQs) (1 Mark each)**

1. Which SQL clause is used to filter the results of a query? a) WHERE  
   b) FILTER  
   c) SORT  
   d) GROUP BY
2. What is the purpose of the GROUP BY clause in MySQL? a) To filter records  
   b) To group records based on a specified column  
   c) To sort records  
   d) To delete duplicate records
3. Which of the following is used to retrieve unique records from a table? a) DISTINCT  
   b) UNIQUE  
   c) DIFFERENT  
   d) SEPARATE
4. What does the HAVING clause do in a SQL query? a) Filters rows before grouping  
   b) Filters rows after grouping  
   c) Sorts records  
   d) Deletes duplicate records
5. Which MySQL function is used to find the highest value in a numeric column? a) MIN()  
   b) MAX()  
   c) AVG()  
   d) SUM()
6. What type of JOIN returns only matching records from both tables? a) INNER JOIN  
   b) LEFT JOIN  
   c) RIGHT JOIN  
   d) FULL JOIN
7. Which SQL statement is used to count the total number of records in a table? a) SUM()  
   b) COUNT()  
   c) TOTAL()  
   d) ADD()
8. What is the default sorting order of the ORDER BY clause in MySQL? a) DESC  
   b) ASC  
   c) RANDOM  
   d) NONE
9. Which keyword is used in SQL to fetch only specific rows from the top of a table? a) LIMIT  
   b) FETCH  
   c) SELECT TOP  
   d) ROWNUM
10. What will the following SQL statement return?  
    SELECT COUNT(\*) FROM employees WHERE department='IT';  
    a) The total number of employees  
    b) The number of employees in the IT department  
    c) All employee records  
    d) The sum of salaries in IT

**Section B: True/False Questions (1 Mark each)**

1. The COUNT() function can be used to count NULL values in a column. (True/False)
2. The LEFT JOIN includes all records from the left table and only matching records from the right table. (True/False)
3. The SQL alias (AS) is used to temporarily rename a table or a column in a query. (True/False)
4. The GROUP BY clause must always be used with aggregate functions. (True/False)
5. A subquery can be used inside a SELECT statement. (True/False)

**Section C: Fill in the Blanks (1 Mark each)**

1. The \_\_\_\_\_\_\_\_\_\_ function is used to find the average value of a numeric column.
2. To remove duplicate values in a SQL query, the \_\_\_\_\_\_\_\_\_\_ keyword is used.
3. The \_\_\_\_\_\_\_\_\_\_ clause is used to sort records in a particular order.
4. The \_\_\_\_\_\_\_\_\_\_ function is used to calculate the sum of all values in a column.
5. The \_\_\_\_\_\_\_\_\_\_ clause is used to filter records after an aggregation operation.

**Section D: Match the Following (1 Mark each)**

|  |  |
| --- | --- |
| **Column A** | **Column B** |
| 21. COUNT() | a) Maximum value |
| 22. AVG() | b) Returns total records |
| 23. MAX() | c) Calculates mean value |
| 24. DISTINCT | d) Retrieves unique values |
| 25. ORDER BY | e) Sorts query results |

**Section E: Short Answer Questions (2 Marks each)**

1. What is the difference between WHERE and HAVING clauses?
2. Explain the use of INNER JOIN and LEFT JOIN with an example.
3. How does indexing improve query performance in MySQL?
4. What is the purpose of the UNION operator in SQL?
5. Explain the difference between DELETE, TRUNCATE, and DROP commands.