Multiple Choice

1. Which one of the following is used to define the structure of the relation, deleting relations and relating schemas ?

   a) DML(Data Manipulation Language)   b) DDL(Data Definition Language)
   c) Query   d) Relational Schema

2. An attribute A of datatype varchar(20) has the value "Avi" . The attribute B of data type char(20) has value "Reed". Here attribute A has _____ spaces and attribute B has _____ spaces.

   a) 3, 20   b) 20, 4   c) 20 , 20   d) 3, 4

3. **Select _____ dept_name from instructor;** Here which of the following displays the unique values of the column ?

   a) All   b) From   c) Distinct   d) Name

4. **SELECT * FROM employee WHERE dept_name="Comp Sci";** In the SQL given above there is an error . Identify the error .

   a) Dept_name   b) Employee   c) "Comp Sci"   d) From

5. '_ _ _ ' matches any string of _____ three characters. '_ _ _ %' matches any string of at _____ three characters.

   a) At least, Exactly   b) Exactly, At least   c) At least, All   d) All , Exactly

Please write SQL queries for following tasks.

1. Create tables following tables «movies» and «theaters»:

id (serial, PK)	title (varchar(255), not null, unique)	rating (integer)	genre (varchar(50), not null)
1	Citizen Kane	5	Drama
2	Singin' in the Rain	7	Comedy
3	The Wizard of Oz	7	Fantasy
4	The Quiet Man	null	Comedy
5	North by Northwest	null	Thriller
6	The Last Tango in Paris	9	Drama

id (serial, PK)	name (varchar(255), not null, unique)	size (integer, not null)	city (varchar(50), not null)
1	Kinopark Esentai	15	Almaty
2	Star Cinema Mega	7	Almaty
3	Kinopark 8	9	Shymkent
4	Star Cinema 15	11	Astana

2. Select the names of only one movie from each genre.

3. Select the top 3 movies by rating.

4. Select the third biggest theater by size.

5. Select all unrated movies.

6. Select theaters from Almaty and Shymkent with size greater than 7.

7. Show all movies in the following format with aliases:

ModieID	MovieInfo
1	The genre of Citizen Kane is Drama
2	The genre of Singin' in the Rain is Comedy
3	The genre of The Wizard of Oz is Fantasy

8. Create table named «movietheaters» with pair primary key (theater_id and movie_id):

theater_id (FK from theaters)	movie_id (FK from movies)	rating
1	5	5
3	1	7
1	3	9
4	6	6

9. Select all theaters that are not currently showing a movie.

10. Select all movies by dividing to three categories (if NULL print «No rating»):
    1) Low rating (0-3); 2) Medium rating (4-7); 3) High rating (8-10)

11. Set the rating of all unrated movies to 1.

12. Remove all movies not currently showing in theaters.

13. Select all movies which has name with following pattern: First letter is 'T', third letter is 'e' and end with letter 'n'.

14. Select average rating of each genre.

15. Select theaters which currently showing more than 1 movie.