DBMS MCQ Question and Answer

1. 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: Cartesian product

2. The _____operation performs a set union of two “similarly structured” tables
a) Union
b) Join
c) Product
d) Intersect
Answer: Union

3. 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: Select

4. 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: Intersect

5. 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: Schema diagram

6. 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: Relational algebra

7. A relational database consists of a collection of
a) Tables
b) Fields
c) Records
d) Keys
Answer: Tables

8. A _____ in a table represents a relationship among a set of values.
a) Column
b) Key
c) Row
d) Entry
Answer: Row

9. The term _____ is used to refer to a row.
a) Attribute
b) Tuple
c) Field
d) Instance
Answer: Tuple

10. The term attribute refers to a _____ of a table.
a) Record
b) Column
c) Tuple
d) Key
Answer: Column

11. For each attribute of a relation, there is a set of permitted values, called the _____ of that attribute.
a) Domain
b) Relation
c) Set
d) Schema
Answer: Domain

12. 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.
a) Instance, Schema
b) Relation, Schema
c) Relation, Domain
d) Schema, Instance
Answer: Schema, Instance

13. 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: Primary

14. 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: Referenced relation

15. 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: Referenced relation

16. Course (course_id,sec_id,semester)
Here the course_id,sec_id and semester are _____ and course is a _____
a) Relations, Attribute
b) Attributes, Relation
c) Tuple, Relation
d) Tuple, Attributes
Answer: Attributes, Relation

17. Department (dept name, building, budget) and Employee (employee_id, name, dept name, salary)
Here the dept_name attribute appears in both the relations. Here using common attributes in relation schema is one way of relating _____ relations.
a) Attributes of common
b) Tuple of common
c) Tuple of distinct
d) Attributes of distinct
Answer: Tuple of distinct

18. A domain is atomic if elements of the domain are considered to be _____ units.
a) Different
b) Indivisbile
c) Constant
d) Divisible
Answer: Indivisbile

19. The tuples of the relations can be of _____ order.
a) Any
b) Same
c) Sorted
d) Constant
Answer: Any

20. 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: Super key

21. 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: ID

22. 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: No proper subset is a super key

23. 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: Key

24. 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: Referential

25. Using which language can a user request information from a database?
a) Query
b) Relational
c) Structural
d) Compiler
Answer: Query

26. 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: ID

27. Which one of the following is a procedural language?
a) Domain relational calculus
b) Tuple relational calculus
c) Relational algebra
d) Query language
Answer: Relational algebra

28. 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: Join

29. Which one of the following attribute can be taken as a primary key?
a) Name
b) Street
c) Id
d) Department
Answer: Id

30. Which one of the following cannot be taken as a primary key?
a) Id
b) Register number
c) Dept_id
d) Street
Answer: Street

31. Relational Algebra is a _____ query language that takes two relations as input and produces another relation as an output of the query.
a) Relational
b) Structural
c) Procedural
d) Fundamental
Answer: Procedural

32. Which of the following is a fundamental operation in relational algebra?
a) Set intersection
b) Natural join
c) Assignment
d) None of the mentioned
Answer: None of the mentioned

33. Which of the following is used to denote the selection operation in relational algebra?
a) Pi (Greek)
b) Sigma (Greek)
c) Lambda (Greek)
d) Omega (Greek)
Answer: Sigma (Greek)

34. For select operation the _____ appear in the subscript and the _____ argument appears in the paranthesis after the sigma.
a) Predicates, relation
b) Relation, Predicates
c) Operation, Predicates
d) Relation, Operation
Answer: Predicates, relation

35. 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: Set-difference

36. An _____ is a set of entities of the same type that share the same properties, or attributes.
a) Entity set
b) Attribute set
c) Relation set
d) Entity model
Answer: Entity set

37. Entity is a _____
a) Object of relation
b) Present working model
c) Thing in real world
d) Model of relation
Answer: Thing in real world

38. The descriptive property possessed by each entity set is _____
a) Entity
b) Attribute
c) Relation
d) Model
Answer: Attribute

39. The function that an entity plays in a relationship is called that entity's _____
a) Participation
b) Position
c) Role

d) Instance
Answer: Role

40. The attribute name could be structured as an attribute consisting of first name, middle initial, and last name. This type of attribute is called
a) Simple attribute
b) Composite attribute
c) Multivalued attribute
d) Derived attribute
Answer: Composite attribute

41. The attribute AGE is calculated from DATE_OF_BIRTH. The attribute AGE is
a) Single valued
b) Multi valued
c) Composite
d) Derived
Answer: Derived

42. Not applicable condition can be represented in relation entry as
a) NA
b) 0
c) NULL
d) Blank Space
Answer: NULL

43. Which of the following can be a multivalued attribute?
a) Phone_number
b) Name
c) Date_of_birth
d) All of the mentioned
Answer: Phone_number

44. Which of the following is a single valued attribute
a) Register_number
b) Address
c) SUBJECT_TAKEN
d) Reference
Answer: Register_number

45. In a relation between the entities the type and condition of the relation should be specified. That is called as_____attribute.
a) Desciptive
b) Derived
c) Recursive
d) Relative
Answer: Desciptive

46. Which is a unary operation:
a) Selection operation
b) Primitive operation

c) Projection operation
d) Generalized selection
Answer: Generalized selection

47. Which is a join condition contains an equality operator:
a) Equijoins
b) Cartesian
c) Natural
d) Left
Answer: Equijoins

48. In precedence of set operators, the expression is evaluated from
a) Left to left
b) Left to right
c) Right to left
d) From user specification
Answer: Left to right

49. Which of the following is not outer join?
a) Left outer join
b) Right outer join
c) Full outer join
d) All of the mentioned
Answer: All of the mentioned

50. The assignment operator is denoted by
a) ->
b) <-
c) =
d) ==
Answer: <-