1. In a relation, ___ are selected using the tuple relational calculus. * (1 Point)

- ◯ Attributes
- ◯ Tuples
- ◯ Relation
- ◯ Calculus

4. Which key is commonly known as a subset of a super key? * (1 Point)

- ◯ Candidate key
- ◯ Foreign key
- ◯ Primary key
- ◯ Unique key

5. Which statement helps us to get the definition of a particular table at a time? * (1 Point)

- ◯ Show table
- ◯ Describe
- ◯ Use table
- ◯ All of the above

6. Renaming the output relation is done via the ___ operation. * (1 Point)

- ◯ Update
- ◯ Alter
- ◯ Rename
- ◯ Reverse

7. which one is a non-procedural query language? * (1 Point)

- ◯ Relational Algebra
- ◯ Relational Calculus
- ◯ Ambiguous Calculus
- ◯ None of the above

8. For select operation the _____ appear in the subscript and the _____ argument appears in the paranthesis after the sigma. *

(1 Point)

- Predicates, relation
- Relation, Predicates
- Operation, Predicates
- Relation, Operation

9. In which operation all the tuples are there in the given two tuples? *
(1 Point)

- Union
- Select
- Rename
- Set Intersection

10. Which command is used to see all the databases ? * (1 Point)

- Show database;
- Show databases;
- Show database();
- Show_all database;

11. Which of the following is SET Operators * (1 Point)

- ◯ UNION
- ◯ INTERSECT
- ◯ MINUS
- ◯ UNION ALL
- ◯ All of the above

12. The expression used in relational calculus to specify request of retrieval is classified as * (1 Point)

- ◯ declarative expression
- ◯ procedural expression
- ◯ structural expression
- ◯ functional expression

13. In which operation we can display a list of the attributes as a result? *
(1 Point)

- ◯ Select
- ◯ Project
- ◯ Union
- ◯ Rename

14. **What does Set Intersection Operation denote as?** * (1 Point)

- ○ U
- ○ ∩
- ○ ∏
- ○ I

15. What is the T in Tuple Relational Calculus's Notation? * (1 Point)

- ○ Input Tuples
- ○ Resulting Tuples
- ○ Both A and B
- ○ None of the above

16. Which syntax you will follow to drop a column using alter statement ?
* (1 Point)

- ○ ALTER table_name TABLE DROP COLUMN column_name;
- ○ ALTER TABLE table_name DROP COLUMN column_name;
- ○ ALTER table_name TABLE DROP COLUMN row_name
- ○ None

17. Which of the following is NOT a type of relational operation? *
(1 Point)

- ◯ Select Operation
- ◯ Set Difference
- ◯ Set Update
- ◯ Cartesian Product

18. a1, a2, ... an notation in DRC are defined as * (1 Point)

- Tuples
- Attributes
- Both A and B
- None of the above

19. In the statement(use students ;), what do you mean by the 'student'? *
(1 Point)

- Database name
- Row name
- Column name
- Table name

20. In which symbol Project Operation is denoted * (1 Point)

- P
- R
- O

∏

21. The number of attributes in relation is called as its * (1 Point)

- ◯ Cardinality
- ◯ Degree
- ◯ Tuples
- ◯ Entity

22. Which type of join combines the result from both the tables and returns us the Cartesian product of the values? * (1 Point)

- ◯ Right join
- ◯ Left join
- ◯ Inner join
- ◯ Cross join

23. What does Set Difference Operation denote as? * (1 Point)

◯

- ◯ +
- ◯ -
- ◯ U
- ◯ ∩

24. Which of the following is the correct syntax to add a field using alter command? * (1 Point)

- ◯ ALTER TABLE table_name ADD field_name data type;
- ◯ ALTER TABLE table_name, field_name data type;
- ◯ ALTER TABLE field_name data type;
- ◯ All of the above

25. In Relational Algebra, queries are performed using ___. * (1 Point)

- ◯ Entities
- ◯ Relationships
- ◯ Operators
- ◯ Objects

- ◯

26. Which command you will use to add a row in a table ? * (1 Point)

- INSERT INTO
- ADD
- ALTER
- CREATE

27. DRC uses logical connectives * (1 Point)

- ∧ (and)
- ∨ (or)
- ¬ (not)
- All of the above

28. Find the ID, name, dept name, salary for instructors whose salary is greater than $50,000 . * (1 Point)

- {t | t ε instructor ∧ t[salary] > 50000}
- ∋ t ∈ r (Q(t))
- {t | ∋ s ε instructor (t[ID] = s[ID]∧ s[salary] > 50000)}
- None of the mentioned

29. What is the difference between UNION & UNION ALL operators? * (1 Point)

- Combining the results of two select statements will be done using UNION whereas combined records from both queries are returned by UNION ALL operator.
- Combining the results of two select statements will be done using UNION ALL whereas combined records from both queries are returned by UNION operator.

- ◯ After performing the UNION operation, duplicate rows will not be removed whereas after performing the UNION ALL operation, duplicate rows will be removed.
- ◯ All of the above

30. Which statement you will use to delete the entire data of a table without disturbing the table definition? * (1 Point)

- ◯ DELETE
- ◯ TRUNCATE
- ◯ DROP
- ◯ CLEAR

31. Binding the variable is done by * (1 Point)

- ◯ Existential Functions (∃)
- ◯ Universal Quantifier Functions (∀)
- ◯ Both A and B
- ◯ None of the above

32. ALTER command is a type of which SQL command? * (1 Point)

- ◯

- ◯ DML
- ◯ DDL
- ◯ DCL
- ◯ DQL

33. How many types of relational calculus are there? * (1 Point)

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4

34. If we want to retain all duplicates, we must write _____ in place of union. * (1 Point)

- ◯ Union all
- ◯ Union some
- ◯ Intersect all
- ◯ Intersect some

35. Which of the following is a type of relational operation? * (1 Point)

- ◯ Project Operation
- ◯ Union Operation
- ◯ Set Difference
- All of the above

36. The types of quantifiers are__ * (1 Point)

- ◯ universal quantifier
- ◯ existential quantifier
- ◯ local quantifier
- ◯ both a and b

37. SELECT is a type of which SQL command? * (1 Point)

- ◯ DML
- ◯ DDL
- ◯ DCL
- ◯ DQL

◯ 38. TRC can be _____. * (1 Point)

- ◯ Quantified
- ◯ Qualified
- ◯ Destroyed
- ◯ Created

39. Choose the correct syntax of DRC's notation * (1 Point)

- ◯ {a1, a2, a3, ..., an | P (a1, a2, a3, ... ,an)}
- ◯ {P(a1, a2, a3, ... ,an) | a1, a2, a3, ..., an}
- ◯ {P(a1, a2, a3, ... ,an)}
- ◯ {a1, a2, a3, ..., an}

40. The domain of ___ is used when filtering variables using domain relational calculus. * (1 Point)

- ◯ Attributes
- ◯ Tuples
- ◯ Both a and b
- ◯ None of the above

41. Select operation is denoted by * (1 Point)

- ◯ σ
- ◯ R
- ◯ P
- S

42. Which of the following command is used to delete a database? * (1 Point)

- ◯ DELETE DATABASE_NAME;
- ◯ DROP DATABASE_NAME;
- ◯ DROP DATABASE DATABASE_NAME;
- ◯ DELETE DATABASE DATABASE_NAME;

43. Find the Correct Expressions for “Find all students who have taken all courses offered in the Biology department.” * (1 Point)

- ◯ ∋ t ε r (Q(t))
- ◯ ∀ t ε r (Q(t))
- ◯ ¬ t ε r (Q(t))
- ◯ ~ t ε r (Q(t))
- ◯

44. Union operation eliminates the ___ tuples. * (1 Point)

- ◯ Simple
- ◯ Single
- ◯ Duplicate
- ◯ NULL

45. P(T) represents the condition that is used to ___ T. * (1 Point)

- ◯ Get
- ◯ Fetch
- ◯ Both A and B
- ◯ None of the above

46. Propositional logic is conducted using p as a formula, using connectors like - * (1 Point)

- ◯ AND
- ◯ OR
- ◯ NOT
- ◯ All of the above

47. What is the full form of DRC? * (1 Point)

- Domain Rational Calculus
- Domain Relational Calculus
- Distributed Rational Calculus
- Distributed Relational Calculus

48. Which of the following is not a type of relational calculus? * (1 Point)

- Tuple Relational Calculus
- Domain Relational Calculus
- Both A and B
- None of the above

49. Which is a join condition contains an equality operator: * (1 Point)

- Equijoins
- Cartesian
- Natural
- Left

50. Union operation is denoted by - * (1 Point)

- ◯ U
- ◯ ^
- ◯ *
- ◯ !

51. Using the select operation, you can select the * (1 Point)

- ◯ Tuples
- ◯ Attributes
- ◯ Operators
- ◯ None

52. What is the notation to denote Tuple Relational Calculus? * (1 Point)

- ◯ {T | P (T)}
- ◯ {P (T) | T}
- ◯ {P (T)}
- ◯ {T}