SQL FUNCTIONS
ASSIGNMENTS

Q.1

Table : SchoolBus

Rtno	Area_overed	Capacity	Noofstudents	Distance	Transporter	Charges
1	Vasant kunj	100	120	10	Shivamtravels	100000
2	Hauz Khas	80	80	10	Anand travels	85000
3	Pitampura	60	55	30	Anand travels	60000
4	Rohini	100	90	35	Anand travels	100000
5	Yamuna Vihar	50	60	20	Bhalla Co.	55000
6	Krishna Nagar	70	80	30	Yadav Co.	80000
7	Vasundhara	100	110	20	Yadav Co.	100000
8	Paschim Vihar	40	40	20	Speed travels	55000
9	Saket	120	120	10	Speed travels	100000
10	Jank Puri	100	100	20	Kisan Tours	95000

a. Give the output of following queries based on schoolbus table:

(i) select sum(distance) from schoolbus where transporter= "Yadav travels";

(ii) select min(noofstudents) from schoolbus;

(iii) select avg(charges) from schoolbus where transporter= "Anand travels";

(iv) select distinct transporter from schoolbus;

b. Write sql query for following

(i) Display area_covered in uppercase along with distance

(ii) Display area_covered with largest length(number of characters)

(iii) Display area_covered with largest distance

(iv) Display the list of schoolbus where rightmost part of transporter is travels

(v) Display the total distance covered by 'Anand travels'

(vi)Display the transporter which charges maximum with regards to all area covered taken together.

Q.2

TABLE : GRADUATE

S.NO	NAME	STIPEND	SUBJECT	AVERAGE	DIV.
1	KARAN	400	PHYSICS	68	I
2	DIWAKAR	450	COMP. Sc.	68	I
3	DIVYA	300	CHEMISTRY	62	I
4	REKHA	350	PHYSICS	63	I
5	ARJUN	500	MATHS	70	I
6	SABINA	400	CEHMISTRY	55	II
7	JOHN	250	PHYSICS	64	I
8	ROBERT	450	MATHS	68	I
9	RUBINA	500	COMP. Sc.	62	I
10	VIKAS	400	MATHS	57	II

a. Give the output of following sql statement based on table GRADUATE:

(i) Select MIN(AVERAGE) from GRADUATE where SUBJECT= PHYSICS ;

(ii) Select SUM(STIPEND) from GRADUATE WHERE div=2;

(iii) Select AVG(STIPEND) from GRADUATE where AVERAGE>=65;

(iv) Select COUNT(distinct SUBDJECT) from GRADUATE;

b. Write sql query for following

(i) Display the name of the students in lower case

(ii) Display the average stipend of COMP.SC. subject

(iii) Display the name , stipend of student where subject is either physics or maths

(iv) Display the subject with maximum stipend

(v) Display the subject with maximum stipend(sum of stipend of all student for each subject)

3.

Table:TEACHER

No.	Name	Age	Department	Dateofadm	Salary	Sex
1	Jugal	34	Computer	10/01/97	12000	M
2	Sharmila	31	History	24/03/98	20000	F
3	Sandeep	32	Maths	12/12/96	30000	M
4	Sangeeta	35	History	01/07/99	40000	F
5	Rakesh	42	Maths	05/09/97	25000	M
6	Shyam	50	History	37/06/98	30000	M
7	Shivam	44	Computer	25/02/97	21000	M
8	Shalakha	33	Maths	31/07/97	20000	F

a. Give the output of the following SQL statements.
   i. Select COUNT(distinct department) from TEACHER;
   ii. Select MAX(Age) from TEACHER where SEX='F';
   iii. Select AVG(Salary) from TEACHER where SEX='M';
   iv. Select SUM(Salary) from TEACHER where DATOFJOIN<{12/07/96};

b. Write SQL query for following
   i.   Display the teacher name with maximum age
   ii. Display the teacher name with minimum salary
   iii. Display the department where maximum salary is being given
   iv. Display the name of the teacher where year of dateofadm is 98
   v.   Display the name of the teacher whose day of dateofadm is Monday
   vi. Display how many males and females are there in teacher table

4.

PRODUCT TABLE

PCODE	PNAME	COMPANY	PRICE	STOCK	MANUFACTURE	WARRANTY
P001	TV	BPL	10000	200	12-JAN-2008	3
P002	TV	SONY	12000	150	23-MAR-2007	4
P003	PC	LENOVO	39000	100	09-APR-2008	2
P004	PC	COMPAQ	38000	120	20-JUN-2009	2
P005	HANDYCAM	SONY	18000	250	23-MAR-2007	3

a. Give the output of following statement.

(i) Select COUNT(distinct company) from PRODUCT.

(ii) Select MAX(price)from PRODUCT where WARRANTY<=3

(iii) select avg(price) from PRODUCT

(IV) SELECT MAX(STOCK),PNAME FROM PRODUCT

b. Write SQL query for following

i. Display the product with oldest manufacturing date

ii. Display the product with maximum warranty

iii. Display the recent product

iv. Display the costliest TV company

v. Display manufacturing year of all products

vi. Display the product manufactured in MAR month

vii. display the product name with maximum length.