**DBMS-MID1**

**MULTIPLE** **CHOICE**

1. A relational database consists of a collection of

a) Tables b) Fields c) Records d) Keys

ANS: C PTS: 1

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

a) Column b) Key c) Row d) Entry

ANS: C PTS: 1

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

a) Attribute b) Tuple c) Field d) Instance

ANS: B PTS: 1

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

a) Record b) Column c) Tuple d) Key

ANS: B PTS: 1

5. 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

ANS: A PTS: 1

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.

a) Instance, Schema c) Relation, Domain

b) Relation, Schema d) Schema, Instance

ANS: D PTS: 1

7. Course(course\_id,sec\_id,semester)

Here the course\_id,sec\_id and semester are and course is a

a) Relations, Attribute c) Tuple, Relation

b) Attributes, Relation d) Tuple, Attributes

ANS: B PTS: 1

8. 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

ANS: C PTS: 1

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

a) Different b) Indivisbile c) Constant d) Divisible

ANS: B PTS: 1

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

a) Any b) Same c) Sorted d) Constant

ANS: A PTS: 1

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

a) DML(Data Manipulation Langauge) c) Query

b) DDL(Data Definition Langauge) d) Relational Schema

ANS: B PTS: 1

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

a) DML(Data Manipulation Langauge) c) Query

b) DDL(Data Definition Langauge) d) Relational Schema

ANS: A PTS: 1

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

What type of statement is this?

a) DML c) View

b) DDL d) Integrity constraint

ANS: B PTS: 1

14. SELECT \* FROM employee

What type of statement is this?

a) DML c)

b) DDL d)

View

Integrity constraint

ANS: A PTS: 1

15. 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

ANS: C PTS: 1

16. 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

ANS: A PTS: 1

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

a) Delete b) Purge c) Remove d) Drop table

ANS: D PTS: 1

18. DELETE FROM r; //r – relation

his command performs which of the following action?

a) Remove relation c) Delete fields

b) Clear relation entries d) Delete rows

ANS: B PTS: 1

19. INSERT INTO instructor VALUES (10211, ’Smith’, ’Biology’,

66000);What type of statement is this?

a) Query b) DML c) Relational d) DDL

ANS: B PTS: 1

20. Updates that violate are disallowed.

a) Integrity constraints c) Authorization

b) Transaction control d) DDL constraints

ANS: A PTS: 1

21. 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

ANS: C PTS: 1

22. Which of the following is a fundamental operation in relational algebra?

a) Set intersection c) Assignment

b) Natural join d) None of the mentioned

ANS: D PTS: 1

23. Which of the following is used to denote the selection operation in relational algebra?

a) Pi (Greek) c) Lambda (Greek)

b) Sigma (Greek) d) Omega (Greek)

ANS: B PTS: 1

24. For select operation the appear in the subscript and the argument appears in the paranthesis after the sigma.

a) Predicates, relation c) Operation, Predicates

b) Relation, Predicates d) Relation, Operation

ANS: A PTS: 1

25. 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

ANS: B PTS: 1

26. Which is a unary operation:

a) Selection operation c) Projection operation

b) Primitive operation d) Generalized selection

ANS: D PTS: 1

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

a) Equijoins b) Cartesian c) Natural d) Left

ANS: A PTS: 1

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

a) Left to left c) Right to left

b) Left to right d) From user specification

ANS: B PTS: 1

29. Which of the following is not outer join?

a) Left outer join c) Full outer join

b) Right outer join d) All of the mentioned

ANS: D PTS: 1

30. The assignment operator is denoted by

a) -> b) <- c) = d) ==

ANS: B PTS: 1

31. The union operation is represented by

a) n b) U c) – d) \*

ANS: B PTS: 1

32. The intersection operator is used to get the tuples.

a) Different b) Common c) All d) Repeating

ANS: B PTS: 1

33. he union operation automatically unlike the select clause.

a) Adds tuples c) Adds common tuples

b) Eliminates unique tuples d) Eliminates duplicate

ANS: D PTS: 1

34. If we want to retain all duplicates, we must write in place of union.

a) Union all b) Union some c) Intersect all d) Intersect some

ANS: A PTS: 1

35. The number of attributes in relation is called as its

a) Cardinality b) Degree c) Tuples d) Entity

ANS: B PTS: 1

36. clause is an additional filter that is applied to the result.

a) Select b) Group-by c) Having d) Order by

ANS: C PTS: 1

37. joins are SQL server default

a) Outer

b) Inner

c) Equi

d) None of the mentioned

ANS: B PTS: 1

38. The is essentially used to search for patterns in target string.

a) Like Predicate b) Null Predicate c) In Predicate d) Out Predicate

ANS: A PTS: 1

39. A indicates an absent value that may exist but be unknown or that may not exist at all.

a) Empty tuple b) New value c) Null value d) Old value

ANS: C PTS: 1

40. If the attribute phone number is included in the relation all the values need not be entered into the phone number column. This type of entry is given as

a) 0 b) – c) Null d) Empty space

ANS: C PTS: 1

41. The predicate in a where clause can involve Boolean operations such as and. The result of true and unknown is false and unknown is while unknown and unknown is

a) Unknown, unknown, false

b) True, false, unknown

c) True, unknown, unknown

d) Unknown, false, unknown

ANS: D PTS: 1

42. SELECT name FROM instructor WHERE salary IS NOT NULL; Selects

a) Tuples with null value c) Tuples with any salary

b) Tuples with no null values d) All of the mentioned

ANS: B PTS: 1

43. In an employee table to include the attributes whose value always have some value which of the following constraint must be used?

a) Null b) Not null c) Unique d) Distinct

ANS: B PTS: 1

44. Using the clause retains only one copy of such identical tuples.

a) Null b) Unique c) Not null d) Distinct

ANS: D PTS: 1

45. CREATE TABLE employee (id INTEGER,name VARCHAR(20),salary NOT

NULL);INSERT INTO employee VALUES (1005,Rach,0);

INSERT INTO employee VALUES (1007,Ross, );

INSERT INTO employee VALUES

(1002,Joey,335);

Some of these insert statements will produce an error. Identify the statement.

a) Insert into employee values (1005,Rach,0);

b) Insert into employee values (1002,Joey,335);

c) Insert into employee values (1007,Ross, );

d) None of the mentioned

ANS: C PTS: 1

46. The primary key must be

a) Unique c) Both Unique and Not null

b) Not null d) Either Unique or Not null

ANS: C PTS: 1

47. The result of unknown is unknown.

a) Xor b) Or c) And d) Not

ANS: D PTS: 1

48. Aggregate functions are functions that take a as input and return a single value.

a) Collection of values

b) Single value

c) Aggregate value

d) Both Collection of values & Single value

ANS: A PTS: 1

49. SELECT FROM instructor WHERE dept name= ’Comp. Sci.’;

Which of the following should be used to find the mean of the salary ?

a) Mean(salary) b) Avg(salary) c) Sum(salary) d) Count(salary)

ANS: B PTS: 1

50. All aggregate functions except ignore null values in their input collection.

a) Count(attribute) b) Count(\*) c) Avg d) Sum

ANS: B PTS: 1

51. The connective tests for set membership, where the set is a collection of values produced by a select clause. The connective tests for the absence of set membership.

a) Or, in b) Not in, in c) In, not in d) In, or

ANS: C PTS: 1

52. The phrase “greater than at least one” is represented in SQL by

a) < all b) < some c) > all d) > some

ANS: D PTS: 1

53. We can test for the nonexistence of tuples in a subquery byusing the construct.

a) Not exists b) Not exist c) Exists d) Exist

ANS: A PTS: 1

54. SQL applies predicates in the clause after groups have been formed, so aggregate functions may be used.

a) Group by b) With c) Where d) Having

ANS: B PTS: 1

55. Aggregate functions can be used in the select list or the clause of a select statement or subquery. They cannot be used in a clause.

a) Where, having c) Group by, having

b) Having, where d) Group by, where

ANS: B PTS: 1

56. Which of the following creates a temporary relation for the query on which it is defined?

a) With b) From c) Where d) Select

ANS: A PTS: 1

57. Subqueries cannot:

a) Use group by or group functions

b) Retrieve data from a table different from the one in the outer query

c) Join tables

d) Appear in select, update, delete, insert statements.

ANS: C PTS: 1

58. Which of the following is not an aggregate function?

a) Avg b) Sum c) With d) Min

ANS: C PTS: 1

59. How can you find rows that do not match some specified condition?

a) EXISTS c) NOT EXISTS

b) Double use of NOT EXISTS d) None of the mentioned

ANS: B PTS: 1

60. A Delete command operates on relation.

a) One b) Two c) Several d) Null

ANS: A PTS: 1

61. Delete from r where P;

The above command

a) Deletes a particular tuple from the relation

b) Deletes the relation

c) Clears all entries from the relation

d) All of the mentioned

ANS: A PTS: 1

62. Which one of the following deletes all the entries but keeps the structure of the relation.

a) Delete from r where P;

b) Delete from instructor where dept name= ’Finance’;

c) Delete from instructor where salary between 13000 and 15000;

d) Delete from instructor;

ANS: D PTS: 1

63. UPDATE instructor salary= salary \* 1.05;

Fill in with correct keyword to update the instructor relation.

a) Where b) Set c) In d) Select

ANS: B PTS: 1

64. are useful in SQL update statements, where they can be used in the set clause.

a) Multiple queries c) Update

b) Sub queries d) Scalar subqueries

ANS: D PTS: 1

65. The problem of ordering the update in multiple updates is avoided using

a) Set b) Where c) Case d) When

ANS: C PTS: 1

66. The condition allows a general predicate over the relations being joined.

a) On b) Using c) Set d) Where

ANS: A PTS: 1

67. Which of the join operations do not preserve non matched tuples?

a) Left outer join b) Right outer join c) Inner join d) Natural join

ANS: C PTS: 1

68. What type of join is needed when you wish to include rows that do not have matching values?

a) Equi-join

b) Natural join

c) Outer join

d) All of the mentioned

ANS: C PTS: 1

69. Which are the join types in join condition: a) Cross join

b) Natural join

c) Join with USING clause

d) All of the mentioned

ANS: D PTS: 1

70. How many join types in join condition:

a) 2 b) 3 c) 4 d) 5

ANS: D PTS: 1

71. Which join refers to join records from the right table that have no matching key in the left table are include in the result set:

a) Left outer join b) Right outer join c) Full outer join d) Half outer join

ANS: B PTS: 1

72. The operation which is not considered a basic operation of relational algebra is

a) Join b) Selection c) Union d) Cross product

ANS: A PTS: 1

73. The operation which is not considered a basic operation of relational algebra is

a) Join b) Selection c) Union d) Cross product

ANS: B PTS: 1

74. Which of the following creates a virtual relation for storing the query?

a) Function c) Procedure

b) View d) None of the mentioned

ANS: B PTS: 1

75. Which of the following is the syntax for views where v is view name?

a) Create view v as “query name”; c) Create view v as “query expression”;

b) Create “query expression” as view; d) Create view “query expression”;

ANS: C PTS: 1

76. SELECT course\_id FROM physics\_fall\_2009 WHERE building=

’Watson’; Here the tuples are selected from the view.Which one

denotes the view.

a) Course\_id b) Watson c) Building d) physics\_fall\_2009

ANS: D PTS: 1

77. Materialised views make sure that

a) View definition is kept stable c) View definition is verified for error

b) View definition is kept up-to-date d) View is deleted after specified time

ANS: B PTS: 1

78. Updating the value of the view

a) Will affect the relation from which it is defined

b) Will not change the view definition

c) Will not affect the relation from which it is defined

d) Cannot determine

ANS: A PTS: 1

79. SQL view is said to be updatable (that is, inserts, updates or deletes can be applied on the view) if which of the following conditions are satisfied bythe query defining the view?

a) The from clause has only one database relation

b) The query does not have a group by or having clause

c) The select clause contains only attribute names of the relation and does not have any expressions, aggregates, or distinct specification

d) All of the mentioned

ANS: D PTS: 1

80. Which of the following is used at the end of the view to reject the tuples which do not satisfythe condition in where clause?

a) With

b) Check

c) With check

d) All of the mentioned

ANS: C PTS: 1

81. In the relational model, cardinality is termed as:

a) A number of tuples. c) A number of tables.

b) A number of attributes. d) A number of constraints.

ANS: A PTS: 1

82. Relational calculus is a

a) Procedural language.

b) Non- Procedural language.

c) Data definition language.

d) High-level language.

ANS: B PTS: 1

83. The view of total database content is

a) Conceptual view. b) Internal view. c) External view. d) Physical View.

ANS: A PTS: 1

84. Cartesian product in relational algebra is

a) a Unary operator. c) a Ternary operator.

b) a Binary operator. d) not defined.

ANS: B PTS: 1

85. DML is provided for

a) Description of the logical structure of a database.

b) The addition of new structures in the database system.

c) Manipulation & processing of the database.

d) Definition of a physical structure of the database system.

ANS: C PTS: 1

86. ‘AS’ clause is used in SQL for

a) Selection operation. c) Join operation.

b) Rename operation. d) Projection operation.

ANS: B PTS: 1

87. ODBC stands for

a) Object Database Connectivity.

b) Oral Database Connectivity.

c) Oracle Database Connectivity.

d) Open Database Connectivity.

ANS: D PTS: 1

88. Architecture of the database can be viewed as

a) two levels. b) four levels. c) three levels. d) one level.

ANS: C PTS: 1

89. In a relational model, relations are termed as

a) Tuples. b) Attributes c) Tables. d) Rows.

ANS: C PTS: 1

90. The database schema is written in

a) HLL b) DML c) DDL d) DCL

ANS: C PTS: 1

91. In the architecture of a database system external level is the

a) physical level. b) logical level. c) conceptual level d) view level.

ANS: D PTS: 1

92. An entity set that does not have sufficient attributes to form a primary key is a

a) strong entity set. c) simple entity set.

b) weak entity set. d) primary entity set.

ANS: B PTS: 1

93. In Hierarchical model records are organised as

a) Graph. b) List. c) Links. d) Tree.

ANS: D PTS: 1

94. In an E-R diagram attributes are represented by

a) rectangle. b) square. c) ellipse. d) triangle.

ANS: C PTS: 1

95. In case of entity integrity, the primary key maybe

a) not Null c) both Null & not Null.

b) Null d) any value.

ANS: A PTS: 1

96. In tuple relational calculus P1 ®P2 is equivalent to

a) ¬P1 Ú P2 b) P1 Ú P2 c) P1 Ù P2 d) P1 Ù¬P2

ANS: A PTS: 1

97. The language used in application programs to request data from the DBMS is referred to as the

a) DML b) DDL c) VDL d) SDL

ANS: A PTS: 1

98. A logical schema

a) is the entire database.

b) is a standard way of organising information into accessible parts.

c) describes how data is actually stored on disk.

d) both a) and c)

ANS: A PTS: 1

99. Related fields in a database are grouped to form a

a) data file. b) data record. c) menu. d) bank.

ANS: B PTS: 1

100. The database environment has all of the following components except:

a) users. c) database.

b) separate files. d) database administrator.

ANS: A

101. What is a database?

a) Organized collection of information that cannot be accessed, updated, and managed

b) Collection of data or information without organizing

c) Organized collection of data or information that can be accessed, updated, and managed d) Organized collection of data that cannot be updated

ANS: C PTS: 1

102. Which type of data can be stored in the database a) Image oriented data

b) Text, files containing data

c) Data in the form of audio or video d) All of the above

ANS: D PTS: 1

103.In which of the following formats data is stored in the database management system? a) Image

b) Text c) Table d) Graph

ANS: C PTS: 1

104.Which of the following is not a type of database? a) Hierarchical

b) Network c) Distributed

d) Decentralized

ANS: D PTS: 1

105.Which of the following is a feature of the database? a) No-backup for the data stored

b) User interface provided c) Lack of Authentication

d) Store data in multiple locations ANS: B PTS: 1

106. Which of the following is not a function of the database? a) Managing stored data

b) Manipulating data

c) Security for stored data

d) Analysing code

ANS: D PTS: 1

107. Which of the following is a function of the DBMS? a) Storing data

b) Providing multi-users access control c) Data Integrity

d) All of the above

ANS: D PTS: 1

108. Which of the following is known as a set of entities of the same type that share same properties, or attributes?

a) Relation set b) Tuples

c) Entity set

d) Entity Relation model ANS: C PTS: 1

109.What is information about data called? a) Hyper data

b) Tera data c) Meta data d) Relations

ANS: C PTS: 1 110.What does an RDBMS consist of?

a) Collection of Records b) Collection of Keys

c) Collection of Tables d) Collection of Fields

ANS: C PTS: 1

111.The values appearing in given attributes of any tuple in the referencing relation must likewise occur in specified attributes of at least one tuple in the referenced relation, according to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ integrity constraint.

a) Referential b) Primary

c) Referencing d) Specific

ANS: A PTS: 1

112.\_\_\_\_\_\_\_\_\_\_\_\_\_ is a hardware component that is most important for the operation of a database

management system. a) Microphone

b) High speed, large capacity disk to store data c) High-resolution video display

d) Printer

ANS: B PTS: 1

113.Which command is used to remove a relation from an SQL? a) Drop

b) Delete c) Purge d) Remove

ANS: A PTS: 1

114.Procedural language among the following is \_\_\_\_\_\_\_\_\_\_ a) Domain relational calculus

b) Tuple relational calculus c) Relational algebra

d) Query language

ANS: C PTS: 1

115. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ operations do not preserve non-matched tuples. a) Left outer join

b) Inner join c) Natural join

d) Right outer join

ANS: C PTS: 1

116. What is the function of the following command? Delete from r where P;

a) Clears entries from relation b) Deletes relation

c) Deletes particular tuple from relation d) All of the mentioned

ANS: C PTS: 1

117.Which of the following is the subset of SQL commands used to manipulate Oracle Structures, including tables?

a) Data Described Language b) Data Retrieval Language

c) Data Manipulation Language

d) Data Definition Language ANS: D PTS: 1

118. Which of the following represents a query in the tuple relational calculus? a) { }{P(t) | t }

b) {t | P(t)} c) t | P() | t

d) All of the mentioned

ANS: B PTS: 1

119.A major goal of the db system is to minimize the number of block transfers between the disk and memory. Which of the following helps in achieving this goal?

a) Secondary storage b) Storage

c) Catalog d) Buffer

ANS: D PTS: 1

120.What happens if a piece of data is stored in two places in the db?

a) Storage space is wasted & Changing the data in one spot will cause data inconsistency b) In can be more easily accessed

c) Changing the data in one spot will cause data inconsistency d) Storage space is wasted

ANS: A PTS: 1

121. The logical design, and the snapshot of the data at a given instant in time is known as? a) Instance & Relation

b) Relation & Schema c) Domain & Schema d) Schema & Instance

ANS: D PTS: 1

122. The given Query can also be replaced with\_\_\_\_\_\_\_:

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;

ANS: B PTS: 1

123. What do you mean by one to many relationships? a) One class may have many teachers

b) One teacher can have many classes

c) Many classes may have many teachers d) Many teachers may have many classes ANS: B PTS: 1

124.In the following Query, which of the following can be placed in the Query's blank portion to display the salary from highest to lowest amount, and sorting the employs name alphabetically?

SELECT \* FROM instructor

ORDER BY salary \_\_\_\_, name \_\_\_; a) Ascending, Descending

b) Asc, Desc c) Desc, Asc

d) All of the above

ANS: C PTS: 1

125. Which one of the following refers to the "data about data"? a) Directory

b) Sub Data c) Warehouse d) Meta Data

ANS: D PTS: 1

126.Which of the following refers to the level of data abstraction that describes exactly how the data actually stored?

a) Conceptual Level b) Physical Level

c) File Level

d) Logical Level

ANS: B PTS: 1

127. Which of the following refers to the number of tuples in a relation? a) Entity

b) Column

c) Cardinality

d) None of the above

ANS: C PTS: 1

128. Which one of the following is a type of Data Manipulation Command? a) Create

b) Alter c) Delete

d) All of the above

ANS: C PTS: 1

129.Which of the following is a top-down approach in which the entity's higher level can be divided into two lower sub-entities?

a) Aggregation b) Generalization c) Specialization

d) All of the above

ANS: C PTS: 1

130.In which one of the following, the multiple lower entities are grouped (or combined) together to form a single higher-level entity?

a) Specialization b) Generalization c) Aggregation

d) None of the above

ANS: B PTS: 1 131. The term "TCL" stands for\_\_\_\_\_.

a) Ternary Control Language

b) Transmission Control Language c) Transaction Central Language d) Transaction Control Language

ANS: D PTS: 1

132.Which of the following commands is used to save any transaction permanently into the database?

a) Commit b) Rollback c) Savepoint

d) None of the above

ANS: A PTS: 1

133. Which one of the following commands is used to restore the database to the last committed state?

a) Savepoint

b) Rollback c) Commit

d) Both A & B

ANS: B PTS: 1

134.Which of the following refers collection of the information stored in a database at a specific time?

a) Independence

b) Instance of the database c) Schema

d) Data domain

ANS: B PTS: 1 135. What is the relation calculus?

a) It is a kind of procedural language b) It is a non-procedural language

c) It is a high-level language

d) It is Data Definition language ANS: B PTS: 1

136. Which of the following levels is considered as the level closed to the end-users? a) Internal Level

b) External Level

c) Conceptual Level d) Physical Level

ANS: B PTS: 1

137. Which one of the following keyword is used to find out the number of values in a column? a) TOTAL

b) COUNT c) SUM

d) ADD

ANS: B PTS: 1

138. Which one of the following is commonly used to define the overall design of the database? a) Application program

b) Data definition language c) Schema

d) Source code

ANS: C PTS: 1

139. Before use of DBMS information was stored using \_\_\_\_\_\_\_\_\_\_. a) Cloud Storage

b) Data System

c) File Management System d) None of the above

ANS: C PTS: 1 140. DBMS helps to achieve:

a) [Data independence](https://t4tutorials.com/data-independence-in-dbms-database/)

b) Centralized control of data c) Both A and B

d) None of the above

ANS: C PTS: 1