

PUNE VIDYARTHI GRIHA'S
COLLEGE OF SCIENCE & TECHNOLOGY
Regular Examination December-2020
Computer Science (Semester-I)

Note: 1. Attempt any 40 from given 50 Question

Total 60 Marks

2. Each correct question Carry 1.5 marks

1 hour

1. 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

2. Entity is a _____

- a) Object of relation
- b) Present working model
- c) Thing in real world
- d) Model of relation

3. The descriptive property possessed by each entity set is _____

- a) Entity
- b) Attribute
- c) Relation
- d) Model

4. The function that an entity plays in a relationship is called that entity's _____

- a) Participation
- b) Position
- c) Role
- d) Instance

5. 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

6. The attribute AGE is calculated from DATE_OF_BIRTH. The attribute AGE is

- a) Single valued
- b) Multi valued
- c) Composite
- d) Derived

7. Not applicable condition can be represented in relation entry as

- a) NA
- b) 0
- c) NULL
- d) Blank Space

8. Which of the following can be a multivalued attribute?

- a) Phone_number
- b) Name
- c) Date_of_birth
- d) All of the mentioned

9. Which of the following is a single valued attribute

- a) Register_number
- b) Address
- c) SUBJECT_TAKEN
- d) Reference

10. In a relation between the entities the type and condition of the relation should be specified. That is called as _____ attribute.

- a) Descriptive
- b) Derived
- c) Recursive
- d) Relative

11. _____ express the number of entities to which another entity can be associated via a relationship set.

- a) Mapping Cardinality
- b) Relational Cardinality
- c) Participation Constraints
- d) None of the mentioned

12. An entity in A is associated with at most one entity in B, and an entity in B is associated with at most one entity in A. This is called as

- a) One-to-many
- b) One-to-one
- c) Many-to-many

d) Many-to-one

13. An entity in A is associated with at most one entity in B. An entity in B, however, can be associated with any number (zero or more) of entities in A.

- a) One-to-many
- b) One-to-one
- c) Many-to-many
- d) Many-to-one

14. Data integrity constraints are used to:

- a) Control who is allowed access to the data
- b) Ensure that duplicate records are not entered into the table
- c) Improve the quality of data entered for a specific property
- d) Prevent users from changing the values stored in the table

15. Establishing limits on allowable property values, and specifying a set of acceptable, predefined options that can be assigned to a property are examples of:

- a) Attributes
- b) Data integrity constraints
- c) Method constraints
- d) Referential integrity constraints

16. The union operation is represented by

- a) \cap
- b) \cup
- c) $-$
- d) $*$

17. The intersection operator is used to get the _____ tuples.

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

18. The union operation automatically _____ unlike the select clause.

- a) Adds tuples
- b) Eliminates unique tuples
- c) Adds common tuples
- d) Eliminates duplicate

19. 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

20.

```
(SELECT course id
FROM SECTION
WHERE semester = 'Fall' AND YEAR= 2009)
EXCEPT
(SELECT course id
FROM SECTION
WHERE semester = 'Spring' AND YEAR= 2010);
```

This query displays

- a) Only tuples from second part
- b) Only tuples from the first part which has the tuples from second part
- c) Tuples from both the parts
- d) Tuples from first part which do not have second part

21. For like predicate which of the following is true.

- i) % matches zero OF more characters.
 - ii) _ matches exactly one CHARACTER.
- a) i-only
 - b) ii-only

- c) i & ii
- d) None of the mentioned

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

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

23. _____ clause is an additional filter that is applied to the result.

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

24. _____ joins are SQL server default

- a) Outer
- b) Inner
- c) Equi
- d) None of the mentioned

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

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

26.

Name

Annie

Bob

Callie

Derek

Which of these query will display the the table given above ?

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

27. 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

28. 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

29. 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

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

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

31. 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;

32.SELECT * FROM employee WHERE salary>10000 AND dept_id=101;

Which of the following fields are displayed as output?

- a) Salary, dept_id
- b) Employee
- c) Salary
- d) All the field of employee relation

33.

Employee_id	Name	Salary
1001	Annie	6000
1009	Ross	4500
1018	Zeith	7000

This is Employee table.

Which of the following employee_id will be displayed for the given query?

```
SELECT * FROM employee WHERE employee_id>1009;
```

- a) 1009, 1001, 1018
- b) 1009, 1018
- c) 1001
- d) 1018

34. Which of the following statements contains an error?

- a) Select * from emp where empid = 10003;
- b) Select empid from emp where empid = 10006;
- c) Select empid from emp;
- d) Select empid where empid = 1009 and lastname = 'GELLER';

35. In the given query which of the keyword has to be inserted?

```
INSERT INTO employee _____ (1002,Joey,2000);
```

- a) Table
- b) Values
- c) Relation
- d) Field

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

- a) Function
- b) View
- c) Procedure
- d) None of the mentioned

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

- a) Create view v as "query name";
- b) Create "query expression" as view;
- c) Create view v as "query expression";
- d) Create view "query expression";

```
38.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

39. Materialised views make sure that

- a) View definition is kept stable
- b) View definition is kept up-to-date
- c) View definition is verified for error
- d) View is deleted after specified time

40. 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

41. 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 by the 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

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

- a) With
- b) Check
- c) With check
- d) All of the mentioned

43. Consider the two relations instructor and department

Instructor:

ID	Name	Dept_name	Salary
1001	Ted	Finance	10000
1002	Bob	Music	20000
1003	Ron	Physics	50000

Department:

Dept_name	Building	Budget
Biology	Watson	40000
Chemistry	Painter	30000
Music	Taylor	50000

Which of the following is used to create view for these relations together?

- a) CREATE VIEW instructor_info AS
SELECT ID, name, building

```
FROM instructor, department
WHERE instructor.dept name= department.dept name;
```

b)CREATE VIEW instructor_info

```
SELECT ID, name, building
FROM instructor, department;
```

c)CREATE VIEW instructor_info AS

```
SELECT ID, name, building
FROM instructor;
```

d)CREATE VIEW instructor_info AS

```
SELECT ID, name, building
FROM department;
```

44. For the view Create view instructor_info as

```
SELECT ID, name, building
FROM instructor, department
WHERE instructor.dept name= department.dept name;
```

If we insert tuple into the view as insert into instructor info values ('69987', 'White', 'Taylor');

What will be the values of the other attributes in instructor and department relations?

- a) Default value
- b) Null
- c) Error statement
- d) 0

45.CREATE VIEW faculty AS

```
SELECT ID, name, dept name
FROM instructor;
```

Find the error in this query.

- a) Instructor
- b) Select
- c) View ...as
- d) None of the mentioned

46. 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

47. 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)

48. SELECT COUNT (____ ID)

FROM teaches

WHERE semester = 'Spring' AND YEAR = 2010;

If we do want to eliminate duplicates, we use the keyword _____ in the aggregate expression.

- a) Distinct
- b) Count
- c) Avg
- d) Primary key

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

- a) Count(attribute)
- b) Count(*)
- c) Avg

d) Sum

50. A Boolean data type that can take values true, false, and _____

a) 1

b) 0

c) Null

d) Unknown