

**Week 5 – Functions**

**Observation (5)**

1. What are Functions? List the types.
2. Write syntax for each of the following functions as per the template provided.

<b>Aggregate &amp; Mathematical Functions</b>	<b>AVG(), COUNT(), FIRST(), LAST(), MAX(), MIN(), SUM(), ABS(), CEIL(), FLOOR(), TRUNCATE()</b>
<b>Scalar Functions</b>	<b>UCASE(), LCASE(), MID(), LEN(), ROUND(), NOW(), FORMAT(), CONCAT(), TRIM()</b>
<b>Date Functions</b>	<b>ADDDATE(), ADDTIME(), CURDATE(), CURRENT_DATE(), CURRENT_TIME(), CURRENT_TIMESTAMP(), CURTIME(), DATE(), DATEDIFF(), DATE_ADD(), DATE_FORMAT(), DATE_SUB(), DAY(), DAYNAME(), DAYOFMONTH(), DAYWEEK(), DAYOFYEAR(), EXTRACT(), FROM_DAYS(), HOUR(), LAST_DAY(), LOCALTIME(), LOCALTIMESTAMP(), MAKEDATE(), MAKETIME()</b>
<b>Date with Time Functions</b>	<b>MICROSECOND(), MINUTE(), MONTH(), MONTHNAME(), NOW(), PERIOD_ADD(), PERIOD_DIFF(), QUARTER(), SECOND(), SEC_TO_TIME(), STR_TO_DATE(), SUBDATE(), SUBTIME(), SYSDATE(), TIME(), TIME_FORMAT(), TIME_TO_SEC(), TIMEDIFF(), TIMESTAMP(), TO_DAYS(), WEEK(), WEEKDAY(), WEEKOFYEAR(), YEAR(), YEARWEEK()</b>

**Note: Follow the template given below**

Function	Purpose of the function	Syntax

**Execution (15)**

Execute all the functions listed in the observation using any one of the tables already created in the Hospital Management system Database.

## Spot (5)

Pre-Requisite Data: (This table already created in week 4 Lab)

emp_id	emp_name	job_name	manager_id	Join_date	salary	commission	dep_id
8319	KAYLING	PRESIDENT	683120	1991-11-18	6000.00		1001
66928	BLAZE	MANAGER	683120	1991-05-01	2750.00		3001
67832	CLARE	MANAGER	68319	1991-06-09	2550.00	900.00	1001
65646	SCARLET	ANALYST	65646	1997-04-19	3100.00		2001
67858	FRANK	ANALYST	65646	1991-12-03	3100.00		2001
69062	SANDRINE	CLERK	69062	1990-12-18	900.00		2001
63679	ADELYN	SALESMAN	66928	1991-02-20	1700.00	400.00	3001
64989	WADE	SALESMAN	66928	1991-02-22	1350.00	600.00	3001
65271	MADDEN	SALESMAN	66928	1991-09-28	1350.00	1500.00	3001
66564	TUCKER	SALESMAN	66928	1991-09-08	1600.00	0.00	3001
68454	ADNRES	CLERK	67858	1997-05-23	1200.00		2001
68736	JULIUS	CLERK	66928	1991-12-03	1050.00	300.00	3001
69000	MARKER	CLERK	67832	1992-01-23	1400.00		1001

Create a table "Employees" and Insert records as given in the Pre-Requisite Data

### Write a query

1. To find the total salary and its average for all the employees.
2. To list the employee name who gets highest and lowest salary.
3. To count the tuples in the Employees relation.
4. To convert all the names in emp\_name to lower case.
5. To fetch first four characters of names of the employees from the employee table.
6. To find the length of emp\_name from employee table.
7. To retrieve the name and current system time from the employee table.
8. To list the employees whose name ends with "R".
9. To return the current date.
10. To return the difference in days between two date values of empid 64989 and 63679
11. To returns the day portion of a date value from join\_date.
12. To returns the month name from join\_date.