CLASS XI

Questions of my SQL tables

1. **Write SQL commands for (a) to (f) and writes the outputs for (g) on the basis of table HOSPITAL.**

No.	Name	Age	Department	DateOfAdm.	Charges	Sex
1	Arpit	62	Surgery	1998-01-21	300	M
2	Zarina	22	ENT	1997-12-12	250	F
3	Kareem	32	Orthopaedic	1998-02-19	200	M
4	Arun	12	Surgery	1998-01-11	300	M
5	Zubin	30	ENT	1998-02-12	250	M
6	Ketaki	16	ENT	1998-02-24	250	F
7	Ankita	29	Cardiology	1998-02-20	800	F
8	Zareen	45	Gynaecology	1998-02-22	300	F
9	Kush	19	Cardiology	1998-01-13	800	M
10	Shilpa	23	Nuclear Medicine	1998-02-21	400	F

(a) To select all the information of patients of cardiology department.

(b) To list the names of female patients who are in ENT department.

(c) To list names of all patients with their date of admission in ascending order.

(d) To display Patient's Name, Charges, Age of only female patients.

(e) To count the number of patients with Age < 30.

(f) To insert a new row in the HOSPITAL table with the following data: 11, 'Aftab', 24,'Surgery','1998-02-25' , 300,'M'.

(g) Give the output of following SQL statements: [Include the last inserted values in part (f)]

(i) SELECT COUNT(DISTINCT charges) FROM HOSPITAL;

(ii) SELECT MIN(Age) FROM HOSPITAL WHERE Sex = 'F';

(iii) SELECT SUM (charges) FROM HOSPITAL WHERE Department ='ENT';

(iv) SELECT AVG (charges) FROM HOSPITAL WHERE DateOfAdm. < '1998-02-12';

2. **Write the SQL commands for delete (a) to (f) and write the outputs for (g) on the basis of table STUDENT:**

TABLE: STUDENT

No.	Name	Age	Department	DateOfAdm.	Fees	Sex
1	Pankaj	24	Computer	1997-01-10	120	M
2	Shalini	21	History	1998-03-24	200	F
3	Sanjay	22	Hindi	1996-12-12	300	M
4	Sudha	25	History	1999-07-01	400	F
5	Rakesh	22	Hindi	1997-09-05	250	M

6	Shakeel	30	History	1998-06-27	300	M
7	Surya	34	Computer	1997-02-25	210	M
8	Shikha	23	Hindi	1997-07-31	200	F

(a) To show all information about the students of History department.
(b) To list the names of female students who are in department.
(c) To list names of all students with their date of admission in ascending order.
(d) To display Student's Name, Fees, age of male students only.
(e) To count the number of students with age > 23.
(f) To insert a new row in the STUDENT table with the following data: 9, 'Zaheer','Computer','1997-03-12', 230, 'M'.
(g) Give the output of the following SQL Statements: [Include the last inserted values in part

(f)(i) SELECT COUNT (DISTINCT department) FROM STUDENT;
(ii) SELECT MAX (Age) FROM STUDENT WHERE Sex = 'F';
(iii) SELECT AVG (Fees) FROM STUDENT WHERE SEX = 'M';
(iv) SELECT SUM (Fees) FROM STUDENT WHERE DateOfAdm < '1998-01-01';

3. Write the SQL for (a) to (f) and write the output of the (g) on the basis of the table TEACHER:

TABLE: TEACHER

No.	Name	Age	Department	DateOfJoin	Salary	Sex
1	Jugal	34	Computer	1997-01-10	12000	M
2	Sharmila	31	History	1998-03-24	20000	F
3	Sandeep	32	Maths	1996-12-12	30000	M
4	Sangeeta	35	History	1999-09-05	40000	F
5	Rakesh	42	Maths	1997-09-05	25000	M
6	Shyam	50	History	1998-02-25	30000	M
7	Shiv Om	44	Computer	1997-02-25	21000	M
8	Shalakha	33	Maths	1997-07-31	20000	F

(a) To show all information about the teacher of History department.
(b) To list the name of female teachers who are in Maths department.
(c) To list names of all the teachers with their date of admission in ascending order.
(d) The display teacher's Name, Salary, age for male teacher only.
(e) To count the number of teachers with age > 23.
(f) To insert a new row in the TEACHER table with the following data: 9, 'Raja', 26, 'Computer', '1995-05-13', 2300,'M'.
(g) Give the output of the following SQL statement: [Include the last inserted values in part (f)]

(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 DATEOFJOIN < '1996-07-12';

5. Write SQL commands for (a) to (d) and write the outputs for (e) and (f) on the basis of tables CLUB and COACHES:

TABLE: CLUB

COACH-ID	COACH NAME	AGE	SPORTS	DATEOFAPP	PAY	SEX
1	KUKREJA	35	KARATE	1996-03-27	1000	M
2	RAVINA	34	KARATE	1998-01-20	1200	F
3	KARAN	34	SQUASH	1998-02-19	2000	M
4	TARUN	33	BASKETBALL	1998-01-01	1500	M
5	ZUBIN	36	SWIMMING	1998-01-12	750	M
6	KETAKI	36	SWIMMING	1998-02-24	800	F
7	ANKITA	39	SQUASH	1998-02-20	2200	F
8	ZAREEN	37	KARATE	1998-02-22	1100	F
9	KUSH	41	SWIMMING	1998-01-13	900	M
10	SHAILYA	37	BASKETBALL	1998-02-19	1700	M

(a) To show all information about the swimming coaches in the club.

(b) To list names of all coaches with their date of appointment (DATEOFAPP) in descending order.

(c) To display a report, showing coach time, pay, age and bonus (15% of pay) for all the coaches.

(d) To insert a new row in the CLUB table with the following data:
11, 'Rajiv', 40, 'Hockey', '2000-05-27', 2000, 'M'

(e) Give the output of the following SQL statements: [Include the last inserted values in part (d)]

(i) SELECT COUNT (DISTINCT SPORTS) FROM CLUB;

(ii) SELECT MIN (AGE) FROM CLUB WHERE SEX = 'F';

(iii) SELECT AVG (PAY) FROM CLUB WHERE SPORTS = 'KARATE';

(iv) SELECT SUM (PAY) FROM CLUB WHERE DATEOFAPP > '1998-01-31';

6. Write SQL commands for (a) to (g) on the basis of the table SPORTS.

TABLE: SPORTS

Student No.	Class	Name	Game1	Grade1	Game2	Grade2
10	7	Sameer	Cricket	B	Swimming	A
11	8	Sujit	Tennis	A	Skating	C

12	7	Kamal	Swimming	B	Football	B
13	7	Veena	Tennis	C	Tennis	A
14	9	Archana	Basketball	A	Cricket	A
15	10	Arpit	Cricket	A	Athletics	C

(a) Display the names of the students who have grade 'C' in either Game1 or Game2 or both.
(b) Display the number of students getting grade 'A' in Cricket.
(c) Display the names of the students who have same game for both Game1or Game2.
(d) Display the games taken up by the students, whose name starts with 'A'.
(e) Add a new column named named "Marks".
(f) Assign a value 200 for Marks for all those who are getting grade 'B' or grade 'A' in both
Game1 and Game2.
(g) Arrange the whole table in the alphabetical order of Name.

7. Given the following Lab relations: Write the SQL command for questions (a) to (f) and the output for (g).

TABLE: Lab

No.	ItemName	CostPerItem	Quantity	DateOfPurchase	Warranty	Operational
1	Computer	60000	9	1996-05-21	2	7
2	Printer	15000	3	1997-05-21	4	2
3	Scanner	18000	1	1998-08-29	3	1
4	Camera	21000	2	1996-06-13	1	2
5	Hub	8000	1	1999-04-13	2	4
6	UPS	5000	5	1996-05-21	1	4
7	Plotter	25000	2	2000-01-11	2	2

(a) To select the ItemName purchased after 31-Oct-97.
(b) To list the ItemName, which are within the Warranty period till present date.
(c) To list the ItemName in ascending order of the date of purchase where quantity is more than 3.
(d) To display ItemName, CostPerItem, and Quantity whose Warranty is over.
(e) To count the number of items whose cost is more than 10000.
(f) To insert a new record in the Lab table with the following data:
8, 'VCR', 10000, 2, '2000-02-02', 1, 2.

(g) Give the output of the following SQL command: [Include the last inserted values in part (f)]

(i) SELECT MIN (DISTINCT Quantity) FROM LAB;

(ii) SELECT MIN (Warranty) FROM LAB WHERE Quantity = 2;

(iii) SELECT SUM (CostPerItem) FROM LAB WHERE Quantity > 2;

(iv) SELECT AVG (CostPerItem) FROM LAB WHERE DateOfPurchase < '1999-01-01';

8. Given the following family relation. Write SQL command for question (a) to (f) and the output for (g).

TABLE: FAMILY

No.	Name	FemaleMembers	MaleMembers	Income	Occupation
1	Mishra	3	2	67000	Service
2	Gupta	4	1	150000	Buisness
3	Khan	6	3	48000	Mixed
4	Chaddha	2	2	125000	Buisness
5	Yadav	7	2	120000	Mixed
6	Joshi	3	2	114000	Service
7	Maurya	6	3	45000	Farming
8	Rao	5	2	110000	Service

(a) To select all the information of family whose occupation is service.

(b) To list the name of the family where female members are more than 3.

(c) To list the names of family with income in ascending order.

(d) To display family's name, male members and occupation of business family.

(e) To count the number of families whose income is less than 10,000.

(f) To insert a new record in the Family table with the following data:

9, 'D'sousa', 2, 1, 15000, 'Service'.

(g) Give the output of the following SQL command: [Include the last inserted values in part (f)]

(i) SELECT MIN (DISTINCT Income) FROM family;

(ii) SELECT MIN (FemaleMembers) FROM Family;

(iii) SELECT SUM(Income) FROM Family WHERE Occupation='mixed';

(iv) SELECT AVG(Income) FROM Family;

9. Given the following EMPLOYEE relation. Write SQL command for question (a) to (x) and the output for (y).

TABLE: EMPLOYEE

ENO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPT
7369	Sunita Sharma	CLERK	7902	1980-12-17	2800		20
7499	Ashok Singhal	SALESMAN	7698	1981-02-20	3600	300	30
7521	Rohit Rana	SALESMAN	7698	1981-02-22	5250	500	30
7566	Jyoti Sharma	MANAGER	7839	1981-04-02	4975		20
7654	Martin S.	SALESMAN	7698	1981-09-28	6250	1400	30
7698	Binod Goel	MANAGER	7839	1981-05-01	5850		30
7782	Chetan Gupta	MANAGER	7839	1981-06-09	2450		10
7788	Sudhir Rawat	ANALYST	7566	1987-04-19	5000		20
7839	Kavita Sharma	PRESIDENT		1981-11-17	5000		10
7844	Tushar Tiwari	SALESMAN	7698	1981-09-08	4500	0	30
7876	Anand Rathi	CLERK	7788	1987-05-23	6100		20
7900	Jagdeep Rana	CLERK	7698	1981-12-03	4950		30
7902	Sumit Vats	ANALYST	7566	1981-12-03	3500	3600	20
7934	Manoj Kaushik	CLERK	7782	1982-01-23	5300		10

(a) To select all the columns of the above table.
(b) To list the name and employee number from the above table.
(c) To list the names, hiredate and salary of all employees.
(d) To display the employee name and the incremented value of SAL as SAL + 300.
(e) To list the employee name and his annual salary (Annual salary = 12*sal + 100).
(f) Display the ename and sal where comm is NULL.
(g) To list the distinct department number from the table.
(h) To list the unique jobs from the table.
(i) To list the salary where salary is less than the commission.

(j) To list the salary between 3000 and 4000.
(k) To list the mgr which are IN 7902, 7566, 7788.
(l) To list the ename starting with 'S'.
(m) To list all the columns where salary is greater than 4100.
(n) To list the all columns in the ascending order of hiredate.
(o) To list all the columns in the ascending order of deptno and descending order of salary.
(p) To list the employee name and job of emplyees hired between Feb 20,1981 and May 1,1981.
(q) Display the ename and deptno of all employees in department 20 and 30 in alphabetical ORDER BY name.
(r) To list the name and salary of all the emplyees who earn more than 1200 and are in department 10 or 40.
(s) To list the name and hiredate of all the employees who are hired in 1981.
(t) To list all the employees who donot have manager.
(u) To list name and salary of all employees who earn commissions.
(v) To list the names of all employees where the second letter of their name is an a.
(w) To list the names and job of all the employees who work in department 20 and their manager is 7788.
(x) To list the deptno, job and sum of salary group by deptno and job.
(y) Write the output of the following:

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(i) SELECT ENAME, 12*SAL + COMM FROM EMPLOYEE
        WHERE ENAME = 'Ashok Singhal';
(ii) SELECT ENAME FROM EMPLOYEE WHERE ENAME LIKE '_a%';
(iii) SELECT ENAME, MGR FROM EMPLOYEE WHERE MGR IS NULL;
(iv) SELECT AVG (SAL), MAX (SAL), MIN (SAL), SUM (SAL) FROM EMPLOYEE
        WHERE JOB LIKE 'SALES%';
(v) SELECT DEPT, AVG (SAL) FROM EMPLOYEE GROUP BY DEPT;
(vi) SELECT COUNT (*) FROM EMPLOYEE WHERE DEPT = 20;
(vii) SELECT COUNT (COMM) FROM EMPLOYEE WHERE DEPT = 20;
(viii) SELECT DEPT, MAX (SAL) FROM EMPLOYEE GROUP BY DEPT
        HAVING MAX (SAL) > 2900;
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10. Write SQL commands for the queries for the questions given from (a) to (f) and write the output of the SQL commands given in part (g) based on a relation TRAIN shown below:

Relation: TRAIN

No.	Train No.	Name	Class	Seat No.	Age	Fareper Ticket

1	S0001	ANU	I	11	16	700
2	S0002	SAGAR	AC-CHAIR	34	43	1300
3	S0003	SAMIR	AC-I	2	78	9000
4	S0004	GAURAV	II	23	17	600
5	S0005	KAPIL	I	3	25	1700
6	S0005	ANKUR	II	6	20	500
7	S0003	PRIYA	AC-II	2	11	1200

(a) To display the Name and Seat No. where Class is II.

(b) To display Train No. and Seat No. where the Fare per Ticket is > 1300.

(c) To display list of passengers having Name starting with 'A' in ascending order of Train No.

(d) To display the highest amount paid as Fare per Ticket.

(e) To display the Train No. and the number of passengers of each train.

(f) To insert a new passenger in the table with the following data.

8, "S0002", "RAMANLAL", "II", 2, 66, 3000

(g) Write the output of the following: [Include the last inserted values in part (f)]

(i) Select MIN (Age) from TRAIN where Class = "II";

(ii) Select COUNT (Distinct TRAINNO) from TRAIN;

11. Write SQL commands for the queries (a) to (f) and write the output of the SQL commands given in Part (g) based on a relation SHOP shown below:

Relation: SHOP

No.	Shop_name	Sale	Area	Cust_Percent	Rating	City
1	S. M. Sons	250000	West	68.6	C	Delhi
2	Dharohar	500000	South	81.8	A	Mumbai
3	Kriti Art	300000	North	79.8	B	Kolkata
4	Ripple	380000	North	88.0	B	Mumbai
5	Biswas Stores	456000	East	92.0	A	Delhi
6	Crystal	290000	South	66.7	A	Kolkata

(a) To display the names of all shops which are in the South.

(b) To display the names and Customer Percentage of all the shops having cust_percentage>80

(c) To display list of the shops with sale > 300000 in ascending order of Shops_Name.

(d) To display a report with Shop_name, Area and rating for each shop in the table, for only those shops whose sale is between 350000 and 400000 (including both 350000 and 4000000).

(e) To display the City and the number of shops in each city in the table SHOP.

(f) To insert detail of a new shop in the table SHOP with the following data:

7, "The Shop", 550000, "South", 90.8, 'A', "Ahmedabad"

(g) Write the output of the following: [Include the last inserted values in part (f)]

(i) Select Min (Cust_percent) from SHOP;

(ii) Select Sum (Sale) from SHOP where Rating = 'A';

(iii) Select Avg (Sale) from SHOP where city = 'Delhi';

(iv) Select Count (Distinct City) from SHOP;

12. Write SQL commands of the queries given from (a) to (f) and write the output of the SQL command given in part (g) based on a relation FLIGHT with attribute as Sno (Serial Number), FlightNo, FromCity (Fictitious Place Name), ToCity (Fictitious Place Name), Distance (Air Distance in Kilometers between 2 cities), Seats (Capacity of Flight), Frequency (Number of items in a week). A sample data of table AIRWAYS is shown below:

Relation: FLIGHT

No.	FlightNo.	FromCity	ToCity	Distance	Seats	Frequency
1	T1412	Blue Island	Yoyo Town	1500	210	3
2	A3242	Pikswka	Yoyo Town	900	170	7
3	T1434	Perimila	Pikswaka	1000	210	7
4	C3120	Ketty Island	Blue Island	1200	120	4
5	T1418	Jaswaka	Perimila	500	120	3
6	C3120	Pikswaka	Archie Land	1000	170	4
7	A3232	Harappan Valley	Ketty Island	900	210	1
8	T1432	Blue Island	Harappan Valley	1200	120	2
9	T1618	Mumsui	Blue Island	1200	210	4

(a) To display the FlightNo of those which have frequency more than 4 times in a week.

(b) To display FlightNo, FromCity and ToCity of all those flights which are starting from city Blue Islands or are having destination as Blue Islands.

(c) To display FlightNo and Seating capacity of all those flights in which seating capacity is more than 140.

(d) To display FlightNo, Frequency and distance of all those flights, which are covering distance more than 900 kilometers.

(e) To display FlightNo of all those flights which are Weekly flights and having seating capacity less than 180.

(f) To insert a new flight detail in the table FLIGHT with the following data:

9, "T1618", "Mumsui", "Blue Island", 1200, 210, 4

(g) Write the output of the following: [Include the last inserted values in part (f)]

(i) Select COUNT (*) from FLIGHT;

(ii) Select MAX (DISTANCE) from FLIGHT;

(iii) Select MIN (Frequency) from FLIGHT;

(iv) Select COUNT (Distinct FromCity) from FLIGHT;

13. Write the SQL commands for the queries given from (a) to (f) and write the output of the SQL commands given in part (g0 based on a relation LIBRARY shown below:

Relation: LIBRARY

No.	Title	Author	Subject	Publisher	Quantity	Price
1	Data Structure	Lipschute	DS	McGraw	4	217.00
2	DOS Guide	NORTRON	OS	PHI	3	175.00
3	Turbo C++	Robort Lafore	Prog	Galgotia	5	270.00
4	Dbase Dummies	Palmer	DBMS	Pustak M	7	130.00
5	Mastering Windows	Cowart	OS	BPB	1	225.00
6	Computer Studies	French	FND	Galgotia	2	75.00
7	COBOL	Stern	Prog	John W	4	1000.00
8	Guide Network	Freed	NET	Zpress	3	200.00
9	Basics for	Norton	Prog	BPB	3	40.00

	Beginners					
10	Advanced Pascal	Schildt	Prog	McGraw	4	350.00

(a) To display the title of all books with Price between 100 ad 200.

(b) To display Title ad Author of all the books having type Prog and publisher by BPB.

(c) To display list of all the books with price more than 130 in ascending order of Qty.

(d) To display a report with Title, Misplacement Charges for each book in the table.

14. Write the SQL command fro (a) to (f) and write the output of the (g) on the basis of the table SUPPLIER.

TABLE: SUPPLIER

SNo.	PName	SName	Qty	Price	City
S1	Bread	Britannia	150	8.00	Delhi
S2	Cake	Britannia	250	20.00	Mumbai
S3	Coffee	Nescafe	170	45.00	Mumbai
S4	Chocolate	Amul	380	10.00	Delhi
S5	Sauce	Kissan	470	36.00	Jaipur

(a) Display data for all products whose quantity is between 170 and 370.

(b) Display data for all products sotred by their quantity.

(c) Find all the products that have no supplier.

(d) Give Sname for all that entire product whose name starts with "C".

(e) To list Sname, Pname, Price for all the products whose quantity is<200.

(f) To display SNo, Pname, Sname, Qty in descending order of quantity from the SUPPLIER table.

(g) Give the output of the following SQL commands:

(i) Select AVG (Price) from SUPPLIER where price<30.

(ii) Select MAX (Price) from Supplier where price>30.

(iii) Select SUM (Price*Qty) from Supplier where Qty<200.

(iv) Select COUNT (DISTINCT city) FROM supplier;

15. Write the SQL command for (a) to (f) and write the output of the (g) on the basis of the table BANK;

TABLE: BANK

Acc_no	CName	BName	Amount	DateOfOpen	T_Transactions
1	Karan	Bank Of Baroda	15000	1998-01-12	10
2	Punnet	State Bank	25000	1997-02-01	09
3	Anirbhan	Oriental Bank	17000	1999-07-15	05
4	Yatin	Standard Chartered	38000	1999-02-10	11
5	Sunny	State Bank	47000	1998-02-06	15
6	Jayant	UCO Bank	34000	1998-08-10	07
7	Nikhil	Bank Of Baroda	56000	1999-01-02	12
8	Tarun	Oriental Bank	22000	1999-04-04	08
9	Jisha	UCO Bank	34500	1998-01-05	11

(a) Display data for all Customers whose transaction is between 8 and 11.

(b) Display data for all Customers stored by their dateofopen.

(c) To count the number of customers with amount<30000.

(d) List the minimum and maximum amount from the BANK.

(e) To list Cname, Bname Amount for all the clients whose amount is<20000.

(f) To display Acc_no, Cname, Bname, Totla transaction in descending order of Amount.

(g) Give the output of the following SQL commands:

(i) Select AVG (Amount) from BANK where amount<23000;

(ii) Select MAX (Amount) from BANK where amount>30000;

(iii) Select SUM (T_Transactions) from BANK;

(iv) Select COUNT (DISTINCT Bname) FROM BANK;

16. Write the SQL command for (a) to (f) and write the output of the (g) on the basis of the table VOTER:

TABLE: VOTER

VNo	Vname	Age	Address	Phone
1	Diwaker	22	Rohini	27045249
2	Rajiv	23	Sarojini Nagar	25567892
3	Smith	24	Paschim Vihar	25580438

4	Arpit	19	Multan Nagar	25585643
5	Sunny	26	Dev Nagar	27123462
6	Sumit	23	Vikas Puri	25565127
7	Rajiv	27	Rohini	27869845
8	Rohit	24	Rohini	27057845
9	Anand	34	Pitam Pura	27026534
10	Vidhi	26	Bank Vihar	27036713

(a) Write a SQL statement to list VNo, Vname, Age for all the voters. This information should be sorted on
Vname.
(b) To list all those voters who are either residing in Rohini or whose age<25.
(c) Display all the voter with age>27.
(d) List different voters with unique age.
(e) Count the number of voters where Address is 'Rohini'.
(f) Insert a new voter in the VOTER table. Fill the entire column with values.
(g) Give the output of the following SQL commands: [Do not include the last inserted values in part (f)]
(i) Select SUM (Age) from VOTER;
(ii) Select COUNT (DISTINCT age) from VOTER;
(iii) Select MAX (age) from VOTER where age<26;
(iv) Select MIN (age) from VOTER where address= "Paschim Vihar";

17. Write the SQL command for (a) to (f) on the basis of the table DIRECTORY

TABLE: DIRECTORY

No.	Fname	Lname	Phone	Address
1	Arpit	Kumar	27045634	Rohini
2	Ram	Sharma	25563412	Vikas Puri
3	Vikas	Malhotra	27865467	Pitam Pura
4	Rohit	Arora	22235434	Preet Vihar
5	Kisan	Kaushik	25567845	Paschim Vihar
6	Rahul	Verma	27057456	Rohini
7	Rakesh	Gulati	27026519	Pitam Pura
8	Parul	Arora	27018723	Rohini

(a) To select all the information from DIRECTORY of Rohini area.
(b) Update the database set the phone no. as 27047645 where phone number is 27057456.
(c) To create a view called Dir with the following fields Fname, Phone, Address.
(d) To display data for Arpit, Rahul and Kisan.
(e) To delete the rows where the address is Rohini.
(f) To delete the table physically.