**30 DAYS SQL MICRO COURSE ANSWER PDF**

1. **Total Number of Patients**

* Write an SQL query to find the total number of patients across all hospitals.

**Answer:-**

SELECT SUM(Patients\_Count)

FROM hospital\_data;

1. **Average Number of Doctors per Hospital**

o Retrieve the average count of doctors available in each hospital.

**Answer:-**

Select Hospital\_Name, AVG(Doctors\_Count) AS AVG\_Doctors

FROM hospital\_data

GROUP BY Hospital\_Name ;

1. **Top 3 Departments with the Highest Number of Patients**

o Find the top 3 hospital departments that have the highest number of patients.

**Answer:-**

SELECT Department , MAX(Patients\_Count) AS MAX\_Patients

FROM hospital\_data

Group by Department

ORDER BY MAX\_Patients DESC LIMIT 3;

1. **Hospital with the Maximum Medical Expenses**

o Identify the hospital that recorded the highest medical expenses.

**Answer:-**

SELECT Hospital\_Name,MAX(Medical\_Expenses) AS MAX\_Expenses

FROM hospital\_data

GROUP BY Hospital\_Name

ORDER BY MAX\_Expenses DESC LIMIT 10;

1. **Daily Average Medical Expenses**

o Calculate the average medical expenses per day for each hospital.

**Answer:-**

SELECT Hospital\_Name,AVG(Medical\_Expenses) AS AVG\_Medical\_Expenses

FROM hospital\_data

GROUP BY Hospital\_Name;

1. **Longest Hospital Stay**

o Find the patient with the longest stay by calculating the difference between Discharge Date and Admission Date.

**Answer:-**

SELECT Discharge\_Date,Admission\_Date,Department, (Discharge\_date-Admission\_Date )

AS Duration\_in\_Days

FROM hospital\_data;

1. **Total Patients Treated Per City**

* Count the total number of patients treated in each city.

**Answer:-**

SELECT Location , SUM(Patients\_Count)

FROM hospital\_data

GROUP BY Location;

1. **Average Length of Stay Per Department**

* Calculate the average number of days patients spend in each department**.**

**Answer:-**

SELECT Department,AVG(Discharge\_date - Admission\_Date) AS Duration\_in\_days

FROM hospital\_data

GROUP BY Department;

1. **Identify the Department with the Lowest Number of Patients**

* Find the department with the least number of patients.

**Answer:-**

SELECT Department,MIN(Patients\_Count) AS Least\_Patients

FROM hospital\_data

GROUP BY Department

ORDER BY Least\_Patients LIMIT 10;

1. **Monthly Medical Expenses Report**
   * + - Group the data by month and calculate the total medical expenses for each month.

**Answer:-**

SELECT FORMAT(Admission\_Date, 'MM') AS Admission\_Month,

FORMAT(Discharge\_Date, 'MM') AS Discharge\_Month,

SUM(Medical\_Expenses) AS Total\_Medical\_Expenses

FROM hospital\_data

GROUP BY FORMAT(Admission\_Date, 'MM'), FORMAT(Discharge\_Date, 'MM') ;