



Department of Computer Science and Engineering

CS8492 - DATABASE MANAGEMENT SYSTEMS

Unit I - MCQ Bank

1. A relational database consists of a collection of

- a. Tables
- b. Fields
- c. Records
- d. Keys

Answer: a

2. A _____ in a table represents a relationship among a set of values.

- a. Column
- b. Key
- c. Row
- d. Entry

Answer : c

3. The term _____ is used to refer to a row.

- a. Attribute
- b. Tuple
- c. Field
- d. Instance

Answer: b

4. The term attribute refers to a _____ of a table.

- a. Record
- b. Column
- c. Tuple
- d. Key

Answer: b

5. For each attribute of a relation, there is a set of permitted values, called the _____ of that attribute.
- Domain
 - Relation
 - Set
 - Schema

Answer: a

6. Database _____ which is the logical design of the database, and the database _____ which is a snapshot of the data in the database at a given instant in time.
- Instance, Schema
 - Relation, Schema
 - Relation, Domain
 - Schema, Instance

Answer: d

7. Course(course_id,sec_id,semester)

Here the course_id,sec_id and semester are and course is a

- Relations, Attribute
- Attributes, Relation
- Tuple, Relation
- Tuple, Attributes

Answer: b

8. Department (dept name, building, budget) and Employee (employee_id, name, deptname, salary)

Here the dept_name attribute appears in both the relations. Here using common attributes in relation schema is one way of relating _____ relations.

- Attributes of common
- Tuple of common
- Tuple of distinct
- Attributes of distinct

Answer: c

9. A domain is atomic if elements of the domain are considered to be _____ units.

- a. Different
- b. Indivisible
- c. Constant
- d. Divisible

Answer: b

10. The tuples of the relations can be of _____ order.

- a. Any
- b. Same
- c. Sorted
- d. Constant

Answer: a

11. Which one of the following is a set of one or more attributes taken collectively to uniquely identify a record?

- a. Candidate key
- b. Sub key
- c. Super key
- d. Foreign key

Answer: c

12. Consider attributes ID, CITY and NAME. Which one of this can be considered as a super key?

- a. NAME
- b. ID
- c. CITY
- d. CITY, ID

Answer: b

13. The subset of a super key is a candidate key under what condition?

- a. No proper subset is a super key
- b. All subsets are super keys

- c. Subset is a super key
- d. Each subset is a super key

Answer: a

14. A _____ is a property of the entire relation, rather than of the individual tuples in which each tuple is unique.

- a. Rows
- b. Key
- c. Attribute
- d. Fields

Answer: b

15. Which one of the following attribute can be taken as a primary key?

- a. Name
- b. Street
- c. Id
- d. Department

Answer: c

16. Which one of the following cannot be taken as a primary key?

- a. Id
- b. Register number
- c. Dept_id
- d. Street

Answer: d

17. An attribute in a relation is a foreign key if the _____ key from one relation is used as an attribute in that relation.

- a. Candidate
- b. Primary
- c. Super
- d. Sub

Answer: b

18. The relation with the attribute which is the primary key is referenced in another relation. The relation which has the attribute as a primary key is called_____

- a. Referential relation
- b. Referencing relation
- c. Referenced relation
- d. Referred relation

Answer: c

19. The_____is the one in which the primary key of one relation is used as a normal attribute in another relation.

- a. Referential relation
- b. Referencing relation
- c. Referenced relation
- d. Referred relation

Answer: c

20. A _____ integrity constraint requires that the values appearing in specified attributes of any tuple in the referencing relation also appear in specified attributes of at least one tuple in the referenced relation.

- a. Referential
- b. Referencing
- c. Specific
- d. Primary

Answer: a

21. Using which language can a user request information from a database?

- a. Query
- b. Relational
- c. Structural
- d. Compiler

Answer: a

22. Student(ID, name, dept name, tot_cred)

In this query which attributes form the primary key?

- a. Name
- b. Dept
- c. Tot_cred
- d. ID

Answer: d

23. Which one of the following is a procedural language?

- a. Domain relational calculus
- b. Tuple relational calculus
- c. Relational algebra
- d. Query language

Answer: c

24. The _____ operation allows the combining of two relations by merging pairs of tuples, one from each relation, into a single tuple.

- a. Select
- b. Join
- c. Union
- d. Intersection

Answer: b

25. The result which operation contains all pairs of tuples from the two relations, regardless of whether their attribute values match.

- a. Join
- b. Cartesian product
- c. Intersection
- d. Set difference

Answer: b

26. The _____ operation performs a set union of two “similarly structured” tables

- a. Union
- b. Join

- c. Product
- d. Intersect

Answer: a

27. The most commonly used operation in relational algebra for projecting a set of tuple from a relation is

- a. Join
- b. Projection
- c. Select
- d. Union

Answer: c

28. The _____ operator takes the results of two queries and returns only rows that appear in both result sets.

- a. Union
- b. Intersect
- c. Difference
- d. Projection

Answer : b

29. A _____ is a pictorial depiction of the schema of a database that shows the relations in the database, their attributes, and primary keys and foreign keys.

- a. Schema diagram
- b. Relational algebra
- c. Database diagram
- d. Schema flow

Answer: a

30. The _____ provides a set of operations that take one or more relations as input and return a relation as an output.

- a. Schematic representation
- b. Relational algebra
- c. Scheme diagram

d. Relation flow

Answer: b

31. 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

Answer: b

32. Which one of the following provides the ability to query information from the database and to insert tuples into, delete tuples from, and modify tuples in the database?

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

Answer: a

33. CREATE TABLE employee (name VARCHAR, id INTEGER)

What type of statement is this?

- a. DML
- b. DDL
- c. View
- d. Integrity constraint

Answer: b

34. SELECT * FROM employee

What type of statement is this?

- a. DML
- b. DDL
- c. View
- d. Integrity constraint

Answer: a

35. The basic data type char(n) is a _____ length character string and varchar(n) is _____ length character.

- a. Fixed, equal
- b. Equal, variable
- c. Fixed, variable
- d. Variable, equal

Answer: c

36. An attribute A of datatype varchar(20) has the value "Avi". The attribute B of datatype 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

Answer: a

37. To remove a relation from an SQL database, we use the _____ command.

- a. Delete
- b. Purge
- c. Remove
- d. Drop table

Answer: d

38. DELETE FROM r; //r - relation

This command performs which of the following action?

- a. Remove relation
- b. Clear relation entries
- c. Delete fields
- d. Delete rows

Answer: b

39. INSERT INTO instructor VALUES (10211, 'Smith', 'Biology', 66000);

What type of statement is this?

- a. Query
- b. DML
- c. Relational
- d. DDL

Answer: b

40. Updates that violate _____ are disallowed.

- a. Integrity constraints
- b. Transaction control
- c. Authorization
- d. DDL constraints

Answer: a

41. Which of these query will display the table given below?

Name

Annie

Bob

Callie

- a. Select employee from name
- b. Select name
- c. Select name from employee
- d. Select employee

Answer : c

42. Here which of the following displays the unique values of the column?

SELECT _____ dept_name FROM instructor;

- a. All
- b. From
- c. Distinct
- d. Name

Answer: c

43. The _____ clause allows us to select only those rows in the result relation of the clause that satisfy a specified predicate.

- a. Where, from
- b. From, select
- c. Select, from
- d. From, where

Answer: a

44. The query given below will not give an error. Which one of the following has to be replaced to get the desired output?

```
SELECT ID, name, dept name, salary * 1.1 WHERE instructor;
```

- a. Salary*1.1
- b. ID
- c. Where
- d. Instructor

Answer: c

45. The _____ clause is used to list the attributes desired in the result of a query.

- a. Where
- b. Select
- c. From
- d. Distinct

Answer: b

46. This Query can be replaced by which one of the following?

```
SELECT name, course_id FROM instructor, teaches WHERE instructor_ID= teaches_ID;
```

- a. Select name, course_id from teaches, instructor where instructor_id=course_id;
- b. Select name, course_id from instructor natural join teaches;
- c. Select name, course_id from instructor;
- d. Select course_id from instructor join teaches;

Answer: b

47. Which is a join condition contains an equality operator:

- a. Equijoins
- b. Cartesian
- c. Natural
- d. LeG

Answer: a

48. In precedence of set operators, the expression is evaluated from

- a. LeG to leG
- b. LeG to right
- c. Right to leG
- d. From user specification

Answer: b

49. Which of the following is not outer join?

- a. LeG outer join
- b. Right outer join
- c. Full outer join
- d. All of the mentioned

Answer: d

50. The _____ operation, denoted by $-$, allows us to find tuples that are in one relation but are not in another.

- a. Union
- b. Set-difference
- c. Difference
- d. Intersection

Answer: b