Started on	Tuesday, 8 March 2022, 10:03 AM
State	Finished
Completed on	Tuesday, 8 March 2022, 10:41 AM
Time taken	38 mins 8 secs

Question **1**

Complete

Marked out of 1.00

What will be the output of the following query,

```
select distinct T.name
from instructor as T, instructor as S
where T.salary > S.salary and S.dept name = 'Biology';
```

- Find names of instructors with salary greater than that of at least two instructor in the Biology department.
- Find names of instructors with salary greater than that of some instructor in the Biology department.
- Find names of instructors with salary greater than that of all instructor in the Biology department.
- Find names of instructors with salary greater than that of at least two instructor

Question **2**

Complete

Marked out of 1.00

The following are functions of a DBMS except _____ .

- Administrating Databases
- Creating and processing forms
- Creating Databases
- Processing Data

Question **3**

Complete

Marked out of 1.00

If Database Administrator modify the structure of the data record then this modification do not affect other application is called as _____.

- Data Isolation
- Data Independance
- Data Security
- Data Integrity

Question **4**

Complete

Marked out of 1.00

Weak entities MUST satisfy which of the following structural constraints.

- Cardinality Ratio
- Existence Dependency
- Participation Constraint
- Identifying Relationship

Question **5**

Complete

Marked out of 2.00

Suppose we have two relations location(city, state, country) and weather(city, temperature, humidity, condition). What will be the query for finding the names of all cities with their temperature, humidity and countries.

- Select location.city, temperature, humidity, country from weather, location where city = select city from location where location.city = weather.city;
- Select weather.city, temperature, humidity, country from weather, location;
- Select city, temperature, humidity, country from location;
- Select location.city, temperature, humidity, country from weather, location where weather.city=location.city;

Question **6**

Complete

Marked out of 1.00

Which is not a data model?

- Entity Relationship Model
- Semantics data model
- Semi-structured data model
- Relational model
- Hierarchical data model

Question **7**

Complete

Marked out of 1.00

Creating specializations of employees based on Religion satisfies which of the following constraints? (Hindu, Muslim, Christian are the only options provided whereas some employees may have other than these three religion also)

- Overlapping
- Partial
- Total
- Disjoint

Question **8**

Complete

Marked out of 1.00

Given a set S, it's powerset is denoted by P(S). Assuming that D represents the domain of an attribute B of an entity type X, which of the following functions make sense?

- B: P(X) --> D
- B: X --> P(D)
- X: P(D) --> B
- X: B --> P(D)

Question **9**

Complete

Marked out of 1.00

The purpose of the E-R diagram is to,

- Simplify Database Programming
- Simplify Database Design
- Simplify Database Organization
- Simplify Database Access

Question **10**

Complete

Marked out of 1.00

Creating specializations of employees based on all possible Categories (Gen, SC, ST, OBC, EWS etc.) satisfies which of the following constraints?

- [x] Partial
- [x] Disjoint
- [x] Total
- [ ] Overlapping

Question **11**

Complete

Marked out of 1.00

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

- Total
- Sum
- Add
- Count

Question **12**

Complete

Marked out of 1.00

Data isolation in the file system is the result of,

- Adding the condition based on the user requirements
- Failure of the system
- Multiple files and formats
- Concurrent access by multiple users

Question **13**

Complete

Marked out of 1.00

Logical database design describes base relations, file organizations, and indexes that are used to achieve efficient access to data.

Select one:

- True
- False

Question **14**

Complete

Marked out of 1.00

Which of the following SQL command is used to select only one copy of each set of duplicate rows?

- Select Top 1
- All of the above
- Select Distinct
- Select Different
- Select Unique

Question **15**

Complete

Marked out of 1.00

Each entity is described by _____.

- Entity
- Attribute
- Relationship
- None of these

Question **16**

Complete

Marked out of 1.00

A transaction is,

- a collection of operations that performs a single logical function in a database application
- a single operations that performs a single logical function in a database application
- a collection of operations that performs multiple logical function in a database application
- a single operations that performs multiple logical function in a database application

Question **17**

Complete

Marked out of 1.00

A key defines a uniqueness constraint on the tuples in a relation. Which among the following types of keys violates this definition?

- Super key
- Candidate key
- Partial key
- Primary key

Question **18**

Complete

Marked out of 2.00

Match the concepts to the correct category of data models:

entity, attributes and relationships	Conceptual
relations, tuples, rows, fields	Physical
Record format, record orderings, access paths	Implementation

Question **19**

Complete

Marked out of 1.00

The property that apps can operate on data by invoking methods through their signatures, irrespective of how the method has been implemented, is know as _____.

- Data abstraction
- Program-data independence
- Program-operation independence
- Data model

Question **20**

Complete

Marked out of 2.00

Select the correct result of following logical expressions, (here Unknown means NULL)

I.) Unknown OR True

II.) True AND Unknown

III.) Unknown AND False

IV.) NOT Unknown

- (I.) True (II.) Unknown (III.) False (IV.) Unknown
- (I.) Unknown (II.) Unknown (III.) False (IV.) False
- (I.) True (II.) False (III.) False (IV.) Unknown
- (I.) Unknown (II.) False (III.) False (IV.) Unknown

Question **21**

Complete

Marked out of 1.00

Data dictionary is responsible for keeping the,

- Data about user
- Data about data
- Data about specific users
- Data about relation

Question **22**

Complete

Marked out of 1.00

Consider the following Query,

SELECT name, course_id FROM instructor, teaches WHERE instructor.ID= teaches.ID;

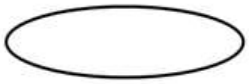
The above query can also be replaced with,

- Select name, course_id from instructor natural join teaches;
- Select name,course_id from teaches,instructor where instructor.id=course.id;
- Select course_id from instructor join teaches;
- Select name, course_id from instructor;

Question **23**

Complete

Marked out of 1.00



The following image is a symbol for _____.

- Entity
- Attribute
- Weak Entity
- Relationship

Question **24**

Complete

Marked out of 1.00

Which one of the following refers to the copies of the same data (or information) occupying the memory space at multiple places.

- Data Repository
- Data Inconsistency
- Data Mining
- Data Redundancy

Question **25**

Complete

Marked out of 2.00

If we have two relations *employee (name, salary, deptno)* and *department (deptno, deptname, address)* then select the query that cannot be expressed using the basic relational algebra
operations (U, -, x, π, σ, p)?

- Department address of every employee
- All employees of a given department
- The sum of all employees' salaries
- Employees whose name is the same as their department name

Question **26**

Complete

Marked out of 2.00

Let R and S be two relations with the following schema

R (P,Q,R1,R2,R3)

S (P,Q,S1,S2)

Where {P, Q} is the key for both schemas. Which of the following queries are equivalent?

I. $\Pi_P (R \bowtie S)$

II. $\Pi_P (R) \bowtie \Pi_P (S)$

III. $\Pi_P (\Pi_{P,Q} (R) \cap \Pi_{P,Q} (S))$

IV. $\Pi_P (\Pi_{P,Q} (R) - (\Pi_{P,Q} (R) - \Pi_{P,Q} (S)))$

- Only I and III
- Only I, III and IV
- Only I and II
- Only I, II and III

Question **27**

Complete

Marked out of 2.00

An ER model of a database consists of entity types A and B. These are connected by a relationship R which does not have its own attribute. Under which one of the following conditions, can the relational table for R be merged with that of A?

- Relationship R is one-to-many from B to A and the participation of A in R is total.
- Relationship R is many-to-one from B to A and the participation of A in R is partial.
- Relationship R is many-to-one from B to A and the participation of A in R is total.
- Relationship R is one-to-many from B to A and the participation of A in R is partial.

Question **28**

Complete

Marked out of 1.00

Creating specializations of students based on those doing Academic Research and those doing Industry Internships satisfies which of the following constraints? (It is mandatory to engage in at least one of these (Both may also be considered) as part of the Summer Internship.)

- [x] Disjoint
- [x] Partial
- [x] Total
- [ ] Overlapping

Question **29**

Complete

Marked out of 2.00

In an E-R diagram, If there is a directed double line (=>) from the relationship "*advisor*" to the entity set "*instructor*" and undirected single line from the relationship "advisor" to the entity set "student", then it denotes,

- (•) A single student can not have more than one instructor as an advisor and the instructor must be an advisor of atleast one student
- ( ) An instructor can not be an advisor of more than one student and a student must have atleast one advisor
- ( ) A student can have more than one instructor as an advisor and the instructor must be an advisor of atleast one student
- ( ) An instructor can be an advisor of more than one student and a student must have atleast one advisor

Question **30**

Complete

Marked out of 1.00

Logical data independence provides transparency between which two layers of the Three-Schema Architecture?

- (•) External and Conceptual
- ( ) External and Internal
- ( ) Conceptual and Internal

Question **31**

Complete

Marked out of 1.00

In the relational schema, any many-to-one and one-to-many relationship sets that are total on the many-side can be represented by,

- Adding a null value to the "many" side, which is not having association with one side
- Adding a null value to the "one" side which is not having association with many side
- Adding an extra attribute to the "many" side, containing the primary key of the "one" side
- Adding an extra attribute to the "one" side, containing the primary key of the "many" side

Question **32**

Complete

Marked out of 2.00

Suppose we have the relations X1(a, b) and X2(c,d). Consider the following query,

select distinct a, b
from X1, X2

The output of the above query will definitely be the same as X1 if,

- X2 has no duplicates and X1 is non-empty
- X1 has no duplicates and X2 is non-empty
- X1 and X2 have the same number of tuples
- X1 and X2 have no duplicates

Question **33**

Complete

Marked out of 1.00

The structural constraint that specifies the maximum number of relationship instances that an entity can participate in is _____.

- Existence Dependency
- Cardinality Ratio
- Participation Constraint
- Identifying Relationship

Question **34**

Complete

Marked out of 1.00

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?

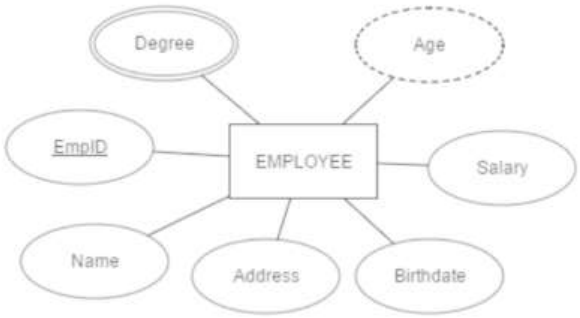
SELECT *
FROM instructor
ORDER BY salary _ _ _ _ , name _ _ _ _ ;

- Desc, Asc
- Asc, Desc
- Ascending, Descending
- Descending, Ascending

Question **35**

Complete

Marked out of 1.00



The following diagram is having the entity,

- Derived Birthdate
- Employee
- EmpID
- Degree

Question **36**

Complete

Marked out of 1.00

An ERs purpose is to support a user's perception of the data and conceal the technical aspects associated with database design.

Select one:

- True
- False

Question **37**

Complete

Marked out of 2.00

Find the names of those students with section and marks whose marks grater than 60 but section must be either A or B.

- Select name, section, marks from student_data where section = A and section = B or marks > 60;
- Select name, section, marks from student_data where section = A or B and marks > 60;
- Select name, section, marks from student_data where section = A or section = B and marks > 60;
- Select name, section, marks from student_data where section = A and section = B and marks > 60;
- Select name, section, marks from student_data where section = A or section = B or marks > 60;

Question **38**

Complete

Marked out of 2.00

Suppose we have two relations location(city, state, country) and weather(city, temperature, humidity, condition). What will be the query for finding the countries where the weather condition is cloudy.

- Select country from location where condition = 'cloudy';
- Select country from location where city intersect (select city from weather where condition = 'cloudy');
- Select country from location where city in (select city from weather where condition = 'cloudy')
- Select country from location where city in (select city from location where condition = 'cloudy');
- Select country from location where city union (select city from weather where condition = 'cloudy');

Question **39**

Complete

Marked out of 1.00

The three-schema architecture was proposed to help achieve and visualize which of the following characteristics of the database approach?

- [ ] Data Abstraction
- [ ] Multiple User View
- [x] Self-describing nature of a database
- [x] Sharing of Data
- [x] Multiuser Transaction Processing

Question **40**

Complete

Marked out of 1.00

The structural constraint that specifies the minimum number of relationship instances that an entity can participate in is _____.

- (•) Cardinality Ratio
- ( ) Existence Dependency
- ( ) Participation Constraint
- ( ) Identifying Relationship

◄ Quiz1 (4 March 2022)

Jump to...

Mid Semester Online Part 2 (8 March 2022) ►