**Database Fundamental**

**Chapter-1**

1. Which statement is (are) true for relational database model?
   1. **Each child table has a single parent table**
   2. **Each parent can have multiple child tables**
   3. None of the above
   4. All of the above

2. Which statement is (are) not true for Network database model?

**A. It allows one-to-one relationship**

**B. It allows many-to-one relationship**

C. It allows many-to-many relationship

D. None of the above

3. Relational database model is that any table can be linked together, regardless of their

Hierarchical position.

* 1. **True**
  2. False

**Chapter 2, 3,4**

1. Which is the best describe for database type
   1. **Transactional ,DSS, Hybrid**
   2. DSE, Hybrid ,Transactional
   3. OLTP, Client-Sever, DSS
   4. OLAP,OLTP, DSS
2. Data mart is a kind of DSS database
   1. **True**
   2. False
3. The correct form of data is called:
   1. Data
   2. Information
   3. **Data integrity**
   4. Above all
4. Which of the following is/are the example of constraint?
   1. Keys
   2. NOT NULL
   3. Validation check
   4. **Above all**
5. Student enrolled many courses at a university. It is example of which relationship?
6. One to one
7. **One to many**
8. Many to many
9. Above all
10. Which key have null and unique value?
11. primary Key
12. Foreign key
13. **Unique key**
14. Above all
15. Views are not same thing as materialized view.

A. **True**

B. False

1. A determinant is inversion or opposite of
   1. Transitive dependency
   2. **Functional dependency**
   3. Multi-valued dependency
   4. All of the above
   5. None of the above
2. When X determinates Y and Y determinates Z, what type of dependency is there?
   1. **Transitive dependency**
   2. Functional dependency
   3. Multi-valued dependency
   4. All of the above
   5. None of the above
3. Which NF eliminates transitive dependencies?
   1. 1NF
   2. 2NF
   3. **3NF**
   4. 4NF
   5. 5NF
4. Which NF eliminates cyclic dependencies?
   1. 1NF
   2. 2NF
   3. 3NF
   4. 4NF
   5. **5NF**
5. Which NF eliminates Multi-valued dependencies?
6. 1NF
7. 2NF
8. 3NF
9. **4NF**
10. 5NF
11. \_\_\_\_\_ removes repeating fields by creating a new table where the original and the new table are linked together with a master-detail, one-to-many relationship.
    1. **1NF**
    2. 2NF
    3. 3NF
    4. 4NF
    5. 5NF
12. ­­­\_\_\_\_ creates a new table where repeating values (rather than repeating fields) are removed to a new table. The result is many-to-one relationship.
    1. 1NF
    2. **2NF**
    3. 3NF
    4. 4NF
    5. 5NF
13. \_\_ creates one-to-one relationship.
    1. 1NF
    2. 2NF
    3. Beyond 3NF
    4. All of the above
    5. **None of the above**
14. \_\_ does not only apply to many-to-many but also one-to-many relationship.
    1. 1NF
    2. **2NF**
    3. 3NF
    4. 4NF
    5. 5NF
15. \_\_ is an ideal form and ultimate or final form of relational database normalization.
    1. 1NF
    2. 3NF
    3. 4NF
    4. 5NF
    5. BCNF
    6. **DKNF**

17. Values in a database are made up of

**A. Data** b. Metadata c. raw data d. None

18. “Row and tuple mean the same thing” the statement is

**a. true** b. false

19. Simple data type applying a value

a. string b. number c. date & time **d. all**

20. Which data type show blank space?

a. string b. variable string **c. fixed length string** d. none

21. Which values can have any number of digits both before and after decimal point?

a. fixed length decimals b. integers **c. floating point**  d. a + c

22. Which key support duplicate data

**a. foreign key** b. unique key c. both d. none

23. ERD displays tables and relationship between those tables

**a. true**  b. false

24. A cross foot is used to describe

a. one to many relationship

b. one to one relationship

c. many to many relationship

**d. a+c**

25. One to one relationship are often created to remove frequently

**a. null value fields from a table**

b. Fixed value from a table

c. Duplicate from a table

d. none

26. one to one relationship are typical of

**a. 4th normal form**

b. 6th normal form

c. 1st normal form

d. 3rd normal form

27. SQL code with more tables in joins can case

**a. bad database performance**

**b. Serious performance issues**

c. normal performance issues

d. none

28. Which relationship we should avoid?

a) one to one

b) one to many

**c) many to many**

d) none

29. Which relationships are extremely common –

a. one to one relationship

**b. One to many relationship**

c. many to many relationship

d. self relation ship

30. In identifying relationship which sentence is true –

**a. The child table is partially identified by the parent table**

**b. The child table is partially dependent on the parent table**

**c. The parent table primary key is included in the primary key of the child table.**

d. a + c

31. Which sentence is true –

**a. An index is likes an index in a book**

**b. An index in a relational database is a copy of a part of a file**

**c. An index can be created an any field**

**d. A key is also an index**

e. a + c + d

32. How many type of keys –

a. 2 types **b. 3 types**

c. 4 types d. 5 types

33. Which are true –

**a. A primary key is used to uniquely identified a record in a table**

**b. Primary keys are known as surrogate keys**

**c. A primary key is also used to define relationships between tables**

d. a + c

34. Which keys are not used to define relationships between tables –

a. Primary keys b. foreign keys

**c. Unique keys** d. Personal keys

35. Which key is like primary key, actually not same-

a. Primary keys b. foreign keys

**c. Unique keys** d. Personal keys

36. Which are true about foreign key-

**a. Foreign keys are the copies of primary keys**

**b. It can be duplicated**

c. It is unique d. b + c

37. Most relational database engines use what are often called –

**a. Constraint** b. Index

c. Keys d. None

38. Which are true –

a. Only primary keys are constraint

b. Foreign keys are not constraint

**c. primary and foreign keys are both constraints**

d. a + c

39. Record means…..

a. **Row**  b. fields c. **Tuple** d. data

1. Which example is fixed length strings 3-character?

**a.DM** b. GERMANY c. GHANA **d. GYD**

41. which is correct ?

a. integer contains decimal digits

b. fixed-length decimal include decimal point

**c. integer contains no decimal digits**

42. complex data types are

**a. binary objects**

**b. user-defined types**

c. number

d. date and times

43. A crow’s foot is used to describe “many”.

**a. yes**

b. no

44. which is/are correct ?

a. primary key is used to define relation key

b .unique key also is used to create relation

c. foreign keys are the copied of primary key

d. bitmap is a type of index

**e. a + c + d**

45. The table IOT indexed order could be seriously problematic for performance ……….

**i. True**

ii. False

46. Indexes can be built on more than a single field and are known as

**i. composite field indexes**

ii. Unique index

iii. reverse index.

47. A materialized view materializes underlying physical data ---------

**i. By making a physical copy of data from tables.**

ii. Filtering against the view.

48. Materialized views are often used to aggregate large data sets down to smaller sized data sets in …...

**i. Data ware house**

**ii. data mart**

iii. Reporting data

iv.None

49. Which are called Anomalies?

1. Insert Anomalies
2. Delete Anomalies
3. Select Anomalies
4. Update Anomalies
5. In 2nd Normal form we remove repetitive value?
   1. True
   2. False
6. In which normal for we separate transitive dependency?
   1. 1st NF
   2. 2nd NF
   3. 3rd NF
   4. 4th NF
   5. 5th NF
7. In which NF we eliminate Cyclic Dependency?
   1. 1st NF
   2. 2nd NF
   3. 3rd NF
   4. 4th NF
   5. 5th NF
8. In BCNF a table can have only one Candidate Key?
   1. True
   2. False
9. Which NF is the last stage or Normalization?
   1. 1st NF
   2. 2nd NF
   3. 3rd NF
   4. BCNF
   5. 4th NF
   6. 5th NF
10. If a Field Contain Comma-delimited list then what kind of dependency it is called?
    1. Full Functional Dependency
    2. **Multi-Valued Dependency**
    3. Transitive Dependency
    4. Functional Dependency

**Chapter 5, 6 ,7**

1. SQL is a \_\_\_\_\_\_\_\_\_\_\_\_ ?
   1. Procedural Language
   2. Non Query Language
   3. **Non Procedural Language**
   4. Unstructured Language
2. Create, Alter, Drop is \_\_\_\_\_\_\_\_?
   1. Query Command
   2. Filter Command
   3. Data Change Command
   4. **Database Structured Command**
3. Select \* author? Is this statement is correct?
   1. Yes
   2. **NO**
4. Which are an Aggregating Clause

   2. Where
   3. **Group by**
   4. **Having**
   5. **AVG**
5. Cluster keep physical copy of data?
   1. **True**
   2. False
6. Temporary Table’s Data can be used for future purpose?
   1. True
   2. **Flase**
7. What is true about METHOD?
   1. A method is equivalent to Table
   2. A method is equivalent to object
   3. **A method is equivalent to stored procedure**
   4. A method is equivalent to column
8. Which model is too granular?
   1. Data warehouse
   2. Object model
   3. **Relational model**
9. Which command change data of a table?
   1. Alter
   2. Insert
   3. **Update**
   4. Drop
10. Which command sorted data of a table?
    1. Where
    2. Insert
    3. **Order by**
    4. join
11. Sarogate key is also know as ….
    1. Foreign key
    2. **Replacement Key**
    3. Unique Key
    4. Null
12. Snowflake Schema is a normalized star Schema?
    1. **True**
    2. False
13. Fact table, Dimension Table is used in
    1. **Data warehouse**
    2. Relational database model
    3. Data mart
    4. Object model
14. Dimension tables contain detailed description about \_\_\_\_\_\_ values?
    1. **Fact**
    2. Primary key value
    3. Foreign key value
    4. None
15. Which one is the most effective approach of a data warehouse model?
    1. **Snowflake Schema**
    2. Relational Schema
    3. Star Schema
    4. A and C