Descriptive of *SQL*
Ch:1&2

1. How to find all tables from sql Library?

Ans: select * from tab;->Enter

2. How to find all columns of a table?

Ans: desc table name; -> Enter. e.g: desc employees; -> Enter

3. How to find all data from a table?

Ans: select * from table name; -> Enter. e.g: select * from employees; ->Enter

4. How to save everything by using spool?

Ans: spool file path and name with extension -> Enter. After all works write spool off -> Enter. e.g: spool d:\test.sql -> Enter. After all works write spool off -> Enter.

5. How to save a definite data statement?

Ans: (After the statement write) save file path and name with extension -> Enter. e.g: save d:\test.sql -> Enter.

6. How to run the saved file?

Ans: @ file path and name with extension. e.g: @ d:\test.sql -> Enter

7. How to replace a saved file?

Ans: save file path and name with extension replace -> Enter. e.g: save d:\test.sql replace-> Enter.

8. How to set edit file?

Ans: copy the edit file in an any drive say d.

set editfile d:\afiedt.buf->Enter

ed->

(Edit your text without semicolon in the last) alt+F4->Enter->/->Enter

9. What is the component of Relational model?

Ans: Relational model consist of the following:

i) Collection of objects or relations.

ii) Set of operators to act on relations.

iii) Data integrity for accuracy and consistency.

10. Write 3 guidelines for Primary key and foreign key.

Ans:

i) You cannot use duplicate values in a primary key.
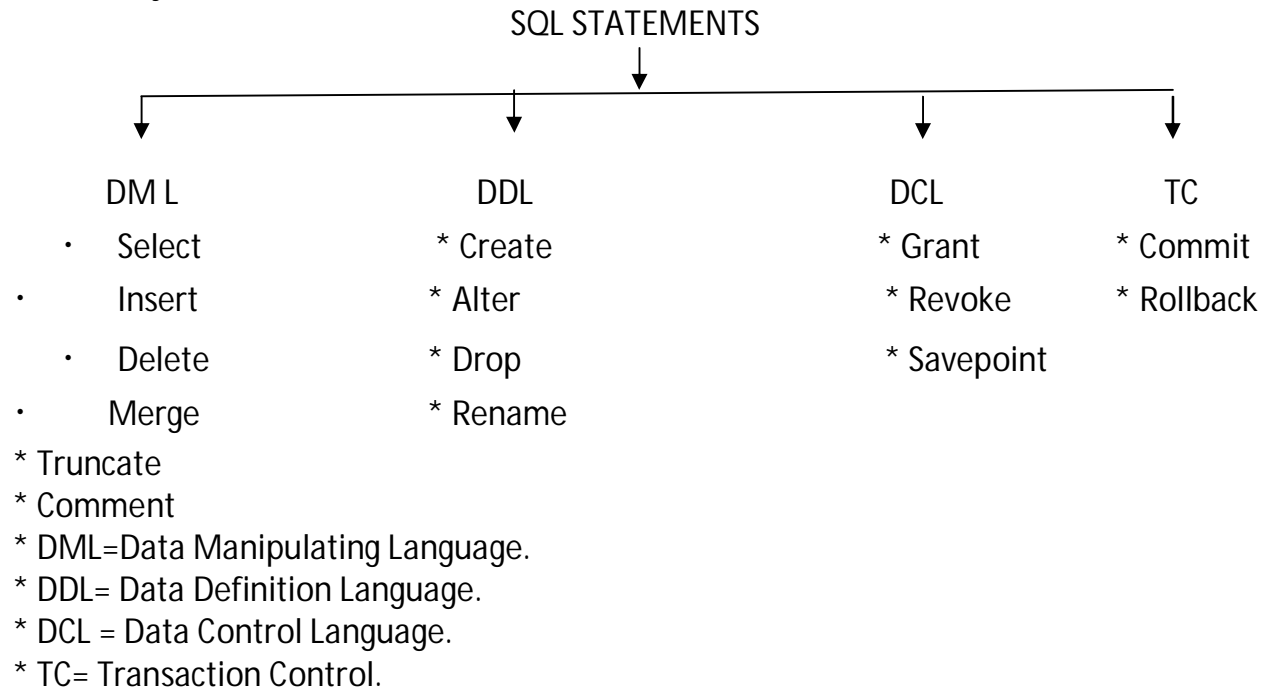
ii) Primary key generally cannot be changed.

iii) Foreign keys are based on data values and are purely logical pointers.

11. What is relational database? Write some properties of relational database.

Ans: A relational database is a collection of relations or two-dimensional tables. A relational database:

i) Can be accessed and modified by executing structured query language statements.

ii) Contains a collection of tables with no physical pointers.

iii) Uses a set of operators.

12. Classify SQL Statemenst.

SQL STATEMENTS

DM L	DDL	DCL	TC
· Select	* Create	* Grant	* Commit
· Insert	* Alter	* Revoke	* Rollback
· Delete	* Drop	* Savepoint	
· Merge	* Rename		

* Truncate

* Comment

* DML=Data Manipulating Language.

* DDL= Data Definition Language.

* DCL = Data Control Language.

* TC= Transaction Control.

14. Write 4 characteristics of SQL statements.

Ans:

i) SQL statements are not case sensitive.

ii) SQL statements can be on one or more lines.

iii) Keywords cannot be abbreviated or split across lines.

iv) Clauses are usually placed on separate lines.

15. What is null value?

Ans: A null is a value that is unavailable, unassigned, unknown or inapplicable. It is not the same as zero or a blank space.

16. What is literal? What is obligatory in date and character literal?

Ans: A literal is a character, a number, or a date that is included in the select statement. Date and character literal must be enclosed by single quotation marks.

17. What are the features of oracle?

Ans: i) Scalability ii) Reliability iii) Single Development model iv) Common skillsets v) Unified management.

18. Write the steps of system development life cycle.

Ans: i) Strategy ii) Design iii) Build and document iv) Transition v) Production

19. What is the advantage of sql?

Ans: i) Efficient ii) Easy to learn and use iii) Functionally complete

20. How to select a definite category's record from a table?

Sample-1: Find those employees salary and job id whose last name starts with A.

Ans: select last_name (Name of the last name's column),salary,job_id(Name of the job id's column) from employees (table's name) where last_name like 'A%'; -> Enter

Sample-2: Find those employees salary and job id whose last name contains an *a* as the third character.

Ans: select last_name (Name of the last name's column),salary,job_id(Name of the job id's column) from employees (table's name) where last_name like '_ _ a%'; -> Enter

Sample-3: Find those employees salary and job id whose last name contains both an *a* and an *e* .

Ans: select last_name (Name of the last name's column),salary,job_id(Name of the job id's column) from employees (table's name) where last_name like '%a%' and last_name like '%e%'; -> Enter

Sample-4: Find those employees salary and job id whose last name contains **SA_** Ans: select last_name (Name of the last name's column),salary,job_id(Name of the job id's column) from employees (table's name) where last_name like '%SA_%' ESCAPE '\'; -> Enter

Sample-5: Find those employees last name, salary and job id who has no pct_commission.

Ans: select last_name (Name of the last name's column),salary,job_id(Name of the job id's column) from employees (table's name) where commission_pct (one Column name of employees table) is null-> Enter

Sample-6: Find those employees last name, salary and job id who has a pct_commission.

Ans: select last_name (Name of the last name's column),salary,job_id(Name of the job id's column) from employees (table's name) where commission_pct (one Column name of employees table) is not null-> Enter

Sample-7: Find those employees last name, salary is between 5000 to 20000

Ans: select last_name (Name of the last name's column),salary,job_id(Name of the job id's column) from employees (table's name) where salary between 5000 and 20000-> Enter

Sample-8: Find those employees last name, salary is not between 5000 to 20000

Ans: select last_name (Name of the last name's column),salary,job_id(Name of the job id's column) from employees (table's name) where salary not between

5000 and 20000-> Enter

Sample-9: Find those employees last name, salary whose job_id is SA_REP or AD_PRES and salary is greater than 15000

Ans: select last_name (Name of the last name's column),salary,job_id(Name of the job id's column) from employees (table's name) where (job_id='SA_REP' or job_id='AD_PRES') and salary>15000

21. Why do we use &?

Ans: & gives us a option to take a value in runtime. e.g:

Ans:
```
select last_name,salary,department_id from employees where
employee_id=&a;
```

Runtime:
```
Enter value for a: 142
old 3: where employee_id=&a
new 3: where employee_id=142
```

Output:
```
LAST_NAME SALARY DEPARTMENT_ID
------------------------ ---------- -------------
Davies 3100 50
```

22. How can we use several & in a sql statement?

Ans:
```
select last_name,department_id,&col from &tab where &con order by
&or;
```

Runtime:
```
Enter value for col: employee_id
old 1: select last_name,department_id,&col
new 1: select last_name,department_id,employee_id
Enter value for tab: employees
old 2: from &tab
new 2: from employees
Enter value for con: salary>10000
old 3: where &con
new 3: where salary>10000
Enter value for or: salary
old 4: order by &or
new 4: order by salary
```

Output:
```
LAST_NAME DEPARTMENT_ID EMPLOYEE_ID
------------------------ ------------ -----------
Vishney 80 162
Zlotkey 80 149
Raphaely 30 114
Abel 80 174
```

23. How can we use && in a sql statement?

Ans:
```
select employee_id,last_name,&&col_name from employees where
salary>10000 order by &col_name;
```

Runtime:
```
Enter value for col_name: salary
old 1: select employee_id,last_name,&&col_name
new 1: select employee_id,last_name,salary
```

```
old 4: order by &col_name
new 4: order by salary
```
Output:
```
EMPLOYEE_ID LAST_NAME SALARY
----------- ------------------------- ----------
162 Vishney 10500
149 Zlotkey 10500
174 Abel 11000
148 Cambrault 11000
168 Ozer 11500
114 Raphaely 12000
```

24. How to set verification off?

Ans: `set verify off`

Runtime: `select employee_id,last_name,&&col_name`
```
2 from employees
3 where salary>10000
4 order by &col_name2;
Enter value for col_name2: salary
```
Output:
```
EMPLOYEE_ID LAST_NAME SALARY
----------- ------------------------- ----------
162 Vishney 10500
149 Zlotkey 10500
174 Abel 11000
148 Cambrault 11000
```

25. How can we define a variable in sql?

Ans: `define emp_num=100;`
`select employee_id,first_name from employees where employee_id=&emp_num;`

Runtime:
```
old 3: where employee_id=&emp_num
new 3: where employee_id=100
```
Output:
```
EMPLOYEE_ID FIRST_NAME
----------- --------------------
100 Steven
```

26. How can we undefined the defined variable?

Ans: `undefine emp_num=101`

```
27. How can we concate two columns?

Ans: select concat(last_name,job_id) "Employee and Title" from
employees;

Or

Select last_name||job_id "Employee and Title" from employees;
```

Output:

Employee and Title
OConnellSH_CLERK
GrantSH_CLERK
WhalenAD_ASST
HartsteinMK_MAN
FayMK_REP

27. How can we concate two columns by separating them with a comma and a space?

Ans: `select last_name||', '||job_id "Employee and Title" from employees;`

Output:

Employee and Title
OConnell, SH_CLERK
Grant, SH_CLERK
Whalen, AD_ASST
Hartstein, MK_MAN