Q1. Using which language can a user request information from a database? a) Query b) Relational c) Structural d) Compiler

Ans- A) Query.

Q2. Which one of the following is a procedural language? a) Domain relational calculus b) Tuple relational calculus c) Relational algebra d) Query language.

Ans - c) Relational algebra

Q3. The\_\_\_\_\_ operation allows the combining of two relations by merging pairs of tuples, one from each relation, into a single tuple. a) Select b) Join c) Union d) Intersection?

Ans - b) Join

Q4. The \_\_\_\_\_\_\_operation performs a set union of two “similarly structured” tables a) Union b) Join c) Product d) Intersect?

Ans - a) Union

Q5. The most commonly used operation in relational algebra for projecting a set of tuple from a relation is a) Join b) Projection c) Select d) Union?

Ans - c) Select.

Q6. The most commonly used operation in relational algebra for projecting a set of tuple from a relation is a) Join b) Projection c) Select d) Union?

Ans - c) Select.

Q7 - A \_\_\_\_\_\_\_\_ is a pictorial depiction of the schema of a database that shows the relations in the database, their attributes, and primary keys and foreign keys. a) Schema diagram b) Relational algebra c) Database diagram d) Schema flow

Ans - a) Schema diagram

Q8 . The \_\_\_\_\_\_\_\_\_ provides a set of operations that take one or more relations as input and return a relation as an output. a) Schematic representation b) Relational algebra c) Scheme diagram d) Relation flow

Ans - b) Relational algebra

Q9 - Define database model?

Ans - An database base model shows the coherent structure of an information base, including the connections and limitations that decide how information can be put away and gotten to. Singular information base models are planned dependent on the standards and ideas of whichever more extensive information model the fashioners embrace.

Q10 – Define Normalization.

Ans -Normalization is a database design technique that reduces data redundancy and eliminates undesirable characteristics like Insertion, Update and Deletion Anomalies. Normalization rules divides larger tables into smaller tables and links them using relationships.

Q11. Enlist the advantages of normalizing database.

Ans - Greater overall database organization.

Reduction of redundant data.

Data consistency within the database.

A much more flexible database design.

A better handle on database security.

Q12. Define Denormalization.

Ans - It is just opposite to normalization. Denormalization is a database optimization technique in which we add redundant data to one or more tables.

Q13 - Define Data Warehousing.

Ans - Data warehousing is the electronic stockpiling of a lot of data by a business or association. An information distribution center is intended to run question and examination on chronicled information got from conditional hotspots for business insight and information mining purposes.

Q14. What do you mean by Index hunting?

Ans - Index hunting is the way toward boosting the assortment of lists which help in improving the question execution just as the speed of the information base.

Q15 - Enlist the disadvantages of query.

Ans - No indexes.

Stored procedures are excessively compiled.

Cursors and temporary tables showcase a bad presentation.

Q16 - Enlist ways to efficiently code transactions.

Ans - While perusing, exchanges should not be opened of information.

Exchanges should be kept as little as could reasonably be expected.

Lower exchange isolation levels.

User input should not be allowed while transactions.

Q17 – Differentiate Table Scan from Index Scan.?

Ans - A table scan is performed on a table which does not have an Index upon it (a heap) – it looks at the rows in the table and an Index Scan is performed on an indexed table – the index itself.

Q18 - Define Fragmentation.

Ans - Fragmentation is a database server feature that allows you to control where data is stored at the table level. Fragmentation enables you to define groups of rows or index keys within a table according to some algorithm or scheme

Q20 - What is Database partitioning?

Ans - Partitioning is dividing of stored database objects (tables, indexes, views) to separate parts. Partitioning is used to increase controllability, performance and availability of large database objects.