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Question Bank

Class: S.Y.B. Sc.IT

Semester: III

Subject: Database Management System

Unit I

1. What do you mean by one to many relationship between Teacher and Class table?
 - 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

2. In one-to-many relationship, the table on 'many' sides is called _____
 - a) Parent
 - b) Child
 - c) Sister
 - d) Master

3. Which of the following enables us to view data from a table based on a specific criterion
 - a) Form
 - b) Query
 - c) Macro
 - d) Report

4. This key that uniquely identifies each record is called :
 - a) Primary Key
 - b) Key Record
 - c) Unique Key

d) Field Name

5. Which name must be unique within a database ?

- a) Table
- b) Field
- c) Record
- d) Character

6. In an ER Diagram an entity set is represented by_____.

- a) Rectangle
- b) Ellipse
- c) Diamond
- d) Circle

7. The collection of related data is termed as _____

- a) Data
- b) Database
- c) DBMS
- d) Information

8. The process of hiding irrelevant details from the user is called

- a) data abstraction
- b) data encryption
- c) data integrity
- d) data encapsulation

9. The total number of attributes which in the relation is called the _____ of the relation.

- a) Table
- b) Tuple
- c) Degree
- d) Attribute

10. _____ is an extension of the Hierarchical model.

- a) Relational Model
- b) Data Model

- c) Network Model
- d) ER-Model

11. Data about data is normally termed as

- a) Directory
- b) Data Bank
- c) Meta Data
- d) Bank of Data

12. Which among the following is NOT Valid level of data abstraction in DMBS ?

- a) Physical Level
- b) Remote Level
- c) Logical Level
- d) View Level

13. Type data abstraction which allows conceptual representation of data in database management system is considered as

- a) logical design model
- b) data model
- c) interface model
- d) user friendly model

14. 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

15. Entity is a _____

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

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

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

17. 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
18. The attribute AGE is calculated from DATE_OF_BIRTH. The attribute AGE is
- a) Single valued
 - b) Multi valued
 - c) Composite
 - d) Derived
19. 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
20. In hierarchical database a hashing function is used to locate the
- a) Root
 - b) Collisions
 - c) Primary key
 - d) Duplicate records
21. DBA stands for
- a) Data bank access
 - b) Database Access
 - c) Data Bank Administrator
 - d) Database Administrator
22. Which of the following are the properties of entities?
- a) Groups
 - b) Table
 - c) Attributes
 - d) Switchboards

23. Between the users and the database itself, a DBMS will act as

- a) Barrier
- b) Interface
- c) Referee
- d) Obstacle

24. Which of these is not a database object?

Index

Sequence

Cursor

Trigger

25. Which one of the following is not an object based logical model?

- a) The Binary Model
- b) The entity relational model
- c) The infological model
- d) Network Model

26. Data about data is normally termed as _____

- a) Directory
- b) Databank
- c) Metadata
- d) Dictionary

27. Which of the following is the oldest database model?

- a) Relational
- b) Hierarchical
- c) Physical
- d) Network

28. The way a particular application views the data from the database that the application uses is a

- a) Module
- b) Relational Model
- c) Schema
- d) Sub- Schema

29. Key to represent relationship between tables is called

- a) Primary key
- b) Secondary key
- c) Foreign Key
- d) Unique Key

30. What is a relationship called when it is maintained between two entities?

- a) Unary
- b) Binary
- c) Ternary
- d) Quaternary

31. A set of possible data values is called

- a) Attribute
- b) Degree
- c) Tuple
- d) Domain

32. Which of the following is another name for weak entity?

- a) Child
- b) Owner
- c) Domain
- d) Parent

33. _____ is nothing but a single row of a table, which contains a single record.

- a) Tuple
- b) Relational schema
- c) Degree
- d) Table

34. ____ are conditions applied on the data.

- a) Constraints
- b) Relationships
- c) Degree
- d) Entities

35. _____ database model organizes data into a tree-like-structure, with a single root, to which all the other data is linked.

- a) Hierarchical Model
- b) Network Model
- c) Relational Data Model
- d) Entity Relationship Model

36. In unified modelling language the diagram captures the system static structure and provide foundation for other models is called _____

- a) Deployment diagrams
- b) Class diagrams
- c) Component diagrams
- d) Object diagrams

37. Tables can have hundreds, thousands, sometimes even millions of rows of data. These rows are often called _____

- a) Tuples
- b) relationships
- c) *records*
- d) columns

38. The view of total database content is

- a) Conceptual view
- b) Internal view
- c) External view
- d) Physical view

39. The database schema is written in

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

40. In hierarchical model records are organized as

- a) Graph
- b) Lists
- c) Links
- d) Tree

41. SET concept is used in

- a) Hierarchical Model
- b) Network Model
- c) Relational Data Model
- d) Entity Relationship Model

42. The RDBMS terminology for a row is

- a) Tuple
- b) Relation.
- c) Attribute
- d) Degree

43. In ER diagram derived attribute is represented as

- a) Ellipse
- b) Dashed ellipse
- c) Rectangle
- d) Triangle

44. Collections of operations that form a single logical unit of work are called

-
- a) Views
 - b) Networks
 - c) Units
 - d) Transactions

45. Which of the following is not a property of a transaction?

- a) Atomicity
- b) Simplicity
- c) Isolation
- d) Durability

46. Which of the following enables us to view data from a table based on a specific criterion

- a) Form
- b) Query
- c) Macro
- d) Report

47.Count Function in SQL returns the number of

- a) Values
- b) Distinct Value
- c) Groups
- d) Columns

48.Which of the following are properties of entities?

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- b) Table
- c) Attributes
- d) Switchboards

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- b) Relation
- c) Attribute
- d) Degree

UNIT II

1. 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
2. Which one of the following attributes can be taken as a primary key?
- a. Name
 - b. Street
 - c. Id
 - d. Department
3. 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
4. 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
5. A set of possible data values is called
- a. Attribute
 - b. Degree
 - c. Tuple
 - d. Domain
6. In the _____ normal form, a composite attribute is converted to individual attributes.
- a. First

- b. Second
 - c. Third
 - d. Fourth
7. A table on the many side of a one to many or many to many relationship must:
- a. Be in Second Normal Form (2NF)
 - b. Be in Third Normal Form (3NF)
 - c. Have a single attribute key
 - d. Have a composite key
8. Tables in second normal form (2NF):
- a. Eliminate all hidden dependencies
 - b. Eliminate the possibility of an insertion anomalies
 - c. Have a composite key
 - d. Have all non key fields depended on the whole primary key
9. Functional Dependencies are the types of constraints that are based on_____
- a. Key
 - b. Key revisited
 - c. Superset key
 - d. Composite key
10. Which is a bottom-up approach to database design that design by examining the relationship between attributes:
- a. Functional dependency
 - b. Database modelling
 - c. Normalization
 - d. Decomposition
11. Which forms simplifies and ensures that there are minimal data aggregates and repetitive groups:
- a. 1NF
 - b. 2NF
 - c. 3NF

d. 5NF

12. Which forms has a relation that possesses data about an individual entity:

- a. 2NF
- b. 3NF
- c. 4NF
- d. 5NF

13. 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

14. Which forms are based on the concept of functional dependency:

- a. 1NF
- b. 2NF
- c. 3NF
- d. 4NF

15. _____ is preferred method for enforcing data integrity

- a. Constraints
- b. Stored Procedure
- c. Triggers
- d. Cursors

16. If every non-key attribute is functionally dependent primary key, then the relation will be in

- a. First normal form
- b. Second normal form
- c. Third form
- d. Fourth normal form

17. If an attribute of a composite key is dependent on an attribute of the other composite key, a normalization called _____ is needed.

- a. DKNF
- b. BCNF
- c. Fourth
- d. Third

18. A dependency exist between two columns when

- a. Together they constitute a composite key for the table
- b. Knowing the value in one column determines the value stored in another column
- c. The table is in 3NF
- d. Together they constitute a foreign key

19. A relational database consists of a collection of

- Table
- Database
- Rows
- Columns

20. Term tuple is used to refer to a

- Row
- Column
- Database
- Attributes

21. For each attribute of a relation, there is a set of permitted values, called the _____ of that attribute

- Domain
- Atomic
- Null
- Entities

22. A _____ is a set of one or more attributes that, taken collectively, allow us to identify uniquely a tuple in the relation.

Foreign Key

Primary Key

Super Key

Secondary Key

23. A language in which a user requests information from the database.

DDL language

Non-Procedural Language

Programming Language

Query Language

24. Inventor of relational database

Dr Edgar 'Ted' Codd

Frank Cary

Joe McCarthy

Mc torent

25. The _____ operation allows the combining of two relations by merging pairs of tuples, one from each relation, into a single tuple.

Join

Cartesian

Union

Intersection

26. _____ is a technique of organizing the data in the database.

a. Database Normalisation

b. Localizations

c. Locating database

d. Mc Carthy rules

27. Problem without Normalisation select wrong answer

- a. Insertion
- b. Updation
- c. Deletion
- d. Creation

28. Normalization rule are divided into following normal form. Select wrong answer

- a. First Normal Form
- b. Third Normal Form
- c. BCNF
- d. Sixth Normal Form

29. For super key chooses appropriate correct answer.

- a. This is sufficient to identify the unique record in the table.
- b. key of the table is a columns or combination of some columns whose values is
Uniquely identify a single record in the table.
- c. Key of the table consist the column and combination of some columns which
Meant for data retrieval purpose.
- d. A Column (or combination of Columns) in the one table whose values is
match the primary key In another table.

30. A relation is a

- a. Subset of a Cartesian product of a list of attributes
- b. Subset of a Cartesian product of a list of Domains
- c. Subset of a Cartesian product of a list of tuples
- d. Subset of a Cartesian product of a list of relations.

31. Minimal Super keys are called.

- a. Schema keys
- b. Candidate Keys
- c. Domains Key

d. Attribute keys

32. Data Manipulation Language (DML) is not to

- a. Create information table in the Database
- b. Insertion of new information into the Database.
- c. Deletion of information in the Database.
- d. Modification of information in the Database.

33. Which of the following is true regarding Referential Integrity?

- a. Every primary-key value must match a primary-key value in an associated table.
- b. Every primary-key value must match a foreign-key value in an associated table.
- c. Every foreign-key value must match a primary-key value in an associated table.
- d. Every foreign-key value must match a foreign-key value in an associated table.

34. Domain constraints, functional dependency and referential integrity are special forms of _____.

- a. Foreign key
- b. Primary Key
- c. Assertion
- d. Referential Constraint

35. 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

36. _____ operator is used to retrieve data from multiple relations.

- a. Join
- b. Projection

- c. Selection
- d. Calculus

37. _____ is used for selecting those tuples that satisfy the given condition.

- a. TRC
- b. DRC
- c. Relational Operator
- d. DML

38. Relational calculus is a _____.

- a. Procedural language
- b. Non-Procedural query language
- c. Structural language
- d. Functional language

39. Relational Calculus is _____

- a. equivalent to relational algebra in its capability
- b. it is stronger than relational algebra
- c. it is based on programming language
- d. it is based on predicate calculus of formal logic

40. In Tuple Calculus, a query is expressed as

- a. $\{t \mid P(t)\}$
- b. $\{c_1, c_2, \dots \mid F(c_1, c_2, \dots, c_n)\}$
- c. $\{t \mid F(c_1, c_2, \dots)\}$
- d. $\{F(C)(P) \mid (t)\}$

41. In the _____ relational calculus, the variables take their values from domains of attributes.

- a. TRC
- b. DRC
- c. DDL
- d. DRL

42. In Tuple Relational Calculus, _____ defines as every tuples of relation R combines with every relation S.

- a. Cartesian product operation
- b. Selection
- c. Join Operator
- d. Division Operator

43. Domain relational calculus(DRC) is a calculus that was introduced by

- a. Michel Lacroix
- b. Edgar F.Codd
- c. Peterson
- d. Edision

44. Relational Calculus is the _____

- a. Declarative language
- b. Structural language
- c. Procedural language
- d. Programming language

45. In _____ filtering variable uses tuple of relation.

- a. Tuple Relational Calculus
- b. Domain Relational Calculus
- c. Programming language
- d. DML

46. The Selection operation is defined by the symbol called _____

- a. σ
- b. \neg
- c. \sim
- d. \wedge

47. This symbol Π is used for _____

- a. Projection
- b. Union
- c. Selection
- d. Join

48. _____ operation gave alternate name to the given column or to any table by using the operator.

- a. Rename
- b. Projection
- c. Set operation
- d. Division

49. Cartesian product in relational algebra is_____.

- a. Unary operator
- b. Binary operator
- c. Ternary operator
- d. Selection

50. Which of the following constitutes a basic set of operations for manipulating relational data?

- a. Predicate calculus
- b. Relational calculus
- c. Relational algebra
- d. SQL

Unit III

1. A _____ key is a minimal super key
 - a) Primary
 - b) Foreign
 - c) Candidate
 - d) Non-Prime

2. By default, which key creates Clustered index?
 - a) Foreign Key
 - b) Unique Key
 - c) Primary Key
 - d) Candidate Key

3. The following Constraint must be always column level.
 - a) Not Null
 - b) Unique Constraint
 - c) Check Constraint
 - d) Default Constraint

4. _____ integrity validates the data before getting stored in the columns of the table.
 - a) Entity
 - b) Data

- c) Domain
 - d) User-defined
5. _____ integrity ensures the relationships between tables remain preserved as data is inserted, deleted & modified.
- a) Referential
 - b) Primary
 - c) Domain
 - d) Data
6. This means the capacity to change the schema at one level of database system without having to change the schema at the next higher level.
- a) Security
 - b) View
 - c) Data independence
 - d) Table
7. Which key accepts multiple NULL values?
- a) Foreign Key
 - b) Unique Key
 - c) Primary Key
 - d) Natural Key
8. A Foreign key is combined with a foreign key creates
- a) Parent child relationship between the tables that connect them
 - b) Many-Many relationship between the tables that connect them
 - c) Network model between the tables that connect them
 - d) Many-One relationship between the tables that connect them
9. Which of the following is not the DDL statements?
- a) Create
 - b) Drop
 - c) Alter
 - d) Insert
10. In SQL, which command(s) is(are) used to change a table's storage characteristics?
- a) ALTER TABLE
 - b) MODIFY TABLE

- c) CHANGE TABLE
 - d) UPDATE TABLE
11. _____ defines rules regarding the values allowed in columns and is the standard mechanism for enforcing database integrity.
- a) Column
 - b) Constraint
 - c) Index
 - d) Trigger
12. Which command is used for removing a table and all its data from the database:
- a) Create command
 - b) Drop table command
 - c) Alter table command
 - d) Update table command
13. Which command allows the removal of all rows from a table but flushes a table more efficiently since no rollback information is retained:
- a) TRUNCATE
 - b) Create
 - c) Drop
 - d) Alter
14. DCL stands for :
- a) Data Control Language
 - b) Data Cancel Language
 - c) Data Concept Level
 - d) Data Concept Language
15. _____ allows us to identify the entity in entity set.
- a) Key
 - b) Domain
 - c) Tuple
 - d) Row
16. ER diagram depicts _____ structure of database graphically.
- a) View
 - b) Architectural
 - c) Logical
 - d) Model
17. Ellipse is the symbol of _____ in ER diagram.
- a) Relationship

- b) Derived
 - c) Multivalued
 - d) Attributes
18. _____ describes the logical design of the database.
- a) Database Instance
 - b) Database Schema
 - c) Relational Schema
 - d) Relational Instance
19. For adding new column in a table _____ command is used.
- a) Update
 - b) Alter
 - c) Delete
 - d) Change
20. Following is not the aggregate function.
- a) String()
 - b) Avg()
 - c) Sum()
 - d) Count()
21. To retrieve the values from database, the command is _____
- a) Write
 - b) Read
 - c) Select
 - d) Insert
22. A transaction completes its execution is said to be
- a) Committed
 - b) Aborted
 - c) Rolled back
 - d) Failed
23. Which of the following keyword is used with Data Control Language (DCL) statements?
- a) SELECT
 - b) INSERT
 - c) DELETE
 - d) GRANT
24. The _____ construct returns true if a given tuple is present in the subquery.
- a) not exists
 - b) present

- c) not present
- d) exists

25. Which of the following clause is mandatorily used in a sub-query?

- a) SELECT
- b) WHERE
- c) ORDER BY
- d) GROUP BY

26. The existence test is performed in subquery using _____ keyword.

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

27. Which of the following multi-row operators can not be used with a sub-query?

- a) IN
- b) ANY
- c) ALL
- d) AND

28. To describe the structure of the table, _____ command is used.

- a) Delete
- b) Edit
- c) Desc
- d) Append

29. To find the maximum value in a given set of values the function used is _____

- a) Avg()
- b) Sum()
- c) Count(*)
- d) Max()

30. You can delete a view with the _____ command

- a) DELETE VIEW
- b) REMOVE VIEW
- c) DROP VIEW
- d) DIGG VIEW

31. _____ command is used for the creation of views in database.

- a) Delete

- b) Drop
 - c) alter
 - d) Create
32. A many to many relationship between two entities usually results in _____ tables
- a) One
 - b) Two
 - c) Three
 - d) Four
33. Delete command without WHERE clause can be used to delete _____
- a) All rows from the table
 - b) One row from the table
 - c) None of the rows in the table
 - d) Selected rows in the table.
34. Online Catalog in the database is synonym to _____
- a) Data Dictionary
 - b) Sequence
 - c) Heaped Files
 - d) Joins
35. Which of the following is not the type of SQL statement?
- a) Primary
 - b) Foreign
 - c) Alternate
 - d) Unique
36. A virtual table, based on another table is called as _____
- a) Just another table
 - b) Relation
 - c) View
 - d) Query Result
37. To append the number of tuples in a table, _____ command is used.
- a) Drop
 - b) Insert
 - c) Index
 - d) Select
38. SQL ALTER command can be used to _____
- a) Change the table structure

- b) Add rows in the table
- c) Delete rows from the table
- d) Edit the rows in the table.

39. The wild characters used in SQL query are _____ & _____

- a) ' _ ' %'
- b) '+ ' %'
- c) '% ' #'
- d) ' _ ' #'

40. To compare list of values, range _____ constraint is used.

- a) Unique
- b) Check
- c) Default
- d) Primary

41. Count() in SQL returns a number of _____.

- a) Columns
- b) Rows
- c) Distinct values
- d) Keys

42. The statement in SQL which allows to change the definition of a table is

- _____
- a) Alter
 - b) Drop
 - c) Create
 - d) Select

43. All columns in a table are by default _____

- a) Nullable
- b) Not Nullable
- c) Zero
- d) Empty

44. Which of the following is not a comparison operator in SQL?

- a) =

- b) LIKE
- c) BETWEEN
- d) :=

45. The _____ operator is used to compare a value to a list of literals values that have been specified.

- a) BETWEEN
- b) ANY
- c) ALL
- d) IN

46. _____ function divides one numeric expression by another and returns the remainder.

- a) Power()
- b) Mod()
- c) Round()
- d) Remainder()

47. A data manipulation command the combines the records from one or more tables is called _____

- a) JOIN
- b) PROJECT
- c) SELECT
- d) MINUS

48. View can be created by using the following syntax

- a) CREATE OR UPDATE VIEW view_name AS
SELECT column_name(s)
FROM table_name
WHERE condition
- b) UPDATE OR REPLACE VIEW view_name AS
SELECT column_name(s)
FROM table_name
WHERE condition
- c) CREATE OR REPLACE VIEW view_name AS
SELECT column_name(s)

FROM table_name
WHERE condition

d) REPLACE OR UPDATE VIEW view_name AS
SELECT column_name(s)
FROM table_name
WHERE condition

49. _____ data type can store unstructured data.

- a) Raw
- b) Char
- c) Numeric
- d) Byte

50. Materialized 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

Unit IV

1. A transaction completes its execution is said to be

- a. Committed
- b. Aborted
- c. Rolled back
- d. Failed

2. The process of managing simultaneous operations on the database without having them interfere with one another is

- a. Serializability
- b. Recoverability
- c. Concurrency control
- d. Transaction management

3. A schedule where the operations of each transaction are executed consecutively without any other interference from other transactions is called
 - a. Non-serial schedule
 - b. Serial schedule
 - c. Recoverable schedule
 - d. Non-recoverable schedule

4. Which of the following is not a deadlock handling strategy?
 - a. Deadlock prevention
 - b. Timeout
 - c. Deadlock detection and recovery
 - d. Deadlock annihilation

5. Which of the following does refer to the size of the data item chosen as the unit of protection by a concurrency control program?
 - a. Granularity
 - b. Lock
 - c. Starvation
 - d. Timestamp

6. Which of the following hashing techniques does allow a hash file to expand and shrink its number of buckets dynamically without needing a directory?
 - a. Linear hashing
 - b. Extensible hashing
 - c. Internal hashing
 - d. External hashing

7. Which of the following indexes is based on the values being uniformly distributed using a mathematical function?
 - a. Ordered index
 - b. Hashed index
 - c. Dense index
 - d. Sparse index

8. A join in which the joining condition is based on equality between values in the common columns is called
 - a. Equi-join

- b. lateral join
 - c. Natural join
 - d. Left join
9. A type of query that is placed within a WHERE or HAVING clause of another query is called
- a. Master query
 - b. Query
 - c. Superquery
 - d. Subquery
10. The entity integrity rule states that
- a. No primary key attribute can be null
 - b. Referential integrity must be maintained across all entities
 - c. Each entity must have a primary key
 - d. A primary key must have only one attribute
11. If a transaction has obtained a _____ lock, it can read but cannot write on the item
- a. Shared mode
 - b. Exclusive mode
 - c. Read only mode
 - d. Write only mode
12. A transaction can proceed only after the concurrency control manager _____ the lock to the transaction
- a. Grants
 - b. Requests
 - c. Allocates
 - d. Response
13. If a transaction can be granted a lock on an item immediately in spite of the presence of another mode, then the two modes are said to be _____
- a. Concurrent
 - b. Equivalent
 - c. Compatible
 - d. Executable

14. A transaction is made to wait until all _____ locks held on the item are released
- Compatible
 - Incompatible
 - Concurrent
 - Equivalent
15. The situation where no transaction can proceed with normal execution is known as _____
- Road block
 - Deadlock
 - Execution halt
 - Abortion
16. The protocol that indicates when a transaction may lock and unlock each of the data items is called as _____
- Locking protocol
 - Unlocking protocol
 - Granting protocol
 - Conflict protocol
17. If a transaction T_i may never make progress, then the transaction is said to be _____
- Deadlocked
 - Starved
 - Committed
 - Rolled back
18. The two phase locking protocol consists which of the following phases?
- Growing phase
 - Shrinking phase
 - More than one of the mentioned
 - Expansion Phase
19. Which of the following is a transaction isolation level as specified by SQL standard?

- a. Serializable
 - b. Repeatable read
 - c. Read committed
 - d. Write committed
20. _____ allows only committed data to be read and further requires that no other transaction is allowed to update it between two reads of a data item by a transaction.
- a. Read uncommitted
 - b. Serializable
 - c. Repeatable read
 - d. Read committed
21. When is a timestamp allotted
- a. When execution begins
 - b. When execution is taking place
 - c. When execution is completed
 - d. When execution is midstate
22. In _____ isolation each transaction is given its own version of the database
- a. Timestamp
 - b. Snapshot
 - c. Lock based
 - d. Relation Based
23. What is the disadvantage of locking?
- a. Does not control concurrency
 - b. Is not atomic
 - c. Is not durable
 - d. Has a poor degree of concurrency
24. A transaction that performs only one operation is called as a _____
- a. Partial schedule
 - b. Complete schedule
 - c. Dependent schedule
 - d. Independent schedule

25. The phenomenon in which one failure leads to a series of transaction rollbacks is called as _____
- Cascading rollback
 - Cascadeless rollback
 - Cascade cause
 - Cascadeless cause
26. A _____ is one where, for each pair of transactions T_i and T_j such that T_j reads a data item previously written by T_i , the commit operation of T_i appears before the commit operation of T_j
- Partial schedule
 - Dependent schedule
 - Recoverable schedule
 - Independent schedule
27. The average time for a transaction to be completed after it has been submitted is called as _____
- Minimum response time
 - Average response time
 - Average reaction time
 - Minimum reaction time
28. If a schedule is equivalent to a serial schedule, it is called as a _____
- Serializable schedule
 - Equivalent schedule
 - Committed schedule
 - None of the mentioned
29. I and J are _____ if they are operations by different transactions on the same data item, and at least one of them is a write operation.
- Conflicting
 - Overwriting
 - Isolated
 - Durable

30. If a schedule S can be transformed into a schedule S' by a series of swaps of non-conflicting instructions, then S and S' are
- Non conflict equivalent
 - Equal
 - Conflict equivalent
 - Isolation equivalent
31. A schedule is _____ if it is conflict equivalent to a serial schedule.
- Conflict serializable
 - Conflicting
 - Non serializable
 - Serializable
32. The set of _____ in a precedence graph consists of all the transactions participating in the schedule
- Vertices
 - Edges
 - Directions
 - Path
33. A _____ of the transactions can be obtained by finding a linear order consistent with the partial order of the precedence graph.
- Serializability order
 - Direction graph
 - Precedence graph
 - Scheduling scheme
34. Which of the following is the most expensive method?
- Timestamping
 - Plain locking
 - Predicate locking
 - Snapshot isolation
35. Collections of operations that form a single logical unit of work are called _____
- Views
 - Networks

- c. Units
- d. Transactions

36. The “all-or-none” property is commonly referred to as _____

- a. Isolation
- b. Durability
- c. Atomicity
- d. Conjunctivitis

37. Execution of transaction in isolation preserves the _____ of a database

- a. Atomicity
- b. Consistency
- c. Durability
- d. Complex

38. Which of the following is not a property of a transaction?

- a. Atomicity
- b. Simplicity
- c. Isolation
- d. Durability

39. Which of the following systems is responsible for ensuring durability?

- a. Recovery system
- b. Atomic system
- c. Concurrency control system
- d. Compiler system

40. Which of the following is not a transaction state?

- a. Active
- b. Partially committed
- c. Failed
- d. Compensated

41. The execution sequences in concurrency control are termed as _____

- a. Serials
- b. Schedules
- c. Organizations

d. Time tables

42. The scheme that controls the interaction between executing transactions is called as _____

- a. Concurrency control scheme
- b. Multiprogramming scheme
- c. Serialization scheme
- d. Schedule scheme

43. Transaction processing is associated with everything below except

- a. Producing detail, summary, or exception reports
- b. Recording a business activity
- c. Confirming an action or triggering a response
- d. Maintaining data

44. All lock information is managed by a _____, which is responsible for assigning and policing the locks used by the transactions.

- a. scheduler
- b. DBMS
- c. lock manager
- d. locking agent

45. According to the ANSI SQL standard, when does a transaction begin?

- a. with use of the START command
- b. when the first SQL statement is encountered
- c. with the BEGIN command
- d. with the BEGIN TRANSACTION command

46. The _____ lock allows concurrent transactions to access the same row as long as they require the use of different fields within that row.

- a. table-level
- b. page-level
- c. row-level
- d. field-level

47. All transactions are controlled and executed by the DBMS (subject to some limitations) to guarantee database _____.

- a. integrity

- b. uniqueness
- c. consistency
- d. design

48. The three basic techniques to control deadlocks are: deadlock ____, deadlock detection, and deadlock avoidance.

- a. prevention
- b. prohibition
- c. rollback
- d. commits

49. The ____ statement is used to end a successful transaction.

- a. COMMIT
- b. DONE
- c. END
- d. QUIT

50. A DBMS uses a transaction ____ to keep track of all transactions that update the database

- a. log
- b. table
- c. block
- d. statement

Unit V

1. __How to give single line comment in PL/SQL
 - a. //
 - b. /*
 - c. --
 - d. <--

2. PL/SQL is _____ to SQL.
 - a. new
 - b. extension
 - c. main
 - d. important

3. Find invalid declaration
 - a. v_number1 NUMBER(10);
 - b. v_num NUMBER := 100;
 - c. v_astring VARCHAR2(2) NOT NULL;
 - d. v_str VARCHAR2(1) NOT NULL := 'Y';

4. Which package is get used to print output on screen
 - a. DBMS_PRINT
 - b. DBMS_OUTPUT
 - c. DBMS_SHOW
 - d. DBMS_COUT

5. Which one is invalid procedure?
 - a. PUT
 - b. PUT_LINE
 - c. NEW_LINE
 - d. NEW

6. PL/SQL groups the syntax of the programs into units called _____.
 - a. sections
 - b. blocks

- c. parts
- d. queries

7. PL/SQL named blocks are called _____

- a. subprograms
- b. anonymous
- c. code
- d. query

8. PL/SQL unnamed blocks are called _____

- a. subprograms
- b. anonymous
- c. code
- d. query

9. _____ can be referred as either function or procedures.

- a. subprograms
- b. anonymous
- c. code
- d. query

10. DECLARE section begins with the keyword DECLARE and ends when the keyword _____

- a. END
- b. BEGIN
- c. END DECLARE
- d. STOP

11. EXECUTABLE section starts with the keyword _____

- a. START
- b. NEW
- c. BEGIN
- d. EXECUTE

12. Which one is not the category of datatype in PL/SQL

- a. Scalar
- b. Composite
- c. Static
- d. Reference

13. %TYPE is called _____ datatype

- a. percent
- b. normal
- c. anchor
- d. reference

14. Which statement is used to terminate a PL/SQL loop?

- a. CONTINUE
- b. STOP
- c. EXIT WHEN
- d. GOTO

15. Which one is not a PL/SQL unit?

- a. CURSOR
- b. TRIGGER
- c. TABLE
- d. PACKAGE

16. In reverse for loop what will be the initial value

- a. 1
- b. 0
- c. Upper bound
- d. lower bound

17. Which one is having return type in its specification and must return a value?

- a. Package
 - b. Procedure
 - c. Function
 - d. Cursor
18. Database object that groups logically related PL/SQL types, objects and subprograms?
- a. Module
 - b. Section
 - c. Package
 - d. Body
19. Total ___ literals are there in PL/SQL
- a. 2
 - b. 3
 - c. 4
 - d. 5
20. PL/SQL _____ consists of grouping of functions, stored procedures, cursors and exceptions which can be referenced by a single name.
- a. Anonymous Blocks
 - b. Packages
 - c. Cursors
 - d. Tables
21. Which query is used to delete package?
- a. `delete package <package_name>;`
 - b. `delete <package_name>;`
 - c. `drop package <package_name>;`
 - d. `drop <package_name>;`
22. Which one is invalid advantage for package in PL/SQL?
- a. All related functions and procedures can be grouped together
 - b. is used to set formatting
 - c. Reliable to granting privileges

- d. functions and procedure within package can share variable among them.
23. ____ clause of Oracle is used to create temporary tables, where data can be stored one and read multiple times in SQL query.
- For
 - Where
 - With
 - Create
24. A ____ is a PL/SQL block structure that defines an action the database should take when some data base related event occurs.
- Package
 - Table
 - Section
 - Trigger
25. Find invalid option: Trigger event can be ____
- Before
 - Instead of
 - Between
 - After
26. Correct sequence of commands to process set of records when using explicit cursor
- CURSOR, GET, FETCH, CLOSE
 - OPEN, FETCH, CLOSE
 - CURSOR, FETCH, CLOSE
 - INITIALIZE, OPEN, CLOSE
27. Explicit cursor in the PL/SQL is declare in
- declaration section
 - body section
 - exception section

d. memory

28. The || operator is used for

- a. Initialization
- b. Integration
- c. Concatenation
- d. Continuation

29. Which one is invalid attribute of an Explicit cursor?

- a. %NOTFOUND
- b. %FOUND
- c. %ROWCOUNT
- d. %COUNT

30. Which kind of parameters cannot have a DEFAULT value?

- a. IN
- b. CONSTANT
- c. RETURN
- d. OUT

31. What are the three parameter modes for procedures?

- a. IN, OUT, IN OUT
- b. IN, OUT, RETURN
- c. OUT, RETURN, SHOW
- d. IN, RETURN, SHOW

32. _____ is a named private area in SQL from which information can be accessed.

- a. Procedure
- b. Function
- c. Cursor
- d. Subprogram

33. select invalid predefined exceptions

- a. ZERO_DIVIDE
- b. NO_DATA_FOUND
- c. TOO_MANY_ROWS
- d. LESS_ROWS

34. Which is not a correct way to call procedure – show()

- a. call show();
- b. BEGIN
show();
END;
/
- c. PRINT show();
- d. EXECUTE show

35. For a COMMIT statement, the following is false.

- a. Other users can see the data changes made by the transaction.
- b. The locks acquired by the transaction are released.
- c. The work done by the transaction becomes permanent.
- d. Database is get disconnected after commit.

36. A maximum of _____ triggers can be applied to one table.

- a. 10
- b. 11
- c. 12
- d. 13

37. Which are 3 basic parts of a trigger

- a. IN, OUT, IN OUT
- b. Open, process, End

- c. Triggering event, restriction, action
- d. event start, event process, output

38. %FOUND cursor is used to
- a. checks if the cursor is open or not
 - b. Checks if the cursor has fetched any row
 - c. Checks the number of rows is updated
 - d. Checks if the cursor is closed or not

39. PL/SQL is a _____ designed by Oracle.
- a. Structural language
 - b. Procedural language
 - c. Markup language
 - d. Machine language

40. Find invalid Scalar datatypes
- a. NUMBER
 - b. VARCHAR2
 - c. RECORD
 - d. LONG

41. Which section in PL/SQL is mandatory
- a. Declaration
 - b. Cursor Declaration
 - c. Execution
 - d. Exception

42. _____ is an error handling part of PL/SQL.
- a. Trigger
 - b. Exception
 - c. Subprogram
 - d. anonymous block

43. Advantage of using an index

- a. Reliability
- b. less Storage
- c. Faster access of data blocks
- d. Useless

44. What is the difference between execution of trigger and stored procedures?

- a. trigger is easy to execute than procedure
- b. procedure is easy to execute than trigger
- c. trigger is automatically executed, while procedure is explicitly invoked by user
- d. no different in execution process of trigger and procedure

45. Which command is used to delete a trigger?

- a. DELETE TRIGGER
- b. DROP TRIGGER
- c. REMOVE TRIGGER
- d. STOP TRIGGER

46. What are the different schemas objects that can be created using PL/SQL?

- a. packages
- b. triggers
- c. tables
- d. cursors

47. What are the two different parts of the PL/SQL packages?

- a. Declaration, Execution
- b. Head, Body
- c. Specification, Body
- d. Sql, Pl/Sql

48. _____ error can be easily detected by a PL/SQL compiler.
- a. syntax
 - b. runtime
 - c. non syntax
 - d. declare
49. _____ attribute is used to declare a variable to be a record having the same structure as a row in a table.
- a. %TYPE
 - b. %COLUMNNAME
 - c. %ROWTYPE
 - d. %ROW
50. The variables or an expression referred to as parameters that appear in the procedure call statement is known as _____.
- a. Formal Parameters
 - b. Actual parameters
 - c. Regular Parameters
 - d. Used Parameters