

INFORMATION TECHNOLOGY (402)

CLASS – X UNIT 11: DATABASE DEVELOPMENT (BASIC)

1. Which of the following is NOT an example of data?
 - a. Phone number
 - b. Employment history of a person
 - c. Date of birth
 - d. Address

2. The basic difference between *data* and *information* is:
 - a. Both are same and can be used interchangeably.
 - b. Data is larger in size than information.
 - c. Logically related data in a context generates useful information.
 - d. Information is unorganised while data is organised.

3. What were the problems faced in storing the data in the form of files?
 - i. Managing data is difficult and time consuming in files.
 - ii. Chances of errors are higher.
 - iii. Data accuracy and redundancy is compromised.
 - iv. Data security is compromised.
 - a. All of the above.
 - b. i, ii and iii
 - c. i, iii and iv
 - d. i and iii

4. Which of the following helps us manage the data?
 - a. Database
 - b. DBMS
 - c. SQL
 - d. None of these

5. Statement 1: Database is an organised collection of data.
Statement 2: DBMS allows to organise data in a database.
 - a. Statement 1 is true while Statement 2 is false.
 - b. Statement 1 is false while Statement 2 is true.
 - c. Both the statements are true.
 - d. Both the statements are false.

6. The core advantage of DBMS is centralisation of data which allows _____.
 - a. Data sharing
 - b. Data security
 - c. Data recovery
 - d. None of these

7. A customer makes online payment from his/her bank to purchase an item. The amount is deducted from his/her account and he gets order confirmation in mail. This is a scenario depicting which of the following:

- a. Data security
- b. Data integrity
- c. Concurrency
- d. Redundancy

8. In a relational database model, the term *relation* refers to which of the following?

- a. SQL query on multiple tables
- b. Table
- c. Primary and foreign key
- d. All of the above

9. The drawback in the flat file database below is which of the following?

ItemCode	SaleDate	SaleQty	ReturnDate	ReturnQty
A001	1/1/2021	100	NULL	NULL
A003	2/1/2021	220	NULL	NULL
A001	1/1/2021	NULL	5/5/2021	20
A003	2/1/2021	NULL	6/5/2021	5

- a. Data redundancy
- b. Concurrency
- c. Data integrity
- d. Data sharing

10. *There is full data independence in Relational Data Model.* – In this statement, which of the following features of RDBMS is depicted?

- a. The user need not to know how the data is stored in the database.
- b. Any new changes or updates in data does not affect the existing data.
- c. Data is stored across multiple table which are related to retrieve desired information through queries.
- d. All of the above.

11. In a client-server model, which part of the model displays the user interface to manage and work with the database?

- a. Backend
- b. Front end
- c. Server
- d. None of these

12. A table has 5 attributes and 100 tuples. What will be the cardinality of the table?
- 5
 - 100
 - 105
 - 500
13. A table has 5 attributes and 100 tuples. What will be the degree of the table?
- 5
 - 100
 - 105
 - 500
14. A customer deals in 10 unique furniture items. He needs to create a Furniture Master table to store Furniture Code, Furniture description and unit price for them. How many tuples should the table have?
- 10
 - 3
 - Can't say
 - Any number between 3 and 10
15. A graphically designed interface to enter, view and modify the data is called _____.
- Report
 - Table
 - SQL
 - Form
16. Which of the following components of a database does store data?
- Form
 - Report
 - Query
 - All of these
17. Which of the data types is most suited to store images in a database?
- Boolean
 - Binary
 - Longvarchar
 - All of these

18. Does following field qualify to be a foreign key? Why/Why not?

Item_ID

IT001

IT003

NULL

IT001

IT004

NULL

- a. No, it cannot have null value since a matching null value can never be in primary key field.
- b. No, it has duplicate values
- c. Yes, foreign key field can have duplicate values.
- d. Yes, foreign key field can store null values.

19. Ravi considered the fields *AreaCode*, *Area*, *Subarea* to decide primary key. Finally, he decided *Area* and *Subarea* to be primary keys in the table. Which of the following are candidate keys here?

- a. Area
- b. Areacode
- c. Subarea
- d. All of these

20. Ravi considered the fields *AreaCode*, *Area*, *Subarea* to decide primary key. Finally, he decided *Area* and *Subarea* to be primary keys in the table. Which of the following are alternate keys here?

- a. Area
- b. Areacode
- c. Subarea
- d. All of these

21. Which of the following are the part of DDL?

- a. CREATE
- b. ALTER
- c. DROP
- d. All of these

22. Which of the following are the part of DML?

- a. INSERT
- b. DELETE
- c. UPDATE
- d. All of these

23. Which of the following is the feature of procedural SQL?
- User only specifies what data is needed.
 - User specifies what data is needed and how to retrieve it from the database.
 - User needs to define the structure of the table.
 - All of these.
24. A database may have zero number of tables.
- True
 - False
25. Which of the types of tables may not be modified after each transaction?
- Master table
 - Transaction table
 - Both a) and b)
 - None of these
26. To define every little detail of the table such as fields, their description, their size, constraints etc., which of the following is most suitable?
- Table wizard
 - Table design
 - SQL DDL
 - Both b) and c)
27. A field is to store the gender of the user. Which of the properties for it can be set?
- Required (entry required)
 - Length
 - Default value
 - Decimal places
28. Primary key is a _____.
- Property
 - Filed type
 - Constraint
 - Feature
29. *It is possible to create a form that allows only view of the records.*
- True
 - False
30. *Forms do not allow inserting any new record. They allow only view, update and delete of existing records.*
- True
 - False

31. Usually, there is no need to store calculable data in the tables since queries can be used to calculate the values.
- True, because we can apply formulae in queries.
 - False, because queries do not allow formulae for calculations.
32. *Select * from student_master* – here, * refers to which of the following?
- Tuples
 - Attributes
 - All the tables in the database
 - All the strings
33. *Order by* clause cannot be used without *where* clause.
- True
 - False
34. By default, in an SQL query, output is sorted in ascending order.
- True
 - False
35. *Order by* clause sorts the data in the table.
- True
 - False
36. The selective fields can be displayed from a table by _____.
- Using WHERE clause
 - Using SELECT clause
 - Both a) and b)
 - None of these
37. A DELETE statement is executed on a table of 3 attributes and 5 tuples without any criteria mentioned in the SQL statement. What will be the cardinality of that table after the execution of DELETE statement?
- 3
 - 0
 - 15
 - 8

38. Ravi executed following statement on the table *student_master* which has cardinality 10 and degree 5. How many records will be affected after the statement is executed: UPDATE "STUDENT_MASTER" SET "MARKS" = MARKS = MARKS + (MARKS * .1)
- a. 10
 - b. 5
 - c. 0
 - d. Only first record
39. Varchar(10) can store minimum what size?
- a. Exactly 10
 - b. 1
 - c. More than 10
 - d. No need to give size with varchar
40. Which of the following helps in analysing data to make further plans?
- a. Table
 - b. Form
 - c. Report
 - d. Query
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